THE 5th INTERNATIONAL CONFERENCE

"EDUCATION ACROSS BORDERS"

"INNOVATIVE EDUCATION: STRENGTHENING THE FUTURE"

BOOK OF PROCEEDINGS

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BOOK OF PROCEEDINGS

FACULTY OF EDUCATION AND PHILOLOGY
FACULTY OF NATURAL AND HUMAN SCIENCES,
“FAN S. NOLI” UNIVERSITY - KORÇË, ALBANIA

FACULTY OF EDUCATION, “ST. KLIMENT OHRIDSKI”-
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HUMANITIES, UNIVERSITY OF WESTERN
MACEDONIA- FLORINA, GREECE

5th INTERNATIONAL CONFERENCE “EDUCATION ACROSS BORDERS”

“INNOVATIVE EDUCATION: STRENGTHENING THE FUTURE”

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KEYNOTE SPEAKER: Prof. dr. Bardhyl MUSAI

FAST CHANGING DEVELOPMENTS NEED INNOVATIVE EDUCATION FOR ACTIVE LEARNING OF NET GENERATION STUDENTS

TOPICS:

1. Education through industrial revolutions;
2. Digital learning in HE;
3. Education response to students of Net Gen;
4. Active learning spaces.

> *"After 30 years, there will be no more*
> *unemployed but useless people for the*
> *sake of technology of education"*
> ***(UVAL NOAH HARARI)***

STUDENTS AND INADEQUACY OF EDUCATION

Today's education face inadequacy as along as we are unable to bridge the gap between **how students live** and **how they learn**.

THE THREE ERAS OF EDUCATION

Agricultural era

1. Horse and carriage
2. Preparation for local jobs
3. Basic skills
4. A few books
5. Unchangeable knowledge

Industrial era

1. Machines
2. Preparation for industry
3. Advanced skills
4. Considerable books
5. Unchangeable knowledge

Digital era

1. Internet
2. Training of skilled workers
3. Lifelong learning
4. Digital books
5. Changeable knowledge

THE THIRD AND THE FOURTH INDUSTRIAL REVOLUTION

In the 70ies of the 20th century:

The third revolution brought forth the rise of **electronics**, **telecommunications** and **computers.**

The Third Industrial Revolution has brought educators to an environment where **access to information is immediate and free**, shifting the focus toward **active learning pedagogies.**

In the 20ies of the 21st century

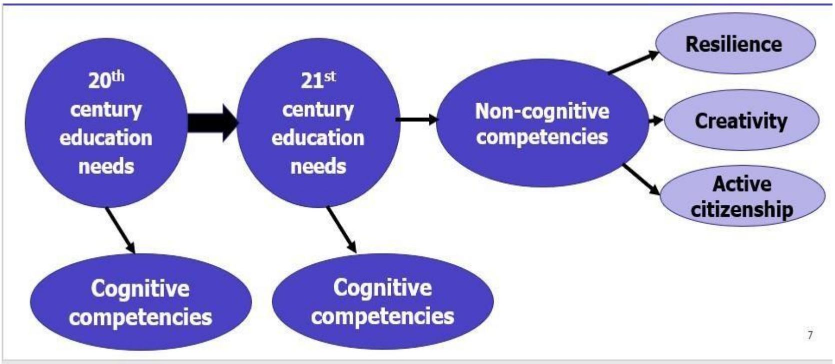
We would have to admit that the Fourth Industrial Revolution (4IR) is happening.

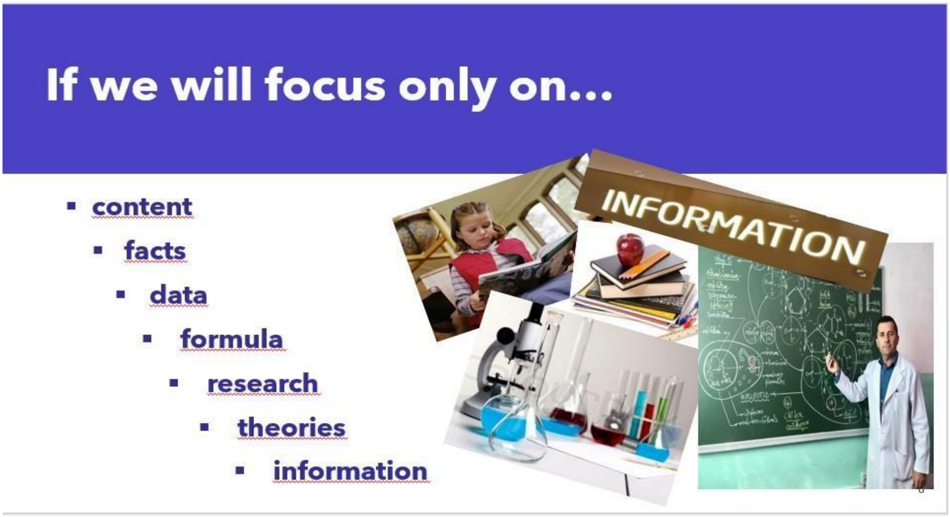
This Revolution **will shape the future of education**, gender and work and will require **accelerating workforce reskilling.**

Characteristics are:

☐ **Smart devices**
☐ **Robotics**
☐ **Artificial Intelligence**

Evolution in education needs

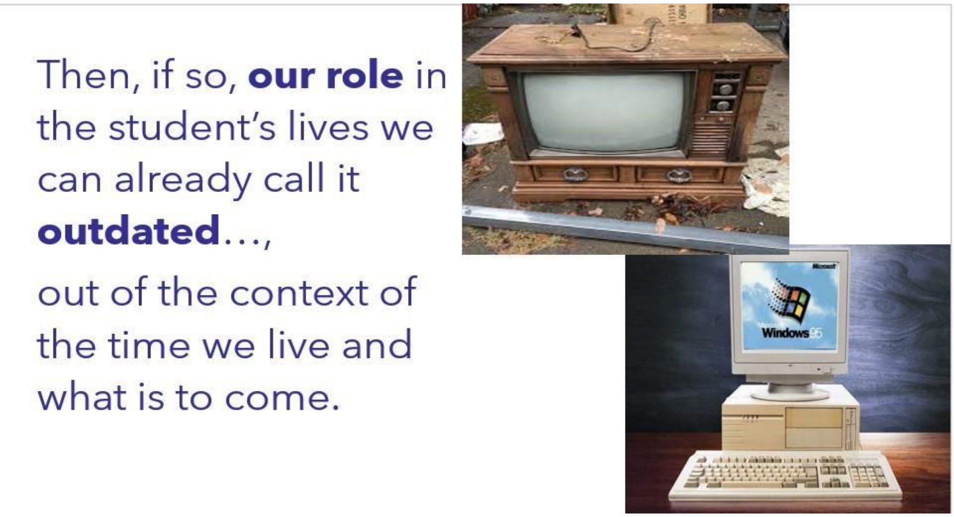

20th century education needs
21st century education needs
Non-cognitive competencies
Resilience
Creativity
Active citizenship
Cognitive competencies
Cognitive competencies
7



If we will focus only on…

- content
  - facts
    - data
      - formula
        - research
          - theories
            - information

INFORMATION



Then, if so, **our role** in the student's lives we can already call it **outdated**…,

out of the context of the time we live and what is to come.

Constructivism

☐ Learning = creating meaning from experience.

☐ Knowledge cannot be 'transmitted'.

☐ Learners must create own meanings based on individual experience and interactions:

- Authentic context
- Relevant to student's experience

Teaching skills that remain relevant in a changing world

- ☐ Universities continue to focus on teaching specific skills involving the latest technologies, even though these skills and the technologies that support them are bound to become obsolete. Universities need to teach the skills **needed in the future workplace.** Those skills will remain relevant in new, changing, and unknown contexts.
- ☐ Generic skills such as **Critical thinking, Creative thinking, Collaboration, Communication** and **Curiosity** lead students to be able to do something useful in ordinary life after graduation. Those skills are broadly applicable.

Soft skills in the digital era

- ☐ HEIs are faced with the challenge of **how to prepare the workforce for the changes happening now and those forecasted for the future**. The modern workforce requires a blend of both soft skills and digital skills, along with an understanding of their role in the digital era.
- ☐ An educated and skilled workforce has positive impacts on unemployment rates.
- ☐ A culture of **continuous learning** and **learning transformation** must be adopted everywhere.
- ☐ With blended and mobile learning resources like time, location and cost are no longer big concerns.

  HE programs must focus on training the right skills

In Higher Education

- ☐ Emphasis on interaction, reflection and collaboration.
- ☐ Learners need **opportunity to define for themselves goals and objectives** for the course.
- ☐ **Focus more on process and interaction**, less on what is especially to be accomplished.
- ☐ **Outcomes defined more in terms of a new common perspective**, rather than particular tasks or actions that students able to perform.
- ☐ Assume learners **motivated by common interest** in problem or issue.

The Fourth Industrial Revolution or Digital Era is defined as the vital interaction between human and machines.

Education response

- ☐ **Changing starts from schools and universities** when they design a suitable program and curricula that matching with employment.
- ☐ 65% of the students in school today will work in jobs that do not currently exist and 47% of today's jobs will be automated in the next decade.
- ☐ More than 50% of the content in a graduate degree today will be useless in 5 years.
- ☐ 4IR requires **reshaping the future of education**.

The transformation of HE is a key factor in the digital transformation of the 4IR

What is change?

"Change Is the Only Constant"— YUVAL NOAH HARARI (21 Lessons for the 21st Century)

Higher education response to the 4IR:

- ☐ The need for higher education to respond is urgent as the power of 4IR technologies for either positive social impacts or devastating environmental damage.
- ☐ Substantial changes to the science and technology curriculum will be required to allow for students to develop capacity in the rapidly emerging areas of genomics, data science, AI, robotics and nanomaterials.
- ☐ STEM curriculum would reconsider the curriculum within the traditional "primary" sciences-biology, chemistry and physics- and place a higher premium for training in computer science subjects as a form of 4IR literacy.

Teaching and learning in the digital era

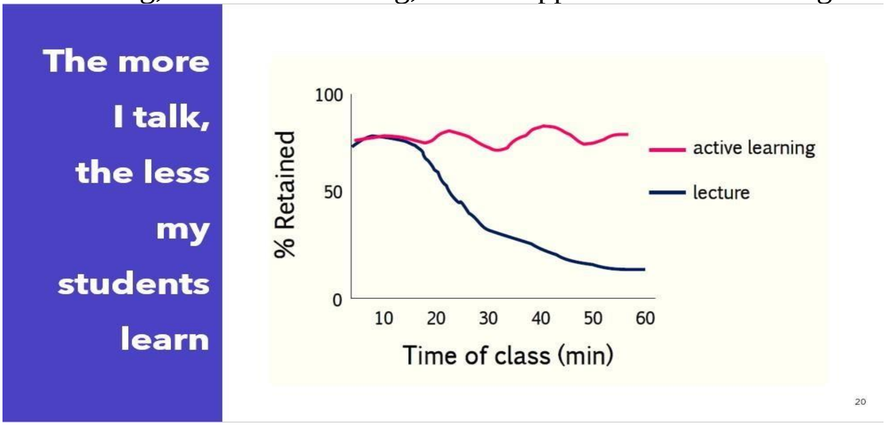
- ☐ 4IR will cause a true revolution in instructional strategies, learning outcomes.

- Professors will have more **instructional aids such as robots, mobiles, and other e-applications** that help to understand the educational situations not only verbally but also visually.
- Integration between the educational system elements (educational policy, university teachers, curricula, learning environment, and students) and industrial sectors in society should happen.

In the future the problem could not be the lack of jobs but the shortage of skills that will depend completely on the 4IR ideas.

Active learning must replace lectures:

- Lectures are an **efficient way of teaching** and an **ineffective way of learning**. Universities have been using them to impart professors' knowledge to students.
- Digital information being ubiquitous and free, seems ludicrous to pay listen to someone **giving you information** you can find elsewhere at **a much cheaper price**.
- Education institutions need to demonstrate effective learning outcomes, to embrace teaching methods that rely on the **science of learning**. This shows that our brains do not learn by listening. **Real learning relies on principles** such as spaced learning, emotional learning, and the application of knowledge.



The more I talk, the less my students learn

Digital learning:

Digital learning refers to the process of **learning with the help of digital content**, **platforms or facilitators**.

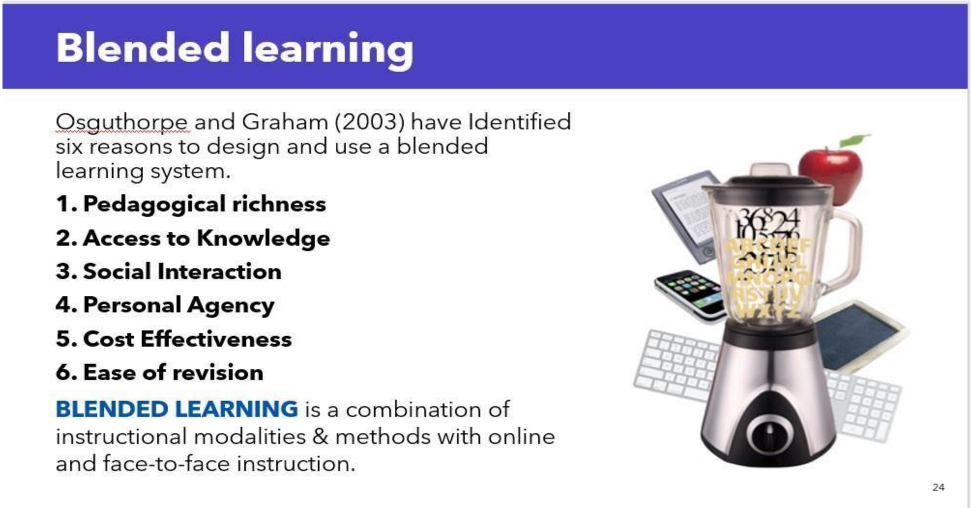
The evolve of **learning increases the use of digital components** more and more as more content becomes available.

Pedagogy has also evolved many **university teachers use digital sources as an integral part of teaching.**

Many students **expand their ideas** with them.

Learning from everywhere:

- During pandemic situation we learned some lessons ***online teaching***. One of them was that we need to reexamine the concepts of **time** and **space** in the HE institutions.
- There were some benefits to students learning at their own pace. Blended or Hybrid learning does not just mean combining a virtual and physical classroom, but allowing for truly immersive and experiential learning, enabling students to apply concepts learned in the classroom out in the real world.
- Rather than shifting to a "**learn from *anywhere***" approach, education institutions should move to a "**learn from *everywhere***" approach.



Blended learning

Osguthorpe and Graham (2003) have Identified six reasons to design and use a blended learning system.

1. **Pedagogical richness**
2. **Access to Knowledge**
3. **Social Interaction**
4. **Personal Agency**
5. **Cost Effectiveness**
6. **Ease of revision**

BLENDED LEARNING is a combination of instructional modalities & methods with online and face-to-face instruction.

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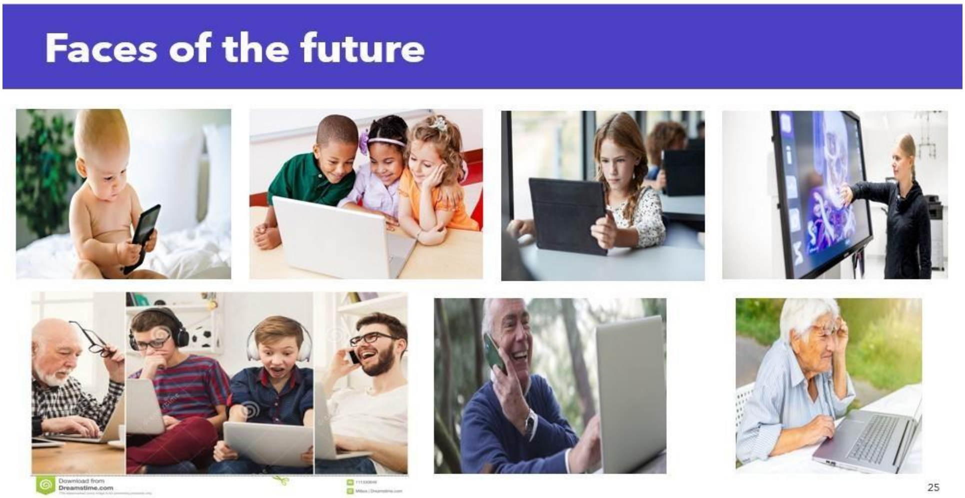

Faces of the future

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Directions for future development of HE:

- ❑ During pandemic situation, universities have been forced to put their teaching online. This seems to have spurred a series of innovations in the education sector. Most of HE institutions embraced more flexibility, offering both virtual and physical classrooms.

- ☐ These changes might give the illusion that education is undergoing some much-needed reform. But these measures **do not address the real problems facing higher education**. In our countries, higher education is inaccessible to the socio-economically underprivileged, certifies knowledge rather than nurtures learning, and focuses on easily-outdated knowledge.

Roles:

- ☐ **Professor**
- ▪ Facilitator, Guide, Coach, Mentor
- ▪ Co-learner
- ☐ **Student**
- ▪ Active participant – explore information & environment
- ▪ Make connections – make own meaning
- ▪ Apply knowledge in personally meaningful contexts

Learning space:

- ☐ A learning space is much more a classroom. It can be any place where learning process is possible: **home, halls, meeting rooms, cafés etc. Of course, the classroom.**
- ☐ Spaces are by themselves **changing agents**, if we modify teaching spaces, we change the kind of learning.
- ☐ Understanding the **HE spaces is an important factor** to understand the way they function, not only what concerns teaching & learning method, but also how the involving space should be planned.

Learning space - from modern to 21st century:

Net Gen students are **social and team oriented**, comfortable with multitasking, generally positive in their outlook and have **hands on**.

Net Gen students **have embraced IT**, using it in ways both intended and unforeseen by programmers.

Their rapid and enthusiastic adoption of IT has in turn influenced it development, particularly with respect to **Web-based services**.

The postindustrial age is characterized by **rapid change**. Literacy skills now include **critical thinking, persuasive expression and the ability to solve complex problems.**

Active learning spaces - Pandemic lessons

1: Put students at the center

There are three most important qualities demanded of current students in relation to the ever-changing labor market. Students must:

- ☐ think creatively and divergently.
- ☐ possess digital literacy.
- ☐ have the social skills to function well in teams.

To develop these skills, 21st-century students benefit greatly from active learning. They are the target group, with the highest usage of educational spaces. In this spaces **students can develop creatively and learn from each other through active education**.

2: Use active learning spaces to facilitate impactful pedagogy

- ☐ Active learning spaces offer the pedagogical possibilities to teach students important skills of the future.
- ☐ Various HEIs should create spaces designed to promote active education and student interaction, which will enable students in small groups to discuss and collaborate with those seated in front of or behind them.
- ☐ Walls in classroom should be equipped with whiteboards.
- ☐ There should be also room for active learning outside the classroom for informal learning spaces, which will focus on both the individual learner and group collaboration.

3: Incorporate technology to continually enhance active learning spaces

- ☐ Active learning spaces offer the pedagogical possibilities to teach students important skills of the future.
- ☐ Various HEIs should create spaces designed to promote active education and student interaction, which will enable students in small groups to discuss and collaborate with those seated in front of or behind them.
- ☐ Walls in classroom should be equipped with whiteboards.

- There should be also room for active learning outside the classroom for informal learning spaces, which will focus on both the individual learner and group collaboration.

facebook
Google
message
followmedia
blog
post
social
rank
like
network
forum
share
video
skype
WIKIPEDIA
YAHOO!
UK
twitter
YouTube

Learning in the digital WORLD needs space

How to improve the learning space?

The classrooms of a HEI are in a greater number used by different teachers, different instructors with different needs.

It is important to consider some aspects:

- How will the space be used by others in the future?
- The physical, technological and curriculum needs.
- The shape of classroom will be controlled by a presentation?
- The room will have a front area where the instructor or professor will be teaching.

Guiding principles

- A learning space should support **a diversity of learning styles**
- At the different times, learning can be a social as well as an **independent activity**.
- A learning space be **versatile and attractive.**
- The space must be maintained continuously, and the **technology must be present everywhere.**

- The resources must be allocated for learning spaces and used **effectively**.
- Must take into account styles of teaching needs and other aspects that **demand specialized spaces.**

The need for new design learning spaces

Implications of learning theories in learning spaces

The constructivist theories have implications in learning spaces. The theory implies that learning is best served when it is:

- **Contextual** – taking into account the students understanding.
- **Active** – engaging students, in learning activities that uses analysis, debate and criticism to receive and test information.
- **Social** – using discussing, direct interaction with peers and team-based projects.

New learning space for the Net Generation Learning environment today

STUDENTS

HEI are preparing the Net Generation of students, who have three main characteristics:

- Digital
- Connected

☐ Want to create and learn at the same time

THE TECHNOLOGY

The technology changes affect teaching and learning processes and the place they are possible.

KNOWLEDGE RESOURCES

Students can access to that contents and study by themselves, developing therefore individual and group skills.

Study by themselves in any place with Internet and they also can use the digital communication to clear up their doubts and solve problems with their instructors.

The Net Generation:

☐ Born in or after **1982**
☐ Gravitate toward **group activity**
☐ 8 out of 10 say: "**It's cool to be smart**"
☐ Focused on **grades** and **performance**
☐ Busy with **extracurricular activities**
☐ Identify with **parent's** values: feel close to parents
☐ Respectful for **social conventions** and **institutions**
☐ Fascination with **new technologies**
☐ Racially and ethnically **diverse**

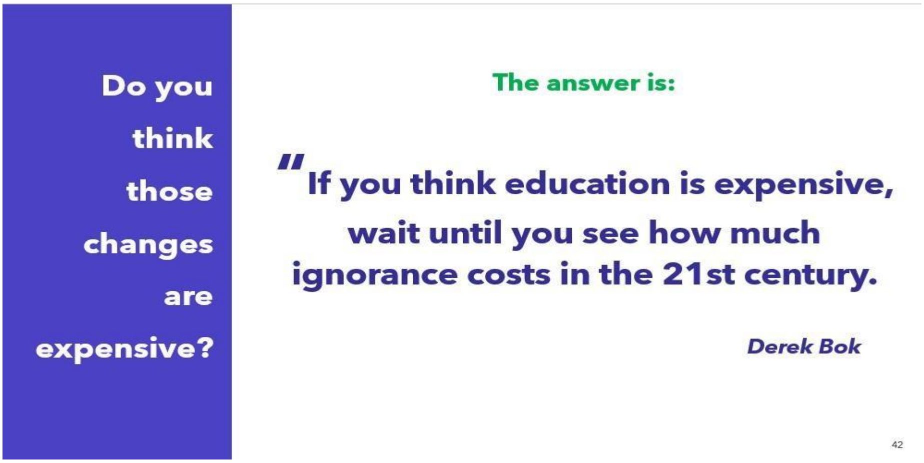
Net Gen learning preferences:

☐ Teams, peer-to-peer
☐ Engagement and experience
☐ Visual & kinesthetic
☐ Things that matter

What can we do?

☐ Make learning interactive & experiential
☐ Consider peer-to-peer approaches
☐ Utilize real-world applications
☐ Emphasize information literacy in courses
☐ Encourage reflection
☐ Incorporate collaborative learning
☐ Use informal learning opportunities

- ☐ Create opportunities for synthesis



Do you think those changes are expensive?

The answer is:

"If you think education is expensive, wait until you see how much ignorance costs in the 21st century.

Derek Bok

Conclusion

- ✓ The teaching and learning process won't be the same it was for the last 10 years
- ✓ The use of technology change the teaching and learning process
- ✓ In order to provide appropriate space to teach and learn, it is necessary for having more than a simple space. The educational activities are organic and flowing
- ✓ We cannot find the right learning space, but the challenge is: **try to get there**

A final remark

The way to get started is to quit talking and begin doing.

SESSION 1
(E-learning and Digital Technologies in Education)

ACADEMIC INTEGRITY IN THE AGE OF REMOTE LEARNING: ADDRESSING ACADEMIC DISHONESTY IN HIGHER EDUCATION

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Abstract
The shift to remote learning brought about by the COVID-19 pandemic has presented a plethora of new challenges for preventing and detecting academic dishonesty. Although academic dishonesty, such as plagiarism and cheating, can occur in traditional in-person classes, just as in remote learning environments, the easy access to books, notes, and gadgets, has made such problematic behavior significantly more prevalent.

Recognizing the numerous challenges to do with academic integrity in the digital age, this small-scale study attempts to highlight undergraduate students' perspectives on online cheating, by conducting a web-based questionnaire. The questionnaire, sent to a small, random sample of undergraduate students from the Faculty of Education – Bitola, intends to investigate students' reasons for cheating as well as their attitudes toward academic dishonesty during distance learning, in general.

The study found that a significant portion of the participants have cheated themselves, on some occasions while almost all of them have witnessed someone else engage in academic dishonesty. The reasons for such misconduct vary, though the most prevalent ones seem to be the accessibility of online resources that make cheating or academic dishonesty easier and the belief that cheating is a common or accepted practice among peers.

Keywords: *Academic dishonesty, COVID-19, Higher Education, Remote learning.*

Introduction

Academic integrity has always been an important issue in higher education, but the rise of remote learning during the COVID-19 pandemic has brought new challenges to maintaining ethical conduct in academic work. With the widespread use of online platforms for exams and assignments, the potential for academic dishonesty has increased, leading to concerns about the credibility of degrees and qualifications. In order to address this issue, it is important for institutions to take proactive measures to promote academic integrity and prevent cheating. This may involve implementing effective plagiarism detection software, providing education and resources for students and faculty, and creating a culture of honesty and ethical behavior.

Additionally, it is important to recognize the unique challenges faced by students in the remote learning environment, such as increased stress and lack of access to support services, and to provide appropriate accommodations to support their success. By taking a comprehensive and proactive approach to promote academic integrity in the age of remote learning, higher education institutions can ensure that their graduates are well-prepared for their future careers and make meaningful contributions to society.

The shift to online learning has also led to concerns about the credibility of degrees and qualifications, as it becomes easier for students to cheat on exams and assignments (Chiang et al., 2022). Therefore, it is important for higher education institutions to take proactive measures to promote academic integrity and prevent cheating, while also recognizing and addressing the unique challenges students face in the remote learning environment.

1. Academic Integrity in Higher Education: A Review

According to a report by the International Center for Academic Integrity (ICAI), academic integrity is defined as "a commitment to honesty, trust, fairness, respect, and responsibility in all academic work" (ICAI, 2019). Academic integrity, defined as such, is crucial in higher education as it upholds the values of honesty, trust, and fairness. It ensures that students demonstrate their own work, acknowledge sources properly, and avoid plagiarism. Upholding academic integrity cultivates a culture of intellectual growth, and ethical behavior, and prepares students for future professional success. However important, unfortunately, academic integrity seems to be declining, which is concerning.

In a study published in the Journal of Academic Ethics, McCabe and Trevino (1993) found that as many as two-thirds of college students engage in some form of academic dishonesty, such as cheating or plagiarism. To address this prominent issue, in their book

"*Cheating in College: Why Students Do It and What Educators Can Do About It,"* McCabe, Butterfield, and Trevino (2012) suggest that promoting a culture of academic integrity requires a multi-pronged approach that involves not only punishing dishonest behavior but also educating students about the importance of ethical conduct and providing them with the resources and support they need to succeed academically.

As to why students cheat, research conducted by Donald L. McCabe and Linda K. Trevino found that students are more likely to cheat when they perceive that cheating is common among their peers and when they believe that they are unlikely to get caught (McCabe & Trevino, 1997). Lack of motivation to study might also be the reason. The author (Shalevska, E.) in a small study to do with students' motivation during distance learning, found that a considerable proportion of the participants expressed experiencing reduced motivation while engaged in remote learning. Other authors have found that even an abundance of motivation and drive can result in dishonest behavior. A study published in the Journal of Educational Psychology found that students who are highly motivated to achieve good grades are more likely to engage in cheating behavior (Whitley, 1998).

Whatever the reason for cheating, most studies agree that it is becoming a prevailing issue in modern, technology-based education. While there is less research on academic dishonesty in online settings than there is on traditional classroom cheating, there has been an increasing amount of research conducted over the past two decades that covers various topics and produces significant results. And since online education is becoming more prevalent, examining the initial findings from this emerging area of research is crucial.(Adzima, 2020) According to a survey conducted by the Pew Research Center, 55% of college presidents believe that plagiarism has increased over the past decade, and 89% believe that the internet has played a major role in this increase (Pew Research Center, 2011).

Though prominent in higher education, it is important to note academic dishonesty seems to stem from fraudulent behavior in earlier years. A small study focusing on high school students in Bitola, N. Macedonia, conducted in 2021 by the author (Shalevska, E.), found that "*...students' cheating behaviors have become more noteworthy as technology and online education have enabled them access to easy* *ways to impair academic integrity*" and that almost 80% of the 145 participants admit to cheating either regularly or, at least sporadically. In a related manner, the public was also shocked to discover that about 7,000 Macedonian high school seniors were found to be cheating via Viber group during the state-wide graduation exam in English this year. (Sitel, 2023).

Regardless of the reasoning behind it, the decline of academic integrity in higher education is unsettling for it undermines the principles of honesty, fairness, and originality. Plagiarism and cheating erode the value of education, hinder personal growth, and devalue degrees. Thus, it is imperative to address this decline, as it threatens the credibility of educational institutions and compromises the learning experience for all students.

2. Methodology

This section outlines the research approach used to investigate the impact of remote learning on academic integrity in higher education. It details the data collection methods, analysis techniques, and ethical considerations employed in the study.

Regarding the *sample,* this small-scale study used a random sample of 38 participants within the population of tertiary students from the Faculty of Education - Bitola. This simple random sample is representative of the larger population of students enrolled at the faculty. The identified *research problem* was the perception that students cheat during distance learning. The study investigated this issue in order to better understand the extent of academic dishonesty among students in higher education. Understanding the identified problem, the *objective* of the study was to detail students' perceptions of academic dishonesty in distance learning. The study also investigated the reasons why students cheat, how frequently they cheat, and what measures can be taken to prevent academic dishonesty in distance learning.

To reach the objective, *data* was collected using an online survey administered through Google Forms. The survey sent to all students at the Faculty of Education – Bitola, enquired about students' perceptions of academic dishonesty in distance learning. The survey was anonymous, and all data collected will be kept confidential.

In a similar line, the study took into account all relevant *ethical considerations* related to data collection and analysis. All students were notified about the purpose of the study and were given the option to opt out of participating. As stated, the survey was completely anonymous, and the collected data was handled as confidential. As for its *limitations,* the study was limited to one faculty and a small sample, which may limit the generalizability of the findings. The study also relied on self-reported data, which may be subject to bias or inaccuracies.

Overall, the study aimed to test the *main hypothesis*: *A significant number of students in higher education cheat during remote learning.* This hypothesis was tested using both quantitative and qualitative data analysis techniques, including statistical analysis and thematic analysis.

It is also important to note that this study was conductedwithout any external funding, ensuring unbiased exploration and analysis of the subject matter. The author declares no conflictinginterests that could influence the outcomes or compromise this study'sobjectivity.

3. Results and Discussion

As stated, this study employed the data collection method through an online questionnaire. The questionnaire was self-administered and it included a total of 8 multiple-choice and select-all-that-applyquestions. The said questionnaire was sent to a random sample of 50 participants – students at the Faculty of Education, Bitola – 38 of whichresponded. resulting in a response rate of 76%. This response rate demonstrates a substantial level of engagement and suggests a representative sample for analysis and interpretation. The high response rate enhances the reliability and generalizability of the study findings.

The first set of questions aimed to collect demographic data to do with the sample. As stated, the sample consisted of a total of 38 students, distributed across different academic years. Among the participants, 10 students were in Year 1, 12 students were in Year 2, 8 students were in Year 3, and 8 students were in Year 4. This distribution of participants across academic years ensures a diverse representation of students at various stages of their educational journey. (Figure 1)

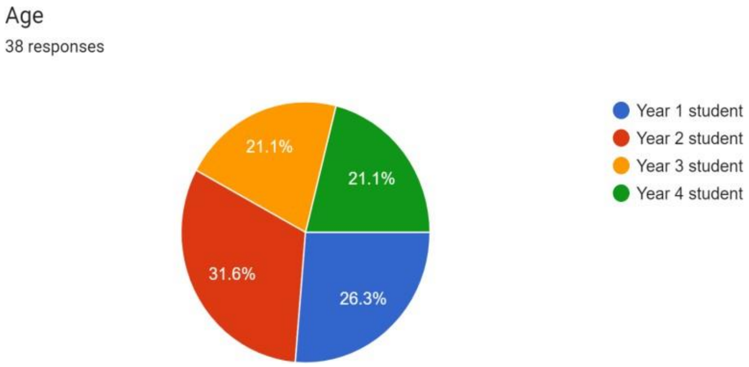

Figure 1: Distribution of the sample among academic years

Regarding the gender distribution, the data revealed that out of the 38 participants, 31 identified as female, while 3 identified as male. Additionally, 4 participants chose not to disclose their gender preference. These findings highlight the predominance of female students within the Faculty of Education – Bitola, indicating a potential gender disparity within the sample. (Figure 2)

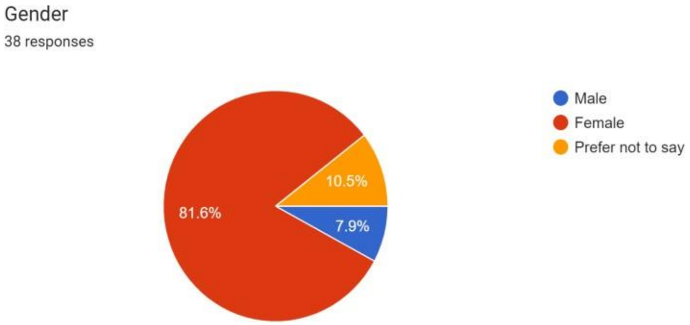

Figure 2: Gender distribution

With the gender and academic level data collected, the questionnaire then set to enquire about students' perspectives to do with academic dishonesty and integrity. The multiple-choice question *"Have you ever cheated or engaged in any type of academic dishonesty during online learning?"* yielded interesting responses from the participants. Among the 38 respondents, 9 individuals admitted to cheating or engaging in academic dishonesty often, while 19 participants confessed to doing so every once in a while. Thus, over ⅔ of the students admitted to having engaged in fraudulent behavior during remote learning, whether frequently, or sporadically. These findings shed light on the prevalence of academic misconduct in the context of remote education and the prevalent need to address it.

On the other hand, 10 participants declared that they had never cheated or engaged in any form of academic dishonesty during online learning. Though this might seem like excellent news, it is important to acknowledge the potential influence of the so-called, social desirability bias. As this questionnaire was administered by their instructor, students might have felt compelled to provide socially acceptable or favorable responses to present themselves in a positive light. Though certain steps were taken to mitigate this bias (such as ensuring anonymity and confidentiality in the data collection process) it is important to acknowledge that despite the anonymity, some level of self-reporting bias or underreporting may still be present. (Figure 3)

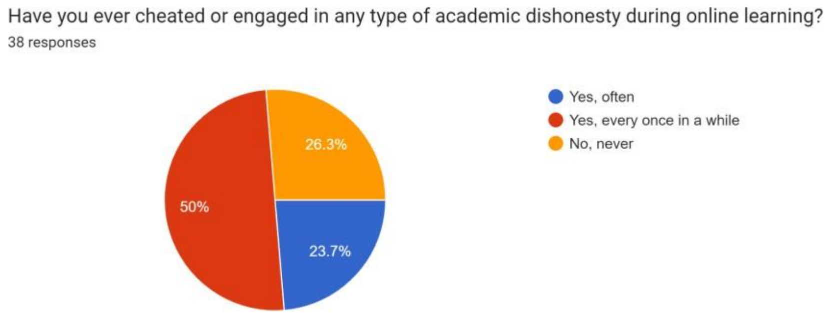

Figure 3: % of participants engaging in academic dishonesty

Interesting results were also obtained as to whether students have *“witnessed or heard of someone else cheating online”*. Out of the 38 respondents, a significant majority of 31 students indicated that they had witnessed or heard of someone cheating on an online exam. Conversely, 7 participants reported that they had not come across any instances of cheating. These findings suggest a high prevalence of observed cheating behaviors within the online exam setting, which is undoubtedly concerning.

Once again, it is important to note the potential social desirability bias in the responses. Participants might have been more comfortable discussing instances of academic misconduct involving "someone else" rather than admitting personal involvement. This bias might have led to a higher number of students acknowledging other students' fraudulent behavior while downplaying their own engagement in dishonest practices. Which might mean that the number of students who actively break the rules is significantly higher than initially admitted. (Figure 4)

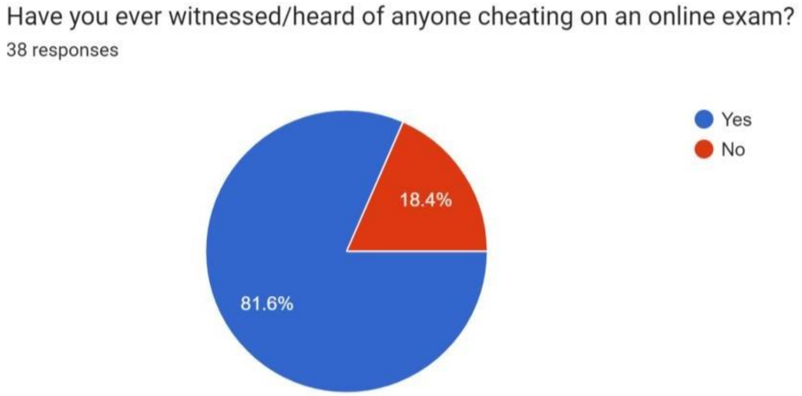

Figure 4: Observed dishonest behavior

The following select-all-that-apply question focused on the reasons why students cheat. The responses revealed a wide range of factors that contribute to dishonesty in higher education. Among the 38 participants, several motivations were identified. The most frequently selected reason was the accessibility of online resources that make cheating easier (20). Other commonly mentioned motivations included the pressure to achieve high grades and maintain a certain GPA, which was chosen by 19 respondents, the belief that cheating is a common or accepted practice among peers or in the academic culture (16), and the lack of consequences for cheating online (13). Additionally, participants identified factors such as the lack of time for completing demands on time (12) and peer pressure (2) as additional reasons behind academic dishonesty. It is noteworthy that a few respondents also provided their own unique motivations, using the "Other" option, such as not liking the professor (1) and lacking the motivation to learn (1).

These diverse motivations highlight the complex nature of cheating and academic dishonesty in online learning environments. Students may be driven by various external and internal factors that influence their decision to engage in dishonest practices. Due to the vast array of reasons for engaging in such behavior, the issue of the declining academic integrity is that much more difficult to solve. (Figure 5)

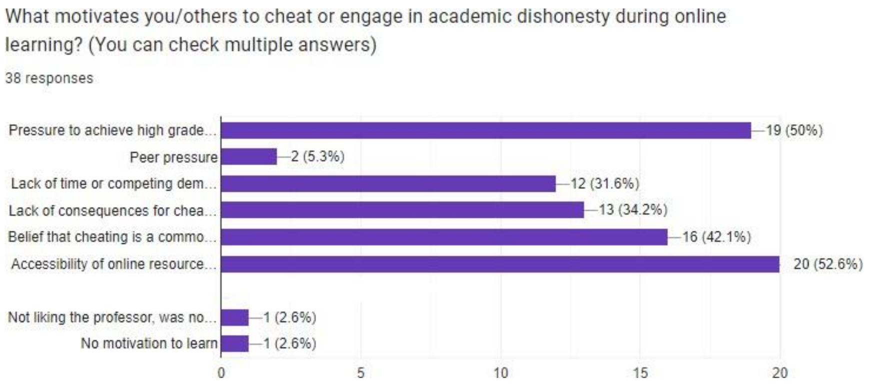

Figure 5: Reasons to engage in academic dishonesty

In order to compare the dishonest behavior in real life vs. in an online environment, the questionnaire enquired whether students think cheating is more prevalent online. Out of the 38 respondents, a significant majority of 30 stated that in their view, students cheat more during online exams compared to traditional exams. On the other hand, 8 participants expressed the belief that there is no significant difference in cheating behavior between the two modes of assessment. (Figure 6)

It is important to consider the aforementioned reasons for cheating, as they may shed light on the perceived increase in cheating during online exams. The highlighted factors above, such as the accessibility of online resources, and the belief that cheating is a common practice could contribute to the perception that online exams are more susceptible to dishonest behaviors.

However, it is crucial to note that perceptions do not necessarily reflect the actual prevalence of cheating. Future research should explore this perception further and investigate the correlation between perceived cheating rates and actual instances of academic dishonesty online and offline.

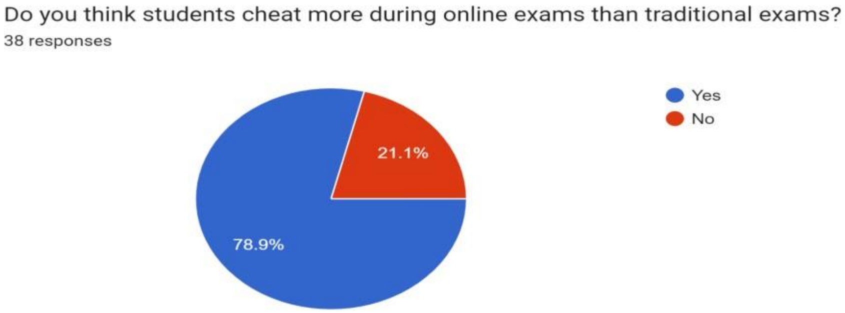

Figure 6: Cheating online vs. offline

Students' perceptions as to the measures academic institutions have taken/should take to prevent academic misconduct are also interesting to note. Out of the 38 respondents, 17 stated that academic institutions should take stricter action against students who cheat or engage in academic dishonesty during online learning. In contrast, 21 participants believed that the existing measures in place are sufficient. (figure 7)

These responses reveal a divergence of opinions regarding the appropriate approach to addressing academic dishonesty in the online learning environment. These contrasting perspectives highlight the complexity of striking the right balance between prevention, and intervention.

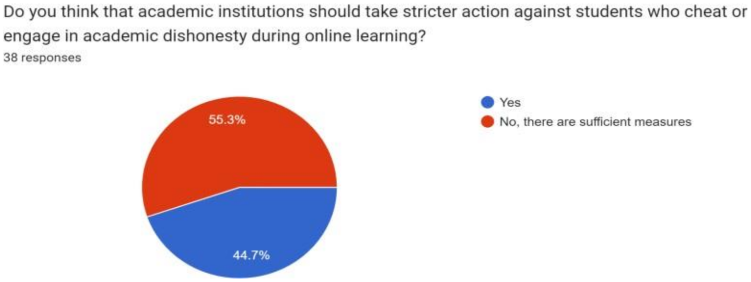

Figure 7: The appropriate approach to addressing academic dishonesty

The final part of the questionnaire aimed to collect data on students’ perception as to what constitutes as cheating in academia, understanding that not recognizing a behavior as inappropriate or fraudulent might also be one of the reasons cheating occurs at such a high rate. According to the responses, the most commonly identified forms of academic dishonesty included copying from others' work or using someone else's ideas without proper citation (25), having someone else complete an assignment or take an exam on one's behalf (25), and submitting work that has been previously submitted for another course or assignment (22). Other behaviors acknowledged as cheating or dishonesty included cooperating with others to cheat or engage in academic dishonesty (21) and using 'essay mills' or other services to complete assignments on one's behalf (18). Notably, 15 participants indicated that they consider asking professors for help, cheating. (Figure 8)

These variations in individuals' perceptions of what constitutes academic misconduct can also be seen as part of the wider issue. As stated, failing to recognize certain behaviors as problematic or not fully understanding the boundaries of academic integrity can contribute to dishonesty. To address this, institutions should provide clear guidelines, training, and awareness programs. Such measures can empower students to make informed decisions, encourage ethical behavior, and create a culture that prioritizes integrity in higher education.

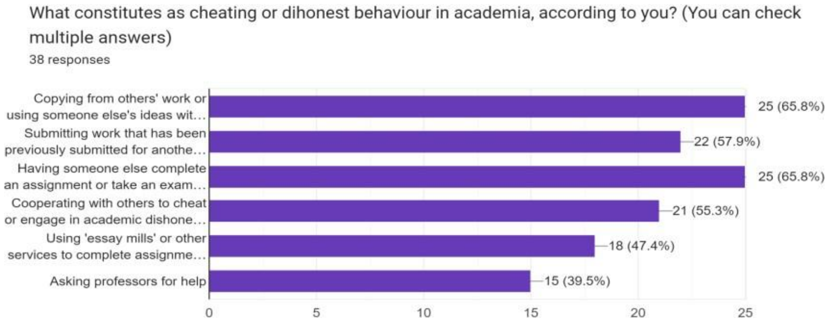

Figure 8: Students' perception as to what constitutes as academic dishonesty

4. Conclusion

The study found that a significant number of the sample of students in higher education admit to cheating, and their reasons for doing so vary. While some students cheat out of a desire to succeed or a fear of failure, others cheat due to the ease of access to information online or a lack of understanding of what constitutes academic dishonesty. Although students' answers must be observed and generalized cautiously due to the potential of self-reporting bias, it seems that academic dishonesty in the remote learning environment is a prominent issue that needs to be addressed carefully, due to the difficulty of striking the right balance between prevention and intervention.

These findings underscore the need for higher education institutions to prioritize academic integrity and employ effective strategies to prevent and address fraudulent behavior. In order to address the issue of academic dishonesty, higher education institutions can take several steps. Such efforts could include promoting a strong culture of integrity, providing clarity on what constitutes academic dishonesty, and implementing appropriate disciplinary measures when misconduct occurs. Moreover, they can provide support and resources to help students succeed academically without resorting to dishonest practices. By addressing the underlying motivations, enhancing awareness, and fostering a sense of personal responsibility, higher education institutions can strive to cultivate an atmosphere of trust, fairness, and ethical conduct.

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SESSION 1
(E-learning and Digital Technologies in Education)

INTERNATIONAL BACCALAURATE WORLD SCHOOLS IN GREECE AS PROFESSIONAL LEARNING COMMUNITIES: TEACHERS' VIEWS

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Abstract:
Recent scientific interest has focused on the concept of 'organizational learning' as a key factor for the sustainability of educational organizations. A key initiative in this area is the implementation of Professional Learning Communities (PLC), collaborative networks aimed at fostering continuous professional development. This study explores this concept in the context of International Baccalaureate (IB) Schools in Greece, known for their emphasis on collaboration and teacher professional development. The research employed a quantitative approach, using the Professional Learning Communities Assessment-Revised (PLCA-R) tool. Data was collected from a diverse sample of 109 IB teachers and analyzed to assess the extent of PLC practices in their institutions. Preliminary findings suggest a high level of implementation of PLC practices, according to surveyed IB teachers' perceptions. Specific areas like 'supportive conditions - structures' and 'collective learning and application' showed substantial implementation. However, 'supportive and shared leadership' practices appeared less prevalent. This discrepancy signals potential areas of improvement in the Greek IB system, particularly with respect to cultivating leadership within PLCs. Therefore, these findings underscore the need for further research into the applications and challenges of PLCs in IB schools and international educational settings, and their role in promoting organizational learning.

Keywords: *IB World Schools, International Baccalaureate, Professional Development, Professional Learning Communities, PLC's dimensions, Teachers' views*

Introduction

In the modern globalised era of technological advances, an organization ought to be flexible to effectively respond and adapt to changes, thus securing its viability (Geleta & Tafesse, 2017). The ability to "learn" has been recognised as the sole, viable, competitive advantage for future companies according to the Organization for Economic Cooperation and Development (OECD, 2016). Educational organizations, too, cannot remain indifferent to this necessity. Papazoglou and Koutouzis (2017) posit that the creation and exchange of new ideas and knowledge are fundamental components for these organizations to thrive in our ever-changing society. As educational systems worldwide search for reformative initiatives to facilitate this organizational shift, Professional Learning Communities (PLCs) have increasingly gained attention. Seen as a means to enhance the learning, abilities, and practices of their educational staff and thereby maximise student outcomes, PLCs have been widely adopted for their promise of improving overall results (Hairon, et al., 2015).

Theoretical Framework

Professional learning communities

Despite extensive research in the field of education, a universally accepted definition of Professional Learning Communities (PLCs) remains elusive due to their multifaceted nature, the variety of interpretations, and their application across diverse disciplines (Jones, Stall & Yarbrough, 2013). Early attempts to define PLCs focused on key aspects that contribute to their effectiveness. Hord (1997) identified these elements as 1) supportive and shared leadership, 2) collective creativity, 3) shared values and vision, 4) supportive conditions, and 5) shared personal practice. A more recent definition was provided by DuFour et al. (2016, p.10), who described a PLC as an 'ongoing process in which educators work collaboratively in recurring cycles of collective inquiry and action research to achieve better results for the students they serve. PLCs operate under the assumption that the key to improved learning for students is continuous, job-embedded learning for educators".

The role of leadership

The role of school leaders in establishing and maintaining Professional Learning Communities (PLCs) is multifaceted. Leaders are expected to show commitment to continuous staff learning, fostering opportunities for personal and professional development while cultivating a culture of cooperation and shared vision (Oragwu

& Nwabueze, 2015). In their exploration of effective leadership for PLCs, Louis and Kruse (1995) outlined key characteristics. They emphasized that successful leaders should be central to the educational staff, rather than occupying a distant, top-down position. These leaders should encourage a culture of inquiry, guide the integration of new knowledge into educational practices, handle conflicts adeptly, and show sensitivity to the needs and concerns of the teaching staff. However, the traditional notion that a single school principal can single-handedly establish a successful PLC is considered outdated in the modern complex educational landscape (Thompson, Gregg & Niska, 2004). Given this shift, certain educational practices and leadership models have been identified as beneficial for developing and sustaining PLCs within school settings. These include instructional, transformational, and distributed leadership models.

Implementation phases

The incorporation of innovations such as PLCs into school units is a process that takes time. Recognizing that a 'one-size-fits-all' approach is infeasible due to the unique characteristics of each organization, several broad phases have been proposed to assess the implementation of innovative practices like PLCs. In Fullan's literature (1985), a model was proposed outlining three broad phases of the change process: i) the initiation phase, ii) implementation phase, and iii) institutionalization phase (Berman, 1981; Huberman & Crandall, 1983; Fullan, 1985). Building upon these phases, Hipp and Huffman (2010) added a non-initiated phase preceding the original three, and suggested replacing 'institutionalization' with 'sustaining' for the final phase. This revised four-point categorization will be used in the following research to descriptively assess the stage of implementation of PLCs in IB schools.

IB World Schools

Mission and Philosophy

The vision of the International Baccalaureate Organization (IBO) is "to develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through education that builds intercultural understanding and respect” (IBO, 2019). To achieve this, the organization collaborates with schools, governments, and international entities to develop robust international education and assessment programs.

IB Leadership

The notion that the IB community is able to conform to a comprehensive model or exemplar of leading practices seems utopian. The complex network of IB educational bodies, spanning globally with diverse social and cultural backgrounds, unique organizational structures, varied human resources management, and the implementation of the IB program, were challenges that the founders had to address. Their efforts culminated in a leadership model grounded in the philosophy and vision of the IB (Lee, Walker & Bryant, 2019).

This model draws from extensive research on educational leadership, while acknowledging the multifaceted nature of leadership roles across diverse settings. Consequently, the focus is placed on developing the leader's abilities to enhance student outcomes and the collective performance of the organization (Calnin, et al., 2018). The abilities, designed to be measurable and relevant to the profile of an IB leader (IBO, 2018), encompass strategic capability, cultural capability, pedagogical capability, entrepreneurial capability, relationalcapability, reflective capability, and heuristic intelligence (insight)capability.

The Reality in Greece

Currently, the international educational IB programme is offered in seventeen (17) private schools in Greece. Of these, eight (8) offer the IB Primary Years Programme (PYP), six (6) offer the PYP and the Middle Years Programme (MYP), while thirteen (13) schools also provide the IB Diploma, which is equivalent to an international baccalaureate.

Aim of the Study and Research Questions

The aim of the study is to examine the views of IB teachers (homeroom and subject teachers) on the implementation of PLCs practices in Greek IB Schools.

Specifically, based on IB teachers’ views, the research questions of the present study are:

1. To what extent is supportive and shared leadership implemented in Greek IB Schools?
2. Are shared values and vision prevalent within Greek IB Schools?
3. Is collective learning and application of learning taking place in Greek IB Schools?
4. Is shared personal practice a common method within Greek IB Schools?
5. Do supportive conditions for professional learning exist in Greek IB Schools?

Methodology

Participants

The research design underpinning this investigation is quantitative. The study population comprises teaching faculty across all academic subjects employed at IB-affiliated institutions in Greece. The researchers established contact with all seventeen IB schools offering one or more of the IB programmes (PYP, MYP, IB Diploma) in Greece. To facilitate a comprehensive and inclusive data collection, questionnaires were disseminated to the entire faculty of these institutions, thereby offering all faculty members the opportunity to participate in this study (Bryman, 2017). Data collection was conducted electronically from December 12, 2022, to January 20, 2023.

The sample size for this study was 109 participants, comprised of 17.4% male (n=19) and 82.6% female (n=90) respondents. The age of participants ranged from 22 to 64 years, with a mean age of 35 years. The predominant educational attainment was a master's degree (54.1%), followed by a bachelor's degree (38.5%). On the criterion of professional tenure in IB schools, a majority of respondents (52.3%) reported five-year tenure. A higher proportion of teachers were affiliated with PYP schools (56%), with the remainder (44%) being from schools offering the complete continuum of IB programmes(PYP, MYP, IB Diploma).

The profile of the IB schools represented in the sample revealed a larger number of schools with faculty exceeding fifty-one teachers (62.4%), and schools where student enrollment exceeded 250 (74.1%).

Research tool

The "Professional Learning Communities Assessment-Revised (PLCA-R)" developed by Olivier et al. (2009) and translated into Greek by Balasi (2020) served as the research tool for data collection.The instrument measured all 5 dimensions of PLCs and was subjectedto internal reliability testing using Cronbach's alpha coefficient, yielding coefficients exceeding 0.81 across all dimensions and anaggregate index exceeding 0.97, attesting to the high internal reliabilityof the instrument (Table 1).

Table 1.

Cronbach's Alpha Coefficients for the 5 PLC dimensions

	Cronbach's Alpha	*n*
1. Supportive and shared leadership	0,905	11
2. Shared values and vision	0,908	9
3. Collective learning and application of learning	0,928	10
4. Shared personal practice	0,879	7
5. Supportive conditions	0,898	15
Total	0,898	52

Given the exploratory nature of this study, the data analysis strategy incorporated descriptive statistics, specifically focusing on measures of central tendency and dispersion.

Results

Dimensions of PLCs

The collected data from all five (5) dimensions of the investigated PLCs yielded a mean of 3.02 (*SD*=0.44). The highest mean 3.06 (*SD*=0.53) was reported in the dimensions of "supportive conditions regarding the structure" and "collective learning and application of learning," according to the responses of the surveyed IB teachers. Conversely, the dimension of "supportive and shared leadership" exhibited the lowest mean (*M* = 2.95, *SD* = 0.53). Table 2 provides a comprehensive overview of the means and standard deviations (SD) for each of the six dimensions of Professional Learning Communities (PLCs). It provides an aggregate depiction of the survey responses, further enhancing our understanding of the prevailing dynamics in Greek IB Schools

Table 2.

Mean and SD per PLC's dimension and dimensions total

	M	*SD*
1. Supportive and shared leadership	2,95	0,53
2. Shared values and vision	3,05	0,50
3. Collective learning and application of learning	3,06	0,50
4. Shared personal practice	3,00	0,53
5. Supportive conditions	3,06	0,51
Total	3,02	0,44

Note: 1=Strongly disagree, 2=Disagree, 3=Agree, 4=Strongly agree

Supportive and shared leadership

The dimension of "supportive and shared leadership" was noteworthy, with 89% of the teachers reporting that staff at their respective schools have access to critical information such as updates, archives, etc. A substantial number of participants (85.4%) stated that multiple data sources are used in decision-making regarding teaching and learning. However, concerns were raised by 44.9% of the respondents regarding the accountability for student learning, with no clear direction or control from involved parties, such as parents and members of the local community.

Shared values and vision

In terms of shared values and vision, 91.7% of teachers agreed that common values that support behavior norms and guide decisions on teaching and learning are highly present in their respective IB schools.

However, 27.6% disagreed that parents and community members actively participate in setting high expectations for student achievement.

Collective learning and application of learning

As for "collective learning and application of learning," 93.6% of the teachers agreed that their IB school colleagues are committed to implementing programs that enhance learning. Moreover, 92.7% of respondents collaborate with other staff to address students' diverse needs effectively. However, 26.6% of respondents disagreed that all parties and staff at their IB schools learn together and apply theacquired knowledge to solve arising problems, hinting at a possible lack of cooperation in this area.

Shared personal practice

The fourth dimension, "shared personal practice," showed that 92.7% of surveyed teachers mentioned that they frequently share ideas to improve their students' learning process. However, 35.8% of teachers disagreed that staff is provided with opportunities to observe their colleagues during teaching, suggesting room for improvement in this area.

Supportive conditions

In the dimension of "supportive conditions", a high percentage (92.7%) of teachers reported caring, respectful relationships based on trust between staff and students. However, some teachers expressed disagreements about the recognition of achievements and the involvement of parties in facilitating change in the school culture.

Lastly, regarding supportive conditions related to structure, 94.5% of teachers agreed that their schools provide adequate technological and educational equipment. However, a significant proportion (45%) disagreed about the allocated time for facilitating collective work in the school. Overall, respondents' feedback highlighted a need for better consideration of staff's personal needs within these educational organizations.

Discussion

This research was conducted to examine teachers’ views at IB schools concerning the implementation of Professional Learning Communities (PLCs) within Greek IB schools. The overarching conclusion of this study is that the majority of surveyed teachers indicated that IB schools implement PLC practices at a high level across all individual dimensions. However, the exact degree of PLC practices application in IB schools remains undefined, owing to the need for qualitative research on the individual aspects of each dimension. Nonetheless, the substantial agreement percentages among IB teachers suggest that Greek IB schools are currently in a sustaining phase, with practices across all dimensions reflecting the schools' philosophy.

Supportive and Shared Leadership

The participants' perspectives revealed high occurrences of collaborative and supportive leadership practices in IB schools. However, this specific dimension garnered the least agreement among teachers compared to other PLC dimensions, marking it as the least implemented in totality. Delving deeper, the pronounced application of this dimension's practices within IB schools confirms the International Baccalaureate Organization's (IBO) objective to transform schools where their programmes are offered into dynamic learning communities (IBO, 2018).

The dimension requiring enhancement involves shared responsibility and accountability for student learning without the imposition of force or power by involved parties— parents, local community members, and inclusive participation of principals with the staff in power distribution. These parties, especially parents, contribute to teachers' work-related stress in private schools due to their exerted authority, as cited in Brady and Wilson's research (2002). This issue, coupled with the lack of power distribution noted by the OECD (2011), underscores the need for educational policies that allow the adoption of contemporary leadership practices, crucial for both private and public educational organizations to function successfully as PLCs.

Shared Values and Vision

The IB teachers that took part in this study affirmed the application of "shared values and vision" practices at high levels within IB schools, echoing the IBO's mission of shared philosophy and common vision in schools that apply their programs (IBO, 2018). This dimension's high application supports the notion that an IB teacher must possess a collaborative spirit and beliefs to be deemed "successful" (Bergeron & Dean, 2013; Lee et al., 2022), while indicating that IB schools implement leadership practices aligning with transformational leadership principles (Kouzes & Posner, 2017). Practices needing improvement involve parents and local community members who don't seem to actively participate in shaping high expectations to elevate students’ achievements, possibly linked to a "consumer model of involvement" common in private schools (Hornby, 2020).

Collective Learning and Application of Learning

The “collective learning and application of learning” dimension saw the highest agreement among the PLC dimensions in this study, reflecting the educational competencies of IB teachers fostered by the IBO, which includes creating prerequisites for collective knowledge across all educational units (IBO, 2018). This dimension's most frequently applied practices reaffirm the IBO's desired commitment (Singh & Qi, 2013), the collective approach encouraged in IB institutions (IBO, 2018), and, to a degree, the application of modern leadership practices related to pedagogical leadership principles (Mora-Ruano, Schurig, & Wittmann, 2021). As in previous dimensions, revising the school-family relationship and engaging parents or guardians is seen as crucial.

Shared Personal Practice

The "shared personal practice" dimension and its practices are the least applied in Greek IB schools compared to other dimensions based on surveyed IB teachers. However, it doesn't imply an unsatisfactory application level. The most commonly applied practices in Greek IB schools relate to the international IB community's existence and the positive reinforcement of sharing ideas and practices, both informally (via Social Media) and formally (such as "My IB"). In contrast, the least applied practices could be attributed to limited available time among teachers and programme pressure—factors contributing to higher emotional exhaustion among private school educators (Sood, 2019; Balasi, 2020).

Supportive Conditions

The research findings indicate high-level practices of this dimension, attributed to the advanced facilities provided by private educational institutions, a factor influencing parents to prefer them over the public sector (Yaacob, Osman & Bachok, 2014). Regarding supportive conditions towards relationships, it was observed that teachers' achievements are not significantly recognized by IB schools, and involved parties do not collaborate with staff to integrate "change” into the school philosophy. Additionally, it's critical to underscore teachers' opinion that staff relationships can improve— likely due to existing competition among them, as noted in the "shared personal practice" practices. Lastly, the teachers highlighted that organizations do not adequately fund their professional development, a finding that contradicts the IBO's philosophy on professional development (IBO, 2021; IBO, 2022).

The results of this exploratory research, as well as the general conclusion that emerged regarding the high implementation of PLCs in IB schools in Greece, are suggested to constitute the starting point of a series of studies where the practices of the PLCs applied in IB schools will be studied in depth, quantitatively and qualitatively, not only at the national but also at the international level. It would be interesting also to study apart from educators' views, perspectives of IB Coordinators and students, in order to achieve a holistic approach to the field.

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SESSION 1
(E-learning and Digital Technologies in Education)

ONLINE TEACHING SELF-EFFICACY: THE VIEWS OF TEACHERS IN HIGHER EDUCATION

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Abstract

Universities worldwide had been called upon to respond to the new teaching conditions brought about by the Covid-19 pandemic by implementing distance learning. The aforementioned situation has caused various challenges, starting with the forced and urgent change in learning and working cultures in higher education. Of particular interest was dealing with the difficulties faced both the educational institutions and their staff. Therefore, the purpose of the present study was to investigate the perceptions of teachers in higher education about online teaching self-efficacy. The sample consisted of 222 men and 145 women who teach in Greek universities. Research data have been collected with the following self-report scale: Online Teaching Self-Efficacy Inventory (henceforth OTSEI). This questionnaire is based on the work of Dr. Kevin P. Gosselin (2009). It was also distributed a socio-demographic question sheet and a section for general information about distance learning during the pandemic Covid-19 and their digital skills (digital proficiency, distance learning experience, use of "synchronous" and "asynchronous" learning platforms/ digital applications). The results of statistical analyses showed: a) the coherence, and more specifically, the high validity and reliability of OTSEI as a research tool,

b) women' s higher skills in virtual interaction compared to men and

c) distance learning experience affects both online teaching self-efficacy and all its sub-dimensions. The above findings are discussed in relation to the development of hybrid teaching systems, the digital literacy/ training of academic teachers and the selection of appropriate technological equipment.

Keywords: *COVID-19, distance learning, higher education, online teaching self-efficacy.*

Introduction

The COVID-19 pandemic and in particular the suspension of university operations worldwide has highlighted the already existing need for distance learning. Its urgent implementation was a special condition for investigating issues related to the implementation of online teaching, the effectiveness of higher education teachers in the new forms of teaching (Scherer, Howard, Tondeur, & Siddiq, 2021), within the framework of the aforementioned condition. Identifying the use of digital technologies in ways that can contribute to the enhancement and innovation of education and training is considered important (Redecker, 2017).

Online/distance teaching self-efficacy refers to teachers' own beliefs about their: a) knowledge and skills, b) self-confidence regarding their ability to effectively utilize online education technologies, c) abilities to engage students in distance learning, d) ability to manage their classroom online (Green & Bettini, 2020; Yang, 2021) and e) ability to application of new technologies and digital tools (Hampton et al., 2020).

Characteristics such as resilience, adaptability, coping with stressful situations are predictive factors for online teaching self-efficacy (Hampton et al., 2020). On the other hand, a high sense of self-efficacy in the distance education condition mitigates the risk of burnout and enhances coping with secondary stress (Bandura, 1997; Benight & Bandura, 2004; Yang, 2021). Teachers' online teaching self-efficacy is particularly enhanced by past online teaching experience, as when faced with similar challenges in online courses they have ideas on how to deal with the situation (Baroudi & Shaya, 2022; Hampton et al., 2020). Predictors of online teaching self-efficacy are also teachers' digital skills, their preparation for the use of digital media and technologies (online environment quality), the development of online educational strategies, online classroom management and engagement - inclusion of students in the online learning process (Robinia & Anderson, 2010; Baroudi & Shaya, 2022).

Online/distance learning is now widely considered necessary rather than merely optional in higher education (Gosselin, Northcote, Reynaud, Kilgour, Anderson & Boddey, 2016). A necessary condition for its successful implementation is the self-efficacy of academic teachers (Hampton et al., 2020). In fact, university teachers' awareness of their level of teaching self-efficacy in an online environment can contribute to improving their teaching practices (Al Qadhi et al., 2022). Therefore, the purpose of the present study was to investigate the perceptions of higher education teachers regarding the online teaching self-efficacy. More specifically, it aims to adapt the OTSEI in the context of higher education in Greece and then to evaluate both its validity and reliability.

Method

The research was conducted in Greece in the period from May 19, 2022 to July 4, 2022, so that a sufficient period of time has passed since the start of live lessons (after their suspension due to the pandemic) and the participants have form their views on the researched issues, through the comparison with distance education. Data collection was carried out using Google Forms in order to ensure both participants' safety (due to pandemic) and the access to all the universities of Greece.

Hypotheses

H1: Validity and reliability of OTSEI in Greek higher education context.
H2: Positive effect of distance learning experience on online teaching self-efficacy.
H3: Women show higher online teaching self-efficacy than men.

Participants

The sample of this research was 367 higher education teachers (see Table 1).

Table1.
Distribution of the sample in terms of teaching position and gender.

	Gender					
	Men		Women		Total	
Teaching position	n	%	n	%	n	%
Professors	74	20,16	26	7,08	100	27,25
Associate Professors	53	14,44	25	6,81	78	21,25
Assistant Professors	36	9,81	28	7,63	64	17,44

Special scientific, laboratory teaching, and special technical laboratory staff	33	8,99	49	13,35	82	22,34
Extraordinary teaching staff	26	7,08	17	4,63	43	11,72
Total	222	60,49	145	39,51	367	100,00

As part of an attempt to collect data from all academic fields, the sample included participants from the following schools: i) agriculture, ii), economic and political sciences, iii) environmental studies, iv) fine arts, v) health sciences, vi) humanities and social sciences, vii) informatics viii) school of education, ix) school of engineering, x) school of law, xi) school of sciences and xii) physical education.

Measure

The research tool used for data collection was the Online Teaching Self-Efficacy Inventory which consists of five subscales (Gosselin, 2009):

a) *Selection of Technological Recourses*. Online teacher's ability to select, utilize and determine the technology to enhance student's learning and enrich instruction.

b) *Virtual Interaction*. Faculty member's effective facilitation of teacher-student interaction, meaningful student cooperation and the ability to establish a positive social climate that engages students through fostering motivation, intellectual commitment and personal development.

c) *Unit Content Migration*. The ability to successfully transfer instructional materials from face-to-face to online courses; the contents of the transferred information are sufficiently comprehensive to achieve the defined learning outcomes.

d) *Online course alignment.* Encompassing faculty's ability to effectively align learning objectives, unit assignments and learning activities, and assessment strategies and procedures with online courses.

e) *Web-based unit structure*. The ability to design and build an online course: i) with a clear organizational structure and simple navigation and communication instructions, ii) consistent and aligned with the mission of the university, and iii) adapted to the context of equal access and inclusive learning, with respect to diversity.

Results

Psychometric characteristics

In order to determine the psychometric characteristics of the scale, validity and reliability tests were carried out.

Validity

More specifically, to determine the validity, of the OTSEI, the Principal Component Analysis (PCA) was carried out. This test yielded five factors (see Figure 1) that explained 67.98% of the total variance. The Kaiser-Meyer-Olkin (KMO) index of sampling adequacy was calculated at .94, a particularly high value.

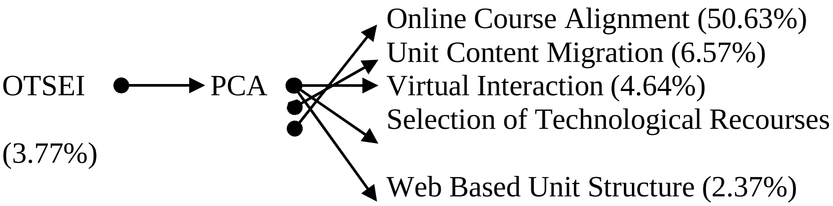
Online Course Alignment (50.63%)
Unit Content Migration (6.57%)
OTSEI
PCA
Virtual Interaction (4.64%)
Selection of Technological Recourses
(3.77%)
Web Based Unit Structure (2.37%)

Figure 1. Principal Component Analysis – OTSEI (5 factors)

Reliability

In order to measure the reliability, of the OTSEI, the internal consistency reliability method was applied through the calculation of the Cronbach's alpha reliability index. All subscales of the OTSEI showed high reliability (see Table 2).

Table 2.

Cronbach's alpha reliability coefficients of Online Teaching Self-Efficacy Inventory.

	Cronbach' s α
Online Course Alignment	.96
Unit Content Migration	.94
Virtual Interaction	.95
Selection of Technological Recourses	.91
Web Based Unit Structure	.90

Distance Learning Experience Effects

According to the results of one-way ANOVA and post hoc multiple comparisons with the Tukey HSD test, the participants who had experience distance teaching (pre-Covid-19)in both theoretical and laboratory courses showed statistically significant higher skills in each sub-dimension of online teaching self-efficacy and also in overall online teaching self-efficacy (see Table 3).

Table 3.

Pre-Covid-19 distance teaching experience effects (One-Way ANOVA).

	Distance learning experience in both theoretical and laboratory courses		No experience in distance learning before Covid-19				
	M	*SD*	*M*	*SD*	*F*	*p*	η^2
Online Teaching Self-Effica	152.95	18.84	130.30	29.13	5.32	.001	.04
Online Cou Alignment	37.00	7.12	30.96	8.75	4.84	.003	.04
Unit Conte Migration	39.35	4.53	34.47	7.11	3.52	.015	.03
Virtual Interaction	32.40	6.32	27.67	7.62	3.22	.023	.03
Selection o Technologi Recourses	24.75	4.30	20.70	5.49	5.55	.001	.04
Web Based Unit Struct	19.45	2.61	16.50	4.38	3.70	.012	.03

Note: The findings related to the dimensions of previous experience (in theoretical courses, in laboratory courses) which presented statistically insignificant differences (*p*>.050) have been omitted.

Socio-demographic Characteristics Effects

In order to study the relationship between the variables under investigation and gender were performed t-criterion tests for independent samples (see Table 4).

Table 4.
Comparison of means (t-test) according to gender, regarding sub-dimensions of OTSE.

	Men			Women				
	M	*SD*		*M*	*SD*	*T*	*p*	*Cohen' s d*
Virtual Interaction	27.47	7.69	<	29.28	7.42	-2.240^{***}	.026	.24

***= p< .05

Note: The findings related to the variables that showed statistically insignificant differences (*p*>.05) have been omitted.

Discussion

First of all, regarding the psychometric characteristics, the results of the validity (Principal Component Analysis, see Figure 1) and the reliability controls (Cronbach's alpha, see Table 2) of the OTSEI confirm the factor structure and the coherence of the scale as a reliable assessment tool of online teaching self-efficacy of academic teachers (confirmation of the H1).

Concerning the effect of previous experience in the distance learning condition, it was found to contribute positively (confirmation of the H2), since it concerns both theoretical and laboratory courses, to academic teachers' skills in online teaching self-efficacy and all its sub-dimensions (see Table 3). This specific finding seems to be consistent with the finding of Culp-Roche et al. (2021) according to which previous online teaching experience is a predictive factor of online teaching self-efficacy. This specific finding could be interpreted more analytically if had been investigated factors related to: a) the training of teachers in new technologies in education and b) their accessibility to ICT. This observation is both a methodological limitation of the research and a suggestion for future research.

Regarding the effect of demographic characteristics and inparticular gender, the finding emerged according to which female academic teachers present higher virtual interaction skills (partial confirmation of the H3, only one sub-dimension of online teaching self-efficacy) than their male counterparts (see Table 4). This seems tobe related to the finding of Al Qadhi et al. (2022) according to which women present a higher online teaching self-efficacy compared to men. Virtual interaction is also a separate dimension of Online Teaching Self-efficacy (Gosselin, 2009). Possibly, the specific finding also echoes the special contribution of virtual interaction to online teaching self-efficacy. This finding may also be due to stereotypical perceptions according to which women show milder interaction traits (that contribute to the learning interaction) than men. Research findings have shown that women tend to have more expressive, cooperative, sensitive, warm and polite communication characteristics (Merchant, 2012).

The contribution of the present study lies in the improvement of the teaching practices of university teachers, through the acquisition of self-awareness regarding their teaching effectiveness in general and in particular in online education context (Al Qadhi et al., 2022). In addition, it is important to investigate the self-efficacy of online teaching as it has been shown to contribute significantly to the application of digital knowledge in the design and implementation of online courses (Zhen, Garthwait, & Pratt, 2008).

This research is ongoing and at an early stage. Data on the professional satisfaction and well-being of higher education teachers have already been collected and will be followed by tests of correlations and exploration of predictors of the variables under study. Finally, regarding the limitations of the research, the scale used is a self-report questionnaire and involves the risk of collecting socially acceptable answers. In a future research, to avoid the aforementioned limitation, a mixed methodology could be used. The sample of teachers for the research could be selected using the focus group method

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SESSION 1
(E-learning and Digital Technologies in Education)

EDUCATORS' DIGITAL COMPETENCE IN SECOND CHANCE SCHOOLS IN GREECE

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Abstract
The present quantitative study investigated the digital competence level of adult educators in Second Chance Schools (SCS) in Greece, according to the European Framework for the Digital Competence of Educators (DigCompEdu). A survey was conducted with 196 hourly and permanent teachers from various regions in Greece, employing the Check-In self-assessment tool. Findings indicated that adult educators in SCS, based on their responses, demonstrated a moderate level of digital competence overall. However, specific areas such as Teaching and Learning, Assessment, and Facilitating Learner's Digital Competence displayed lower levels of digital competence. Statistical analysis indicated a statistically significant relationship between digital competence and factors including employment relationship, specialization, teaching experience, and training in digital technologies. In particular, permanent educators, those with IT majors, and individuals with extensive teaching experience exhibited higher digital competency scores compared to their colleagues. The present empirical research represents the first investigation into the digital competence of adult educators in Second Chance Schools in Greece, using the DigCompEdu framework, thereby expanding upon the existing body of knowledge pertaining to adult education in this specific context.

Keywords: *Adult education, Second Chance Schools, digital competence, DigCompEdu*

Introduction

Being digitally competent today encompasses the ability to understand digital media, to seek information, critically evaluate retrieved information (given the widespread use of the Internet), and effectively communicate using a variety of digital tools and applications (mobile, internet). All these competencies draw from various disciplines, including media studies, information sciences, and communication. Analyzing the repertoire of competencies associated with digital literacy requires an understanding of all these underlying concepts. In addition, new aspects have emerged as essential conditions for digital competence to be functional in a digital environment, such as the ability to read hyperlinked texts (Ferrari, 2012).

Digital competence not only involves understanding digital tools but also extends to educators' ability to help students develop collaboration, creativity, and problem-solving skills through the use of information and communication technologies (ICT). By fostering these skills, educators play a crucial role in preparing students to become effective citizens and members of the workforce (UNESCO, 2011). To achieve this, educators must be able to integrate pedagogical skills with digital skills and apply these skills in their daily practice. Research has consistently demonstrated that teachers who possess strong technology skills are more likely to successfully integrate ICT into their teaching (Hsu, 2010). Moreover, digital media have the potential to transform learning environments and empower students to take an active role in shaping their own education. Therefore, educators should acquire robust skills in technology and its use as an effective teaching tool in order to optimize the use of digital resources in their teaching and the use of information management systems to monitor student learning (Schleicher, 2016). However, despite the recognized importancef of educators' digital competence, the research conducted in Greece has been limited. This scarcity of research highlights the need for further investigation and understanding of the digital competence of educators, particularly within the Greek context.

European framework for the Digital Competence of educators

The European Framework for the Digital Competence of Educators (DigCompEdu) provides a comprehensive reference framework that defines 22 competences across six areas, categorised into three main categories: i) professional competences of educators, ii) pedagogical competences of educators and iii) competences of learners (Figure 1). Developed by the Joint Research Center (JRC) of the European Commission the DigCompEdu framework serves as a scientifically coherent and evidence-based tool to describe what it means for educators to be digitally competent. It offers a general reference framework to support the development of specific digital competences for educators throughout Europe. The framework is applicable to educators at all levels of education, ranging from early childhood to higher education and adult education, including general and vocational education and training, special education, and nonformal learning settings (European Science Hub, n.d.).

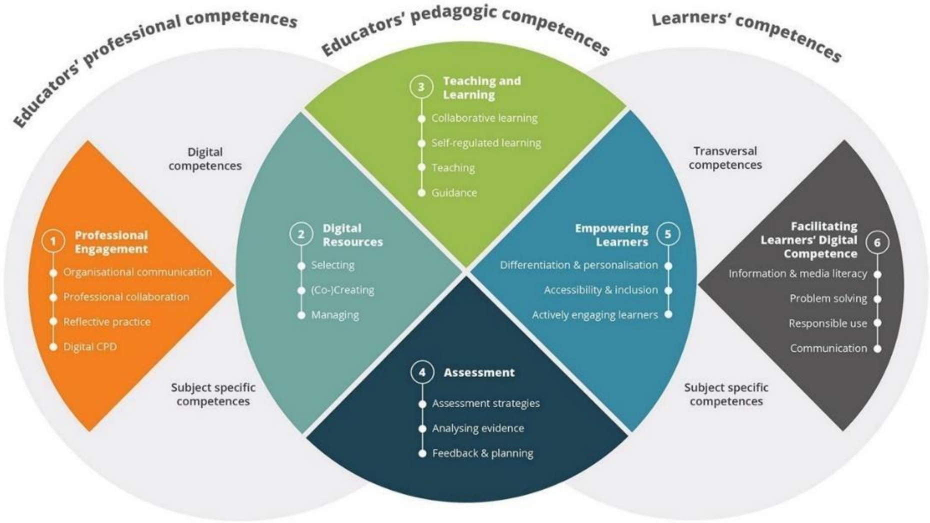
Educators' professional competences
Educators' pedagogic competences
Learners' competences
Digital competences
Transversal competences
Subject specific competences
Subject specific competences
1 Professional Engagement
Organisational communication
Professional collaboration
Reflective practice
Digital CPD
2 Digital Resources
Selecting
(Co-)Creating
Managing
3 Teaching and Learning
Collaborative learning
Self-regulated learning
Teaching
Guidance
4 Assessment
Assessment strategies
Analysing evidence
Feedback & planning
5 Empowering Learners
Differentiation & personalisation
Accessibility & inclusion
Actively engaging learners
6 Facilitating Learners' Digital Competence
Information & media literacy
Problem solving
Responsible use
Communication

Figure 1. Six areas of European framework for Educators' digital competence

Numerous digital competence assessment surveys based on the DigCompEdu framework have been conducted internationally. Recent surveys evaluating the digital competence of educators/trainers have found that participants, based on their answers, reported a medium (B1-Integrator) estimated level of digital competence (Balyk & Shmyger , 2018; Benali et al ., 2018; Cabero - Almenara et al ., 2020; Dias - Trindade & Moreira , 2020; Ghomi & Redecker , 2019; Gowreea & DePryck , 2019). Studies by Benali et al. (2018) and Gowreea and DePryck (2019) demonstrated good performance in professional engagement and digital resources. However, in the work of Dias-Trindade and Moreira (2020), educators scored lower in the fields of "Assessment", "Empowering Learners" and "Facilitating Learner's Digital Competence". In contrast, studies involving undergraduate or postgraduate students, current or future teachers, generally indicate a low level of digital competence based on participants' questionnaire responses (Napal Fraile et al., 2018; Strutynska & Umryk, 2018; Tsankov & Damyanov, 2019).

In Greece, only a few studies have been carried out to date, based on the European framework for evaluating the digital competence of educators (DigCompEdu). For instance, Noou and Retali (2021) investigated the self-assessment of digital competence among educators at Public Vocational Training Institutes in Greece, with a sample of 220 adult educators. The findings revealed that the majority of trainers (68%) had a low to moderate level of digital competence. These percentages were consistent for the areas of "Professional Engagement" and "Digital Resources," while in "Teaching and Learning" and "Assessment," they shifted towards significantly lower levels of competence. Similarly, Vasilakis (2021), in a study investigating the digital competence of 442 educators in secondary vocational education and its relationship with their pedagogical beliefs, found that 67% of educators ranked at moderate levels of digital competence, showing however greater digital competence than in the research conducted by Noou and Retali (2021).

Given the limited number of relevant studies conducted in the Greek context, the present research aims to contribute to the understanding of the digital competence of adult educators, specifically in Second Chance Schools, on a nationwide scale. Therefore, this study investigated the levels of self-assessed digital competence among educators in Greece. By examining the digital skills of educators in Second Chance Schools, this research aspires to contribute to scientific knowledge on the subject and provide insights to support educators in improving their digital competences, thereby enhancing the attractiveness and effectiveness of their teaching practice.

The research questions of the present study were:

1) What is the overall and area-specific level of self-assessed digital competence among adult educators in Second Chance Schools, based on the DigCompEdu framework?
2) How does the digital competence of adult educators in Second Chance Schools relate to their demographic and occupational characteristics?

Methodology

Participants

In the present empirical research, a quantitative approach was chosen to measure the digital competence of educators in Second Chance Schools (SCS) in Greece on a nationwide scale. The research utilized a questionnaire that was distributed to the 78 Second Chance Schools (SCS) in Greece. A total of 196 SCS educators participated in the survey, comprising 60.2% women and 39.8% men. The mean age of the participants was 44.81 years (*SD*=8.2), and their mean teaching experience in adult education was 7.56 years (*SD*=6.42). Among the participants, 10.7% held a doctorate, 74.5% held a master's degree, and 14.8% held a higher education degree.

The participants were represented across different regions, with the highest percentages found in Western Macedonia (21.9%), Attica (12.2%), and Central Macedonia (12.2%). In terms of employment relationship, the majority of educators (66.8%) were hourly workers, while 33.2% held permanent positions. Regarding specialty, the largest percentages were Philologists (17.9%), Informatics specialists (14.8%), and Science educators (12.8%). Furthermore, 76.5% of educators reported having received training in Digital Technologies.

Research tool

The research employed the self-assessment tool Check-In, which is based on the European Framework for the Digital Competence of Educators and was adapted to Greek based on the work of Noou (2020). The Check-In questionnaire consists of 22 questions that assess the extent to which each statement reflects the participants' own practice. Participants were asked to choose one of the five available graded options. From the 22 questions, a digital competence index was derived, with a range of 0 to 88 points (Caena & Redecker, 2019). Table 1 provides the ranking in levels of digital competence based on the scores obtained from the Check-In questionnaire.

Table 1. Ranking in levels of digital competence according to the score in the Check-In questionnaire

Level of digital competence	Total score
Newcomer (A1)	< 20
Explorer (A2)	20-33
Integrator (B1)	34-49

Expert (B2)	50-65
Leader (C1)	66-80
Pioneer (C2)	81-88

The internal reliability of the Check-In questionnaire was found to be high, with a Cronbach's alpha coefficient of α=0.94, consistent with previous related research. Although fluctuations were observed within each of the six areas, all of them exceeded the acceptable threshold of α=0.65.

Data analysis

Data analysis was conducted using IBM SPSS Statistics v28.0. To investigate the correlations between digital ability and age, Pearson's correlation coefficient (*r*) was employed. The relationship between digital competence (dependent variable) and independent variables such as education level, work region, specialty, and teaching experience were examined using one-way univariate analysis of variance (ANOVA). Post hoc analysis using the Least Significant Difference (LSD) test was performed when a statistically significant difference in group means was found. The association between digital competence (dependent variable) and training in digital technologies (independent variable) was assessed using independent samples t-tests. The level of statistical significance was set at α=0.05.

Results

Digital competence of adult educators in Second Chance Schools in Greece

Firstly, the study investigated the self-estimated digital competence levels of adult educators in Second Chance Schools in Greece. Overall, the majority of educators in the survey (61%) fell into the medium digital competence levels of Integrator (B1) and Expert (B2). The average digital competence score among the surveyed educators was 43.53 (*SD* = 17.25) -with a maximum possible score of 88-, which corresponds to the Integrator B1 level. Figure 2 presents the distribution of educators across different levels of overall digital competence.

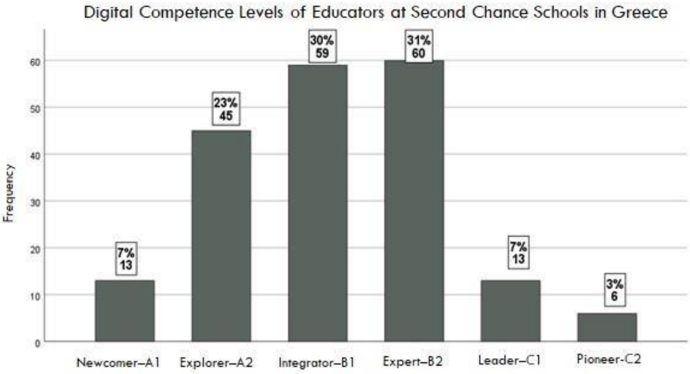

Figure 2. Levels of Digital Competence among SCS educators in Greece

The study also examined digital competence levels in the six areas defined by the European framework for digital competence of educators.

In the first area, “Professional Engagement”, 39.80% of the educators demonstrated average competence levels (B1-Integrator), while equal percentages (23.47%) were observed at the Explorer (A2) and Expert (B2) levels. A shift towards lower levels of competence was observed in comparison to the overall digital competence levels, with only a minimal percentage of educators (4.59%) reaching the highest competence levels (C1-Leader and C2-Pioneer). Figure 3 illustrates the distribution of educators across different levels of digital competence in Area 1 (Professional Engagement).

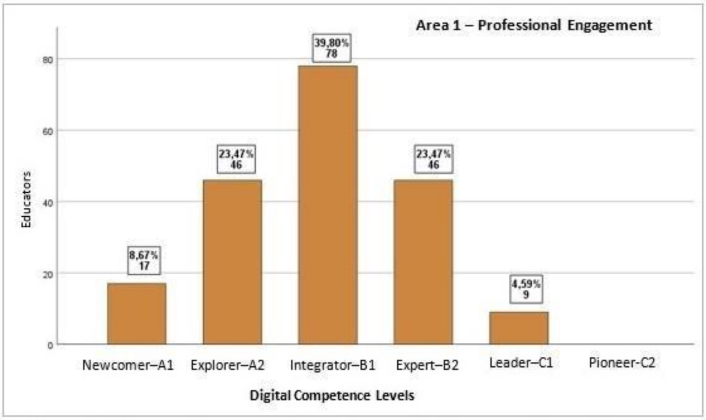

Figure 3. Distribution of educators in levels of digital competence in Area 1 “Professional Engagement”

Similar patterns were observed in the second area “Digital Resources”, where the majority of educators (59.18%) achieved the Integrator (B1) and Expert (B2) levels. Compared to the overall digital competence levels, there was a doubling in the percentage of educators at the lowest competence level (A1-Newcomer). Figure 4 displays the distribution of educators across different levels of digital competence in Area 2 (Digital Resources).

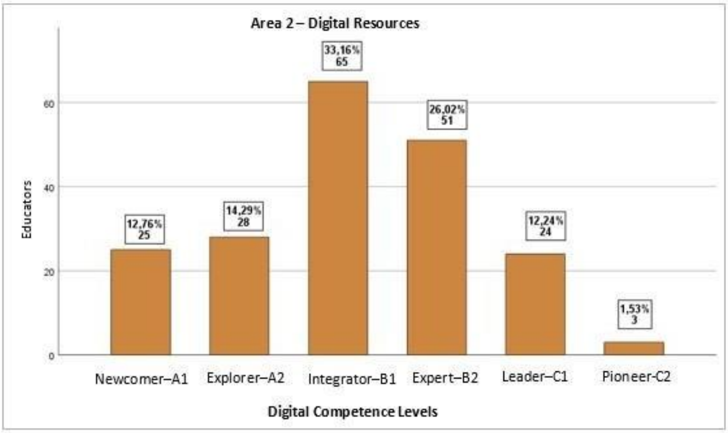

Figure 4. Distribution of educators in levels of digital competence in Area 2 “Digital Resources”

Moving on to the third area, “Teaching and Learning”, a differentiation in digital competence levels was observed. Approximately 80% of the instructors achieved the first three levels of digital competence. The B2-Expert level was recorded as the lowest (12.24%) compared to B2 levels in all the other areas, which is also much lower than the corresponding B2 level (31%) in the overall digital competence. In conclusion, educators in this area demonstrated a low to medium level of digital competence. Figure 5 presents the distribution of educators across different levels of digital competence in Area 3 (Teaching and Learning).

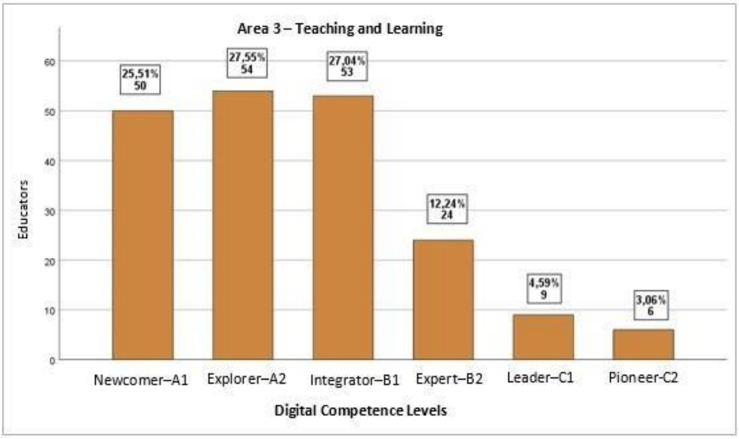

Figure 5. Distribution of educators in levels of digital competence in Area 3 "Teaching and Learning"

In the fourth area, "Assessment", a similar pattern emerged, with the majority of trainers (77.55%) falling within the first three levels of competence. The highest percentage (34.18%) was observed at the A2-Explorer level, exceeding the percentages of A2 levels seen in the other areas. Conversely, the highest levels of competence (C1-Leader and C2-Pioneer) were achieved by a meager percentage (5.61%) of educators. Overall, educators in this area demonstrated a relatively low level of digital competence. Figure 6 displays the distribution of educators across different levels of digital competence in Area 4 (Assessment).

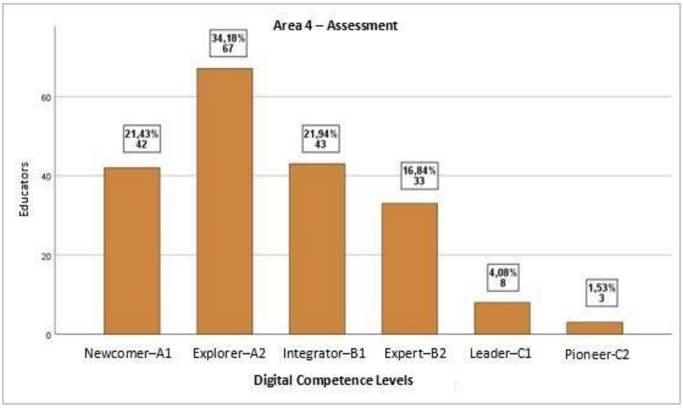

Figure 6. Distribution of educators in levels of digital competence in Area 4 "Assessment"

For the fifth area, "Empowering Learners", the results indicated an average level of digital competence, with 45.92% of educators reaching the B-level (B1-Integrator and B2-Expert). The lowest percentages were observed at the lower levels of competence (A2-Explorer: 20.41% and A1-Newcomer: 18.88%), while the highest levels (C1-Leader: 11.22% and C2-Pioneer: 3.57%) had the lowest percentages. Figure 7 depicts the distribution of educators across different levels of digital competence in Area 5 (Empowering Learners).

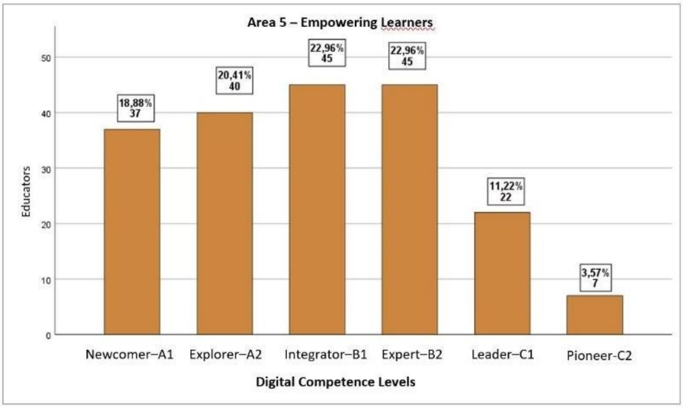

Figure 7. Distribution of educators in levels of digital competence in Area 5 "Empowering learners"

Lastly, in the sixth area, "Facilitating Learner's Digital Competence", almost three quarters of the participants (72.9%) fell within the first three levels of digital competence. Specifically, 32.65% were at level A1, 27.04% at level B1, and 13.27% at level A2. This indicates a low to medium level of competence in this area. Figure 8 presents the distribution of educators across different levels of digital competence in Area 6 (Facilitating Learner's Digital Competence).

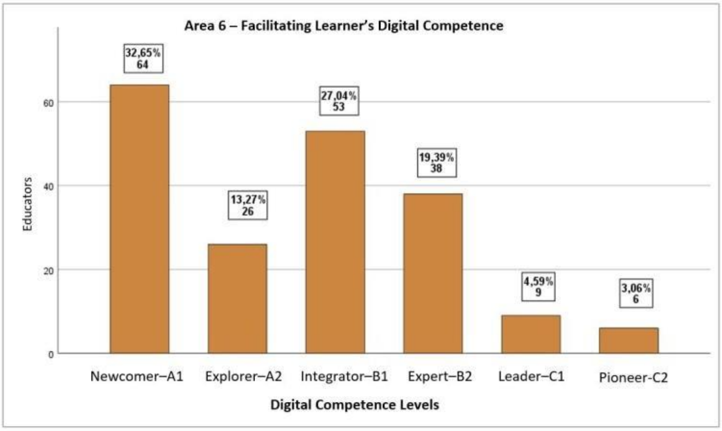

Figure 8. Distribution of educators by levels of digital competence in Area 6 "Facilitating Learner's Digital Competence"

Differences in digital competence of adult educators in Second Chance Schools in Greece based on demographic/occupational characteristics

No statistically significant differences were found in the digital competence of SCS educators based on gender, level of education, work region, or age. However, there were statistically significant differences in digital competence based on the employment relationship of educators (t (194) = 2.601, p = 0.01), with educators of SCS who were permanent achieving higher digital competence performances (M = 48.02, SD = 17.45) compared to their hourly employed colleagues (M = 41.31, SD = 16.77). In addition, the specialty of the SCS educators was found to be related to the performance in digital competence ($F_{2,193}$ =16.761, p <0.001), with the IT educators scoring higher (M = 59.41, SD = 9.77) in relation to the instructors of Technical specialties (M = 40.94, SD = 15.18) and the instructors of "Theoretical" specialties (M = 40.64, SD = 17.99). There was no statistically significant difference in digital competence between instructors of Technical and Theoretical specializations.

In addition, a statistically significant difference was observed in the digital competence of SCS educators based on their years of teaching experience in adult education ($F_{2,193}$ =5.355, p = 0.005). According to the LSD post hoc tests, the SCS educators with more than 10 years of experience achieved higher levels of digital competence (M = 50.11, *SD* = 18.70) compared to those with up to 5 years of experience (*M* = 40.32, *SD* = 16.47). However, no significant difference was found between educators with 6 to 10 years of experience (*M* = 44.04, SD = 15.87) and the other two groups. In summary, more experienced adult educators in SCS demonstrated significantly higher levels of digital competence compared to those with limited teaching experience.

Finally, a statistically significant difference was found between the means of digital competence in those who had been trained and those who had not attended training in digital technologies (*t* (194) = 1.429, *p* = 0.01). Educators who attended training seminars in digital technologies achieved significantly higher levels of digital competence (*M* = 45.15, *SD* = 16.43) compared to their untrained peers (*M* = 38.24, *SD* = 18.92). Overall, these findings shed light on the digital competence levels of adult educators in Second Chance Schools, highlighting both strengths and areas for improvement.

Discussion

The present quantitative study examined the levels of self-assessed digital competence among educators in Greece. Findings of this study suggest that the digital competence levels of SCS educators in Greece are generally comparable to those found in previous studies conducted in different educational contexts (Balyk & Shmyger, 2018; Benali et al., 2018; Cabero-Almenara et al., 2020; Dias-Trindade & Moreira, 2020; Ghomi & Redecker, 2019; Gowreea & DePryck, 2019; Noou & Retali, 2021; Vasilakis, 2021). However, despite the increased exposure to digital technologies during the pandemic due to mandatory distance learning in public schools in Greece (Zorzos, Manikaros, & Avgerinos, 2021), the present research did not find high levels of digital competence among SCS educators. These findings highlight theneed for targeted training programs to enhance the digital competenceof educators, particularly in the areas of Teaching and Learning, Assessment, and Facilitating Learner's Digital Competence.

Furthermore, the difference found in digital competence between permanent and hourly employed educators emphasizes the importance of providing training opportunities specifically for hourly employed adult educators in SCS. While there is limited existing research that directly correlates digital competence with employment relationship, the finding aligns with the fact that hourly employed educators often receive little to no training, including general or digital skills training, when selected from the SCS educators' Register by the General Secretariat and Institute of Youth and Lifelong Learning.

It is worth noting that the present research did not find a correlation between digital competence and geographical criteria, level of study, or age, which is consistent with most previous studies (Noou & Retali, 2021; Vasilakis, 2021). Specialization in IT was found to be associated with higher levels of digital competence, which is expected as IT educators are more fluent in using digital applications and tools, facilitating their integration into the educational process.

The finding that educators with over 10 years of teaching experience demonstrated significantly higher digital competence is consistent with the notion that more experienced educators are often more receptive to digital technologies and possess pedagogical expertise in utilizing them effectively. This finding is in line with Benali et al.'s (2018) research, which identified a positive correlation between digital competence and teaching experience among foreign language educators who used technology to enhance their lessons. However, other studies conducted in Greece did not find a statistically significant correlation between overall digital competence and teaching experience (Noou & Retali, 2021; Vasilakis, 2021). The results also highlight the positive impact of training in digital technologies, as SCS educators who attended such training seminars demonstrated higher levels of overall digital competence compared to their untrained colleagues. This finding supports the value and effectiveness of training programs offered by the Ministry of Education.

The survey results provide an initial assessment of the digital competence levels of adult educators in Second Chance Schools in Greece and contribute to the existing data on digital competence among adult educators in the country. Future research should validate these findings and examine further the low digital competence levels identified within the areas of Teaching and Learning, Assessment, and Facilitating Learner's Digital Competence. In addition, future studies could explore the digital competence of educators in other formal adult education structures, such as the Hellenic Open University and the National Centre for Public Administration and Local Government.

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SESSION 2
(Covid 19 Pandemics: Educational “Lesson-Learned”)

NEW WORKING CONDITIONS? LIFE NARRATIVES OF GREEK PRIMARY EDUCATION TEACHERS ABOUT THEIR PROFESSION DURING THE COVID-19 PANDEMIC

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Abstract
The issue of teachers' professional identity at international level is discussed, especially after this unprecedented period of global health crisis. It is noted that learning can continue and have the desired results, when teachers use technologies fluently and with a didactic and pedagogical perspective, when they are creative, flexible and adaptive to change and problem-solving situations and when they are consciously in their social role in the context of their professional career. During the coronavirus pandemic, teachers were tested at a professional level and were called upon to perform a role that had many different aspects. This paper will present the narratives of primary school teachers, who during the coronavirus pandemic were called upon to redefine their professional identity and teach through distance learning. Through their lived experience and "realities" they narrate issues of job satisfaction, support from institutions and cooperation with colleagues. The analyses of the research concern us regarding the perception of their role in times of crisis and issues of teachers' professionalization.

Keywords: *Covid-19 pandemic, narratives, primary school teachers, professional identity*

Teachers as employees in times of crisis

If we consider the case of teachers, as employees, operating in a constantly changing environment, we see that uncertainty is a kind of an endemic disease for them, a disease that occurs with frequency and duration in their profession (Lortie, 2002). This uncertainty is related to all professional areas of the teacher (Munthe, 2001). The coronavirus pandemic through the closure of schools comes to create or illuminate new conditions of uncertainty that "shook" the needs of teachers for autonomy, competence and effectiveness.

Globally, teachers were asked to handle, in a flash, a situation with which they had not previously come into contact (Kim & Asbury, 2020). They were faced with a situation of redefining their professional identity, through a different form of teaching, with new channels of communication (König, Jäger-Biela & Glutsch, 2020). Clearly, this situation creates tremors and changes in the professional trajectory of teachers. For this reason, Self-Determination Theory (SDT) can be useful in understanding the experience of today's teachers in their working lives (Van den Broeck, Ferris, Chang & Rosen, 2016). According to this theory, three basic psychological needs are taken into account for the better-functioning of employees and their satisfaction in the workplace (Deci & Ryan, 2002).

The autonomy of the teacher is the first basic need (e.g., Do I have the autonomy to choose how I work? Can I take initiatives and implement an idea?). The teachers are satisfied in their workplace, when they act and behave with a degree of freedom, which allow them to appropriate the elements of their workplace naturally and through their own will. Competence is the second key component in this theory (e.g., Do I feel competent and adequate in my work? Can I handle the right tools effectively?). It is important that the teachers feel a sense of effectiveness and expertise; a sense of mastery over the environment, which help them to develop new competences and to shape, transformatively, their knowledge background (e.g., didactic knowledge, digital media skills, communication skills, collaboration skills). Relatedness is the third basic psychological need, the coverage of which leads to a high degree of satisfaction in working life (e.g., do I belong to a team at work? Do my coworkers and my employer help me? Am I happy when I help someone with my work? Do I like to work as a team?) (Baumeister & Leary, 1995). Based on the above theory, employees who meet these needs are more effective in their workplace (Gagné & Deci, 2005).

Research objective and methodological framework

This research focuses on life narratives of five Greek primary school teachers (3 substitutes and 2 permanent teachers), exploring how respondents, recalling personal experiences of their working lives -through their own "realities"- interpret and process what happened during a significant change for them, during the coronavirus pandemic, when they were forced to teach by distance learning (Tsiolis, 2006). At the same time, through a narrative-biographical approach, the way in which they reconstruct their narratives and reposition themselves through retrospective accounts and reflections (McCormack, 2004) becomes apparent. However, due to the short length of the publication, only two teacher cases will be discussed.

This qualitative research aims to answer the following questions:

- *How do teachers interpret the situation they experienced when they teach with the contribution of digital technologies during the coronavirus pandemic?*

- *What needs under the Self-Determination-Theory/SDT seem to be reported either as a deficit or as compensation for teachers?*
- *How do teachers discuss, through their own "realities", issues of role perception in this "violent" adaptation to new learning conditions?*

Teachers' narratives

Ariadne: "The parents approached me, thanked me. I felt proud that my work was being praised".

Ariadne, a substitute teacher with more than ten years of experience in education, during the first period of the pandemic was in a small school in a village of Messenia, teaching sixth grade students. The teacher recalls the difficulties she encountered, as, as she notes, she felt insecure, without any guidance and specific instructions under this new condition. It also raises the issue of autonomy under the "SDT" and relates it to issues related to misinformation regarding working and economic conditions or sanctions for teachers. She stresses that she felt alone, without any help from the state. Characteristically, she uses the word "hanging". Of course, as a counterbalance to fear, uncertainty and the feeling of insecurity and depersonalization, she erects her inner motivation to help her students and prepare them for the next level of education, but also to feel that they belong somewhere, that there is a true -even remote- learning community. Link, therefore, to the third factor affecting workplace satisfaction. That is, despite the fact that she was not satisfied with the first element of this theory, with regard to autonomy, she resisted all this, motivated by her professionalism and by the feeling that she belongs or should belong somewhere.

"In the first lockdown no decision was made, nothing about education. It was not mandatory. We had no instructions and thought we would get back to school quickly. I felt insecure. I do not hide it. I felt hanging out all the time, alone on the four walls. We were all scared. We were closed in on ourselves. Two weeks became four and even three months and sometimes I felt bad (...). Amid the doubt and fear of the pandemic, which was something unknown to all of us, there was misinformation about salary cuts in case we did not do distance learning and other various sanctions. We didn't know how long this would last if we will open (...). And because everyone was unprepared, even the seminars were inadequate, unorganized not effective. No one was prepared, not even the state, for such a situation (...). Of course, I did distance learning, because I had a sixth grade and I wanted to work with the children and prepare them for middle school. Normally I worked I did not stop at all. I thought I wanted to do distance learning so they could get in touch. This connection, I realized was helping them. They were happy to see their classmates".

Through her narrative, Ariadne emphasizes the divide between novice teachers and teachers with many years of service in education. It makes the connection to the second factor based on the "SDT". Teachers, who on the one hand adequately handle digital media and e-learning tools and teachers, on the other, who find it difficult, "give up" and feel ineffective. This new condition also brought to the fore disagreements, as the teacher notes. She gives a harsher characterization to the school, mentioning the word "camp." So, teachers were divided into two camps, depending on their experience in using technology; that is, they were divided... Of course, this issue is also linked to teachers' epistemological assumptions about learning and teaching. Ariadne also raises the issue of reward, confirmation from other reporting groups and specifically from the parents of her students, which is directly related to the high sense of effectiveness of the teacher. As noted in the relevant research, the factor of competence comes to be linked to the support from the teachers' environment. The teacher, therefore, despite herproficiency in digital media, notes that she learned more, even if necessarily, and this helped her shape her professional identity and reposition her in the teaching profession.

"The teachers were divided, even in the school itself it was like we were divided into two camps (...). Certainly, the well-known teachers who did not want to do distance learning did not bother with this part, neither to help nor to teach. We, newly appointed teachers think we are quite comfortable using computers and we have a relationship with technology. The elder teachers, from what I heard, avoided distance learning because they were afraid of it. They didn't know how to handle enough tools. This required skills that for us I believe all young people possess, regardless of whether we are teachers or not. On the other hand, I felt confirmed, because when we returned to school from all three lockdowns, parents came to thank me. That was touching. They felt that their children would not be able to progress through distance learning, but they saw that we were working and left no gaps. It was a confirmation of my work. I think I succeeded, at least with those students who attended and were really interested in the course. As I mentioned before, parents approached me, thanked me. I felt proud that my work was being praised. Despite the doubts I had, I kept going and even felt that I became more comfortable with several online tools, despite being very familiar with using them. I learned extra things".

But did Ariadne feel that she belonged somewhere, that she was supported by her work environment, by "employers", by colleagues and the state? Did she feel satisfied in her workplace, meeting the need for "contact" based on the "SDT"? It repeats the word 'colleagues'. For her, it was of great importance that an informal network of mutual aid, cooperation and experimentation was created, mainly by her colleagues. The teachers were helped, as she says, by the IT teacher, feeling safe. They distributed material, supported both didactically and pedagogically. She wants, however, to stress that there was no support from the state, from the Ministry of Education. This situation also contributed negatively to teachers' sense of isolation. Ariadne, at many points in her account, mentions that she was alone in all this.

"We were improvising, colleagues were helping each other. Yes, we worked together initially. I remember we had a meeting together. The computer science teacher had informed us about all Webex tools. Of course, it was easy, but having a man who already knew them in all the panic and the unprecedented situation, we were relieved, we felt very comfortable. When I created the digital classroom in "e-me" I collaborated with a colleague of the school. We joined each other in our classes and experimented before starting with the kids. We sent out work sheets, announcements, to see a little bit how it worked. Along the way, all acquaintances, friends, colleagues communicated with each other and solved questions about each other. I feel lucky because I have worked with amazing colleagues, many years now, 12 years that I have been working. Most of them were colleagues more or less my age. Whatever we needed, we were there for each other always. On the contrary, I felt more threatened by the Ministry of Education than that it helps me. Yes, manuals of the appropriate platforms were posted, but at the same time there were no clear instructions for compulsory or non-compulsory distance learning. We didn't know about personal data, what was going on with the platform, so we were afraid to turn on cameras, especially of children. There was uncertainty about everything. In the first lockdown at least (...). Really, I felt that everyone was so scared and isolated that almost no one communicated with anyone. I was three months really alone".

Diana: "We had to focus more on children's psychology".

Diana, a newly appointed teacher, focuses on the third factor of the "SDT", that has a noticeable impact on her satisfaction in the workplace. She focuses on the psychological component and the communication it had with students during the coronavirus pandemic. To compensate for the lack of help and support from the state, she notes the supportive role that teachers should have had at that time.

"At first we didn't know what to do or what to teach. At first it was a bit of a shock for everyone, I thought that the role of the teacher should change form. We had to focus more on the psychology of the children, to be next to them. Make our role more supportive and we will probably put aside the learning part a little. I was working in a one-room schoolhouse during the first lockdown and I could have a better communication with them with Viber, images, photos and the material I sent them. It was everything I could in a digital book, in performances, in games, in quizzes. They were not so much

about lessons as more psychologically about spending time pleasantly, away from school".

Not for a moment has she concealed, that her relationship with technology was not, at least before the period of the health crisis, so good. Along with the lack of familiarity with digital tools and e-learning platforms, symptoms of anxiety and insecurity appeared. As a result, she was either helped by ready-made material she searched for online or drew material from her colleagues. Diana, particularly, emphasizes how much the attitude of parents has influenced her teaching. She emphasizes that she encountered difficulty in dealing with this new situation, with parents who were either skeptical or negative and with parents who intervened in the educational process.

"There was anxiety about what to do. I may have had some material, but I also found a lot of material from colleagues online. And maybe less I created. At the very beginning, during the first lockdown when I had four classes because of the one-room schoolhouse, it was very difficult to find so much material. I worked long hours, longer than when I was at school to find my material (...). I wasn't that good. I had to learn to handle some things on the computer that I wasn't aware of. I had to search a lot, but it wasn't an obstacle for me. An obstacle was often my cooperation with parents, where you had to convince them of certain things. And it also made me anxious and even when I think about it, I don't like that I had to go into all the houses. That we had to get so involved with families, so much and be exposed".

Diana believes that the teacher was not supported enough, but was left to teach without proper and timely guidance. *"There was no help anywhere. Nohelp from the state. We had to search the material, we had to look to find outhow the platforms work we had to register the children. Parents were not properly informed to be able to register students, so we did it, as you will surely have heard after 12 midnight, when the platform was operational. So,there is no help there either".*

Conclusions

Through this empathic perspective in the research regarding the teachers' experience, I realize that teachers did not feel autonomous, because they were called in a short time and without support to teach in a new-unknown context. It is also evident that teachers, especially newly appointed teachers, despite their knowledge and experience in the use of digital technologies, felt fear and insecurity, because there were no directions, but only informal support from their colleagues (Ferraro, Ambra, Aruta & Iavarone, 2020). And, finally,it is found that in this whole situation, our teachers had to be effective, whilethey were alone, without feeling the "connection"; without proper materials and relevant instructions, without help from the state, alone in their homes and some away from their families.

It became evident in this research that we have teachers who are conscious in education and try without the commitment of time, who are concerned about their students and the promotion of the educational process, about the cognitive and social-emotional part of teaching their students. We have teachers who either have more or less digital knowledge and skills *("I have a good relationship with technology", "I wasn't that good. I had to learn to handle some things on the computer that I didn't know"*), who feel on the one hand more self-confidence and autonomy (*"In fact, I was the one who told colleagues some things"*) and on the other hand insecurity and uncertainty (*"I don't know if I did it in the best way").*

However, we cannot rely only on the teachers' effort, on the informal support framework that teachers create among themselves (e.g., online support groups on social media), but we have to support them through professional frameworks (Mockler, 2022). And this can be done with correspondingly flexible curricula, with rich educational material adapted to the conditions, with functional and continuous training platforms and with continuous, focused and contextualized education and training. Therefore, this transition period from face-to-face teaching to distance learning should be an occasion for discussion, on a new basis, of the issue of professionalization of teachers in the modern digital era, at a global level (Van der Spoel, Noroozi, Schuurink & van Ginkel, 2020) and for their effective teaching in a new working condition.

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SESSION 2
(Covid 19 Pandemics: Educational "Lesson-Learned")

EDUCATION BEYOND THE PANDEMIC: TEACHERS STILL MAKE THE DIFFERENCE

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Abstract
It has often been jokingly said that we had to experience a pandemic to learn to wash our hands thoroughly every time we return home or before we eat. In the same context, it could be said that we had to meet these unprecedented teaching conditions in order to appreciate how important the role of teachers is and how many challenges they face, now even more so. Because there is no doubt that, beyond the post-pandemic narratives of educational disaster on the one hand and the celebrations of great opportunities on the other, the future of teaching after COVID-19 will in fact be complex and uncertain. And while the literature on the impact of the pandemic on students and the educational system in general is rich, little has been said about teachers in particular, assuming that they will somehow magically emerge unscathed and unaffected and will continue their work as if nothing has happened. Thus, this paper will focus on teachers and discuss what they have learned from the pandemic period, why it is necessary to adapt to the new challenges, and most importantly, how crucial it is for a teacher to be an effective professional. For it will be argued that teachers matter, and that the key that holds out the greatest potential for increasing and equalizing student achievement is investing in teacher quality.

Keywords: *education, effective teacher, post-pandemic, key factor, teachers matter*

Introduction

The COVID-19 pandemic has had a profound impact on educational systems worldwide, affecting students, teachers, and institutions alike. As schools, universities, and other educational facilities have been forced to close or limit in-person instruction, the shift to online and remote learning has exposed both the strengths and weaknesses of educational systems and has raised important questions about the future of education (Bozkurt et al., 2022). With the end of the pandemic, scientists rushed to assess the outcomes, and priority was given to large-scale testing of entire learning communities as a means of measuring and tracking learning losses; however, this can bias learning loss estimates, because learning gains are not spread equally [i.e., linearly] across the [school] (Schult et al., 2022). On the other hand, technology companies keep advocating for the adoption of digital options such as online and hybrid learning, potentially disregarding the associated risks. And while mental health specialists prioritize student well-being as a critical factor for successful learning, it is important to note that ensuring well-being does not guarantee that learning will occur (Hargreaves, 2021). However, it seems that all these efforts are missing the fact that all the way from kindergarten through college, the quality of the teachers determines our perceptions of the quality of the school (Whitaker, 2015). As Rowe (2003) points out, "effective schools are only effective to the extent that they have effective teachers", while Barber notes that "the quality of a country’s education system cannot exceed the quality of its teachers" (Barber & Mourshed, 2007).

Education and pandemics: Doom or opportunity?

If one is looking for the short answer, then this is neither, or both. In the early days of the COVID-19 pandemic, conversations focused on high-level questions about how the pandemic would disrupt education, and many concerns have been voiced about the direct and indirect impacts of the worst pandemic in more than a century on education (Kerres & Buchner, 2022· Stecuła & Wolniak, 2022). Learning losses have been one of the most significant groups of worries. These issues have arisen as a result of the fact that the majority of children in the world have missed at least a few weeks of regular schooling, some have missed a full year or more, remote learning options have frequently proven difficult due to unequal access, on-site learning with physical distance has occasionally diminished or disrupted the regular learning experience, and millions of students have completely lost their way to school, possibly never to return (Azevedo et al., 2021). A recent report estimates that the pandemic could leave more than 40 million children out of school globally, with the poorest and most marginalized communities being the most affected (UNICEF, 2021). Additionally, research has shown that distance learning and other means used to provide education continuity during the pandemic were not good enough, particularly among those from low-income households and those with learning disabilities (Reimers & Schleicher, 2020).

However, while the pandemic has presented numerous challenges, it has also created opportunities. One of the most notable is the increasing utilization of technology in education. With the shift to remote learning, many schools and universities have been forced to rapidly adopt new technologies, such as online learning platforms and virtual classrooms. This has opened up new opportunities for innovative and flexible learning, and has paved the way for more personalized and student-centered approaches to education. Additionally, the pandemic has highlighted the importance of education, and has led to increased investment in the sector, including new initiatives aimed at improving access to technology for students and teachers. Ultimately, the pandemic has emphasized the need for a more adaptive and resilient education system that is better equipped to respond to future global challenges. Thus, the considerable effort expended in allowing teachers and students to find ways to learn and teach remotely has immense potential to augment the pedagogical efficacy of teachers and schools in the future (Reimers & Schleicher, 2020).

Nevertheless, despite a substantial body of published research, it is still challenging to fully appreciate how the pandemic has affected schooling across the world's diverse educational sectors (Schleicher, 2020). Studies on the impact of remote emergency teaching and other measures to cope with the pandemic are often difficult to interpret due to a range of methodological issues and constraints, and thus provide only fragmentary evidence (Bozkurt et al., 2022). For example, it is not possible to directly attribute the effects of learning with educational technology during the pandemic to the use of EdTech as such, since the pandemic has impacted several dimensions of students' and teachers' lives (Kerres & Buchner, 2022). Additionally, there are no guarantees that the tools that make it possible to re-engineer schooling willactually be used accordingly, and the fact that teachers can use EdTechis no assurance that they will; so, there is always a question of what educators ultimately choose to do with the new tools at their disposal. Of course, the problem is not the technology; the problem is the fact that the technology has been parachuted into schools as an emergency solution to adjust the way of learning to the changing situation without any real effort to think about how it changes what students and teachers do (Hess, 2022).

Therefore, the pandemic neither gave the final blow to the faltering education systems nor provided the ultimate solution with the vast integration of technology in learning. Indeed, traditional teaching had been going through a major crisis for years, and the pandemic highlighted the underlying problems it was facing. But we must not exaggerate. "Beware of `doom and gloom` reports", says researcher John Hattie (2021). Some school systems consistently perform better and improve faster than others (Barber & Mourshed, 2007), no matter how hard they were hit by the pandemic (Reimers & Schleicher, 2020· Hargreaves, 2021· Schult et al., 2022). Meanwhile, there is no doubt that we must continue to invest in educational technology, and certainly this need has been greatly enhanced under the pressure of the recent pandemic. But we need to understand that remote education, innovative educational tools and advanced technology can not by itself improve educational outcomes, if it is not followed by good quality content, teaching methods, materials, ways of verifying knowledge and skills, and last but not least, competent educators (Wasmuth & Nitecki, 2020). Thus, what is more important is the methods of teaching, not the media. And of course, teaching rests solely and always with the teacher.

The new key factor is not new at all

All countries are seeking to improve their schools, and in their effort to respond better to higher social and economic expectations, education systems have traditionally focused on inputs such as funding, facilities, and curricula, and more recently, on the dozens of educational technologies that promise to make teaching more engaging and effective. However, as professor Reich (2021) argues, when researchers and policy makers simply focus only on such issues, they fail to consider a vital part of education: the day-to-day experiences of the teachers in the classroom. But even when they do, they treat teachers as a parameter of the overall system they are trying to reform, ignoring the fact that teachers are not a variable but the key factor. So, it seems that we have been pursuing ineffective policies, or, to be more fair, that we have been putting aside the most important factor. The focus needs to shift, and in order to ensure meaningful and sustainable improvement in educational outcomes, it is imperative that we focus on teachers (Carey, 2004· Hattie, 2009).

Because, if we have learned anything from the COVID-19 pandemic is that any questions of learning loss in the short term and learning transformations in the long run cannot be addressed in any meaningful way without examining the short- and longer-term impacts of the pandemic on losses, gains, and transformations in teachers and teaching (Hargreaves, 2021). And it is true that every success story during this period had a common denominator: the effective and capable teacher. As Hattie (2021) points out, "It is hard to find a single policy from districts or policy makers (other than whether to open schools) that assisted in how to effectively teach during the pandemic. But educators found ways to engage their students, to deal with a myriad of new logistical and instructional issues, and to manage enormous workloads". In the early days of the pandemic many educators from various countries reported remarkable resilience, flexibility, and commitment to education in having established well-planned and well-executed strategies for education continuity, in extremely challenging conditions, and most claimed that the plans were not designed from the top-down but by those closer to students, particularly teachers (Reimers & Schleicher, 2020). So, once again is proved that the most significant in-school factor affecting student achievement is the quality of the teacher (Hargreaves, 2021· Hattie, 2021).

Frederick Hess, director of education policy studies at the American Enterprise Institute, has recently said: "The great disruption wrought by Covid-19 has created a profound need for something new" (Hess, 2022). Some look for this newness in the radical reform of the decaying education, others in the innovative educational technologies that promise to make teaching more engaging and effective. However, it has now been most emphatically demonstrated that no educational reform has achieved success without teachers committing themselves to it (Day et al., 2007). Thus, we need to stop talking about the recent pandemic in terms of disaster or opportunity. This is not the point. The main priority is to realize that this pandemic was a confirmation and a reminder that the key that holds out the greatest potential for increasing and equalizing student achievement has been – and still is – the investment in teachers' quality, or in what Fullan and Hargreaves have called the professional capital of teaching (Hargreaves & Fullan, 2012).

Andy Hargreaves and Michael Fullan, leading experts in the field of educational change and improvement, define professional capital as the collective assets, skills, knowledge, and values of the individualswithin an organization, particularly in the context of education, and setout exactly and undeniably why the only way to transform the education is to honor and improve the profession of teaching. According to the authors, the word professional, calls to mind two things: being professional and being a professional. These ideas are connected, but they are not the same. Being professional is about whatyou do, how you behave. It’s about being impartial and upholding high standards of conduct and performance, it's about quality and character. Being a professional has more to do with how other people regard you,and how this affects the regard you have for yourself. To meet the above criteria, investment in teachers’ professional capital must occur at both the individual and organizational levels. At the individual level, this involves providing teachers with opportunities for ongoing professional learning and development. At the organizational level, this involves fostering a culture of collaboration and recognition, where the contributions of educators are valued and rewarded. In other words, professional capital must be developed through a combination of top-down and bottom-up approaches. Top-down approaches involve providing policies and structures that support professional capital development, while bottom-up approaches involve empowering teachers and school leaders to take ownership of their own professional growth.

It would be unfair to argue that no care has been taken to invest in teachers’ professional capital. Over the last few years, teachers have had the opportunity to undergo continuous training, to teach with better means, and to enjoy easier working conditions. However, there are still major concerns about the limited connections between teacher education and school needs, teachers’ relative salaries are declining in most countries, teaching’s appeal as a path to upward social mobility and job security does seem to have diminished, and teachers often feel that their work is undervalued (OECD, 2005· Carey, 2004· Murray, 2021). Therefore, whenever we attribute teachers with limited influence and consequently lessen their importance for the well-being of students and schools, it is not because teachers do not matter but because they are not supported enough to be good teachers. As Carey

(2004) notes: "Sadly, we actually do none of the things you do when you value something as highly as most people say they value good teachers". Even more alarming, the reluctance or inability in supporting teachers is not entirely due to poor educational policies but often reflects a broader trend of post-truth trickling into public discourse about education (Nally, 2022).

Not all teachers matter but the good ones

Undeniably, the school closures due to the Covid-19 pandemic were a unique action taken worldwide, and amongst other important notions, has underlined the inalienable importance of teachers for students well-being and for dealing with all the consequences that went along with these changes. As Hattie (2021) said, this is probably the greatest teacher-led revolution we've ever seen. So, it is now more than ever clear that teachers matter and teachers make the difference. However, this mantra, although difficult to dispute, is misleading and often undermined due to its general and absolute nature (Hattie, 2009). Because what research shows is that students don't just need a teacher but a good teacher. As Winters (2012) notes, "We do not honoreffective teaching when we ignore the undeniable fact that teachers are not equally effective in the classroom". Hattie (2009) points out: "If you take two students of the same ability, it matters not which school they attend, but it may matter greatly who their teacher is. It is not so much that teachers matter, as that the variance within schools indicatesthat some teachers matter more than others!". Many studies can prove these words true (Barber & Mourshed, 2007· Carey, 2004). For example, seminal research based on data from Tennessee, US, showedthat if two average eight-year-old students were given different teachers – one of them a high performer, the other a low performer – their performance diverge by more than 50 percentile points within three years (Sanders & Rivers, 1996). A recent study by the National Center for Education Statistics of USA found that schools with high levels of professional capital teachers were more likely to have higher rates of student engagement and achievement, and were more effective in closing achievement gaps between different groups of students(NCES, 2019). Thus, it turns out that it doesn't matter very much whichschool you go to, but it matters very much which classrooms in that school you are in. And it's not class size that makes the difference, nor is it the presence or absence of setting by ability—these have only marginal effects. The only thing that really matters is the quality of the teacher (William, 2013).

One might wonder what makes a good teacher. Evaluating and measuring the characteristics of a good teacher has been a debate for a long time (Carey, 2004· Rowe, 2003· Winters. 2012). As Murray (2021) notes, "policymakers tend to frame the aspects of what they identify as a good teacher in terms that are easy to measure, whereas that which is easily measurable may not reflect fully the characteristics of the good teacher". Barber and Mourshed (2007) suggest that a good teacher is a teacher with a "high overall level of literacy and numeracy, strong interpersonal and communication skills, willingness to learn and motivation to teach". To recall Fullan and Hargreaves (2012), "ideally a good teacher has to be professional and be a professional at the same time". Additionally, good teachers are always learning. As Freire (1998) argues, "There is, in fact, no teaching without learning. One requires the other […] whoever teaches learns in the act of teaching, and whoever learns teaches in the act of learning". Thus, a good teacher is a skilled and effective teacher who conveys ideas in clear and convincing ways; who makes a conscious effort to continually improve their skills and knowledge; who creates effective learning environments for different types of students; who fosters productive teacher-student relationships; who is enthusiastic and creative and works effectively with colleagues and parents.

Indeed, being a teacher is such a complex and demanding craft, let alone a good teacher. However, in focusing on the skills a teacher needs to obtain and develop in order to be a good teacher, we often overlook how important it is to consider who people choose to become teachers and why (Whitaker, 2015). Because, what marks teachers out as good is not only their content knowledge and pedagogical skills. It is their commitment to their teaching, their students and their learning and achievement (Day et al., 2007). The success of Finland’s education system, one of the models of educational excellence and equity today, lies in the hundreds of talented and motivated young people who consciously and deliberately choose to become teachers, and select teaching as their primary career because work in schools is perceived as an autonomous, independent, highly regarded profession within which they will have freedom to fulfill their aspirations (Sahlberg, 2015). As William (2013) points out, "We need people who are drawn to the profession not because it is easy, but because it is hard—a job that is so difficult that one’s daily experience is of failure, but one where, each day one can fail better". Therefore, a good teacher is the one who, despite all difficulties and demands, consciously and solely wants to be a teacher.

5. Conclusions

Against all the elaborate and complex efforts and surveys for the improvement of the educational system, it’s time now to simply realize that there are really two ways to improve a school significantly: get better teachers, and improve the current teachers (Whitaker, 2015). This realization becomes extremely relevant now, in the years following the pandemic, when both traditional teaching practices and innovative ones have in fact been tested and have shown their strengths and limits. Moreover, they have shown that whatever the teaching conditions and methods, the teacher is the most decisive factor, and overall made it clear that what matters most is quality teachers and teaching, supported by strategic teacher professional development (Rowe, 2003). So, first of all, we need to get quality teachers, and for this, we must make teaching an attractive and competitive profession for highly able people. We need to sketch an alternative system that is capable of improving teacher quality, as for many years the way we hire, train, compensate, and evaluate public school teachers actually reduces teacher quality (Winters, 2012). We need to ensure that teachers have advanced academic education, they teach in an environment that empowers them to do their best, and their work represents an independent and respected profession (Sahlberg, 2015). We also need to ensure that we have confident teachers who feel that their work is recognized, that they have a significant impact on the lives and progress of their students, and that their work is well-respected by all. In other words, if we want to improve the efficiency and equity of schooling, we must ensure that competent people want to work as teachers. Teachers themselves all over Europe have early on expressed high concerns about their profession whether it is sufficiently attractive to talented new entrants (OECD, 2005), and during the recent pandemic it became clear how important this is. While others saw disaster everywhere, and others pinned their hopes on technology, some teachers continued their work with dedication, and succeeded, nomatter what. There is now a need to focus on how these teachers successfully modified and structured their lessons to be more student- centered during the pandemic—and we must bring these ideas back tothe regular classroom (Hattie, 2021). Most importantly, we have to findout who these teachers are, and study their profiles. Because these teachers are the good ones, and these teachers will make the difference.

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SESSION 2

(Covid 19 Pandemics: Educational "Lesson-Learned")

PRIMARY SCHOOL STUDENTS' EXPERIENCE OF DISTANCE LEARNING DURING COVID-19 PANDEMIC

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Abstract
The covid-19 pandemic has led to the replacement of traditional face-to-face authentic learning experiences with distance education. Numerous studies, at an international and at a national level, have been conducted regarding distance education and its consequences. Distance education was applied for the first time in Greece in primary education during the lockdown periods (school years 2019-2020 and 2020-2021). In the present study, interviews were conducted with 12 primary school teachers, with 55 primary school students and with 55 parents. The aim was to study the students', teachers' and parents' views on distance education during the Covid-19 pandemic. The qualitative approach was followed and the thematic analysis was used as a method of analysis. Some of the conclusions of the present study are that distance education has had a negative impact in many areas and has often led teachers to adopt different practices. Most students maintained a negative attitude, reporting mainly drawbacks and difficulties during the distance education period. The majority of the participants in our study emphasized that learning was less, due to the limited teaching time and the technical problems of the platform used. Also, students expressed their preference to face-to-face authentic learning experiences rather than distance education. The views and suggestions of stakeholders can be taken into account in order to improve the effectiveness of distance education.

Keywords: *covid-19, distance education, lockdown, primary school education*

Introduction

1.1. Conceptualization of distance education

A first definition of distance education is that of Delling (cited in Keegan, 2000), who defined it as a planned and systematic activity, which includes the selection, preparation and presentation of teaching materials. The supervision and support of the learning process is achieved by bridging the physical distance between the learner and the teacher through technological means.

Distance education is divided into synchronous and asynchronous. According to the Greek Ministry of Education and Religious Affairs (2020), synchronous distance education refers to teaching in real time using an online platform to students who attend via a computer, a mobile phone or a tablet. During asynchronous distance education the student collaborates with the teacher at a different time from the teaching process and the material is accessible at any time through specific online websites or platforms. Asynchronous distance education is more popular, widespread and with less technical and financial requirements. On the contrary, synchronous distance education has special software requirements, requires high-speed internet and is more complicated to use, both for teachers and students. The possibilities offered today by new technologies and the Internet have significantly improved the quality of the distance education.

Several advantages of distance education for learners as well as for teachers have been pointed out. The main advantage of distance education is that it minimizes the space and time limitations imposed by in-person education, saves time and resources, promotes immediate communication, and offers access to a large number of learners. Other researchers point out that distance education may limit the feelings of insecurity and shame and encourage students to participate and ask questions. Moreover, the use of new technologies enables teachers to apply new learning strategies, give immediate feedback and evaluate students' progress (Jacques, Ouahabi, & Lequeu, 2020).

On the other hand, there are skeptics regarding distance education's effectiveness compared to in person education. One disadvantage is that communication through electronic platforms cannot be compared to or replace the inter-personal communication that takes place in the classroom. In addition, participation may be limited, as learners may be reluctant to ask questions and experience feelings of isolation. At the same time, inequalities are exacerbated due to the lack of the necessary technological equipment or support. The successful integration of new technologies requires technical support and training of all those involved (Dereshiwsky, Papa, & Brown, 2017; Stephens, 2007).

1.2.Distance Education in a pandemic context

The conditions formed by the spread of an unprecedented pandemic resulted in the suspension of all educational institutions and the replacement of in-person education with distance education. One of the groups most affected by the restrictions imposed by the covid-19 pandemic were students, as the suspension of all educational institutions affected more than 1.5 billion students in almost 200 countries as of early March 2020 (Gaggi, Kolasinska, Mirri & Prandi, 2020; UNESCO, 2020a; UNICEF, 2020). In the midst of a pandemic, the use of the internet was the most convenient way to continue education. The Educational and Scientific community studied distance education within the new conditions and as a result a number of research papers were published in Greece and internationally. Several researchers have studied university students' perceptions regarding distance learning under the conditions of the health crisis (Alvarez, 2020; Fidalgo, Thormann, Kulyk & Lencastre, 2020; Gonçalves, Sousa & Pereira, 2020; Jacques, Ouahabi & Lequeu, 2020; Shearer et al., 2020). However, the studies regarding the perceptions of primary and secondary school students are limited.

In a recent study regarding the perceptions of teachers (N=16) and secondary school students (N=20) about distance learning during the pandemic, about a quarter of the students expressed a negative attitude towards distance learning and a fifth emphasized their preference for in-person teaching. In particular, difficulties in understanding the teaching content, the limited time and the fast pace of teaching, the lack of necessary equipment and the inability to concentrate were pointed out. Therefore, the most frequent difficulty was related to the teaching process, followed by the lack of the necessary equipment and the appropriate environment. At the same time, positive opinions were expressed about the usefulness of distance education in the conditions of the pandemic. Some students characterized as a positive aspect the opportunity for self-regulation (Hebebci, Bertiz & Alan, 2020).

In another study of secondary school students' perceptions regarding their satisfaction of distance learning in the subject of Chemistry (N=78) one third of the students faced difficulties in understanding the teaching content, in asking questions and taking notes, in keeping up with the pace and in completing the great amount of homework assigned. A fifth of the students also reported difficulty with time management and concentration. Thirty percent (30%) of the students pointed out that what they missed during distance learning was the interaction with the teacher and their classmates. On the other hand, a high number of students (70%) expressed that distance education has positive aspects, such as that they felt more comfortable at home and less stressed. Also, the students reported that they liked the lesson, because teachers used audio-visual materials and assigned interactive homework (Babinčáková & Bernard, 2020). In conclusion, the majority of researchers have expressed concerns about the effectiveness of distance education stressing the lack of accessibility and the difficulty in understanding the content of the lesson.

The Research Methodology

Following the Corona Virus (Covid-19) outbreak in December 2019, the World Health Organization classified Covid-19 as a global pandemic in March 2020. To slow down and prevent its spread, many countries, including Greece, applied strict protocols, such as lockdowns or regulations to facilitate social distancing. The lockdowns included the suspension of educational institutions and the need to operate remotely. Distance education was applied for the first time in Greece in primary education during the lockdown periods (school years 2019-2020 and 2020-2021). In this context, the aim was the study of primary school students' experience of distance learning during the Covid-19 pandemic. The research question is to identify the positive and negative aspects as well as the difficulties of distance education from the students' perspective. Convenience sampling was applied in order to select the participants, as the participation to the study was voluntary and a number of primary schools answered positively to our request (Cohen & Manion, 1994). In the present study 55 primary school students (23 boys and 32 girls) participated. This research was approved by the Ethics Committee of the University of Thessaly. As a research instrument semi-structured interviews were conducted. The interview was selected as a research instrument, because interviews can be a useful method to better understand the experience of the participants in a context of interaction and dialogue. The interview protocols were based on the research questions and the existing literature. Before the interviews the researcher provided the students' parents a letter of consent explaining the overview and focus of the study and ensuring the anonymity of the participants. The name of the participants was anonymized to achieve confidentiality (e.g. student 1). Likewise, it was explained to them that the interview process will be audio recorded for accurate transcription of data. The aim and the procedure was also described to the students who participated.

Data Analysis

For the analysis of the research data qualitative methodology and thematic/ content analysis was applied. After transcribing the data, the researcher read the entire initial transcripts to assess whether the collected data were complete or whether follow-ups or clarifications were needed. The next steps included the coding of the transcripts, the classification into themes and the analytic descriptions of the codes and the themes as well as the elicitation with participants' quotes. Consequently, the researcher re-read the final transcribed descriptions of students' experience of distance learning during the Covid-19 pandemic, in order to reflect on the participants' experiences and draw the final conclusions (Creswell, 2009; 2014).

Results

The untimely pandemic health crisis caused by Covid-19 resulted in the implementation of distance education. The interviews with the students regarded distance education and in particular the positives, the negatives and the difficulties students faced. Students' attitude towards distance education was mostly negative (34/55). The students that participated in our study expressed their preference to in person learning over distance education. Most students reported negative aspects and difficulties during distance education (48/55). The most frequent negative aspect of distance education was the lack of interpersonal contact with classmates and/or the teacher, followed by technical problems, fatigue and lack of understanding. Examples of the expressed negative aspects of distance education are the following:

"It was difficult for me to be in front of a screen for that long. I got tired". (Student11.3.)

“I don’t like that I can’t see my friends [...] At school we go out during breaks and play and during the lesson someone is sitting next to us”. (Student 7.1.)

“I didn’t like it at all. The students were shouting. I couldn’t understand anything. I faced connection problems. It was very tiring.” (Student 3.1.)

“Some lessons cannot be delivered via the computer, for example some difficult lessons in Mathematics, and in Greek Language”. (Student 6.5)

“I didn’t like it, because the teacher couldn’t explain things to us like he did at school and I couldn’t understand”. (Student 8.1.)

On the other hand, almost half of the students (19/55) recognized positive aspects, such as the communication with their classmates and/or the teacher, even though from a distance, and the use of technology. To illustrate these results, we present examples of the students’ answers.

“I liked that I could communicate with my friends and my teacher”. (Student 6.1.)

“I liked that the teacher could show us videos during the lesson and in that way it was better”. (Student 7.5.)

Conclusions

Although the findings of the present study do not intend to make generalizations, nonetheless, listening to the shared students’ experience regarding distance education during the pandemic provides opportunities in understanding their point of view on a topic that affected their everyday life. Also, the approach of distance education from the perspectives of the learners showed that teaching and learning under the pandemic conditions requires collaborative understanding, support and training. The pandemic has brought exceptional circumstances to teaching that require questioning the teaching methodologies used. Moreover, the existence of issues on accessibility and affordability (high cost of technological devices-services) need to be taken into consideration by policymakers. Listening to the students’ “voices” is crucial for rethinking academic policies, in order to promote inclusive and accessible education. The majority of the students emphasized that they learn less through distance education, justifying their opinion based on the limited teaching time and technical problems that had as a result their difficulty in understanding the teaching content. The results of the present study coincide with the results of other studies regarding students' perceptions of distance education and also enrich the present literature. It is important to take into account the disadvantages expressed by the students and the difficulties they faced during the distance education period, in order to propose and implement solutions and ways of improvement in the future.

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Conflict of interest

The Authors declare that there is no conflict of interest.

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SESSION 2

(Covid 19 Pandemics: Educational "Lesson-Learned")

ELEMENTARY SCHOOL CHILDREN'S DRAWINGS ABOUT COVID-19

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Abstract
Since the emergence of the Covid-19 as a global pandemic, school-aged children have been widely exposed to both scientific and non-scientific information about the Sars-Cov-2 virus, the virus transmission as well as the recovery from Covid-19. Yet, little is known about elementary school children's scientific knowledge and understanding of Covid-19 as well as any age-related differences in their understanding. The present study aimed to investigate from a developmental perspective, elementary school-aged children's ideas about Covid-19, through their drawings. Eighty-two students (26 2nd graders, 33 4th graders and 23 6th graders) participated in the study. Participants were presented with a vignette about Covid-19 and were asked to provide answers to three questions through their drawings. More specifically, participants were asked to draw the Sars-Cov-2 virus to indicate measures that could prevent the transmission of the virus in the school setting and to suggest tips for fast recovery from Covid-19. Qualitative analysis of 246 drawings indicates that elementary school-aged children have scientific knowledge of the Sars-Cov-2 virus and the Covid-19 illness. The majority of the participants depicted Sars-Cov-2 in a way that resembled the scientific illustrations and referred to the scientifically proposed prevention measures and treatment of the illness. Moreover, age-related differences in students' drawings were observed.

Keywords: *children's drawings, children's ideas about Sars-Cov-2, Covid-19 pandemic, naïve biology, scientific knowledge.*

Introduction

The Covid-19 pandemic is still ongoing, affecting many countries around the world. It is an unprecedented situation with serious global consequences, impacting all age groups, including children (Munitis *et al.,* 2022). According to several studies, the infection rates among children are relatively low, and most of those who do get infected may either be asymptomatic or exhibit mild clinical symptoms (Idoiaga *et al.,* 2020; Mondragon *et al.,* 2022). However, despite the low impact of Covid-19 disease on children's physical health, their daily lives had been radically changed, at least during the first two years, due to the restrictive measures that had been implemented. Scholars argue that especially for children, the lockdown as well as other restrictions implemented worldwide during the pandemic have negatively affected their psychological and physical health, as well as their social, emotional, and academic well-being (Bonoti *et al.,* 2022; Thompson *et al.,* 2021).

During the first two years of the Covid-19 pandemic, research results reported several psychological effects on children, such as post-traumatic stress, confusion, and irritability. Additionally, the strict lockdown has led to increased rates of anxiety, stress, and depression in the general population, including children (Gonzalez-Calvo *et al.,* 2022). Often, children – particularly older ones - reported fear and worry, about those who were sick or intubated, as well as fear of death (Gonzalez-Calvo *et al.,* 2022; Mondragon *et al.*, 2022; Munitis *et al.,* 2022).

A significant impact has been observed on children's social lives too. Specifically, away from school and with limited social interactions, children faced obstacles in the socialization process (Addimando *et al.,* 2021; Gonzalez-Calvo *et al.,* 2022). Especially during the first two years of the pandemic, dominant emotions among children included fear and uncertainty about the unknown, particularly regarding their return to "normal life" (Thompson *et al.,* 2021). Many studies highlighted children's dissatisfaction and their loneliness due to the lockdown (for a review see Panchal *et al.,* 2023). Moreover, the difficulties faced by students throughout the period of emergency remote learning had significant impact on their academic performance. Specifically, concerning the younger age groups, research has reported reduced participation and constant distraction during classes (Sajjad, 2021). Increased rates of boredom and apathy were observed among students due to spending prolonged hours at home and in front of a computer screen. These conditions did not favor the cultivation of the necessary learning motivation, resulting in learning gaps and, consequently, a significant decrease in their academic performance (Sajjad, 2021; Tadesse & Muluye, 2020). While numerous studies report the effects of emergency remote learning during Covid-19 pandemic, to our knowledge, studies addressing students' return to school settings and their beliefs about the changes in school life during Covid-19 pandemic are scarce.

Though, the physical and psychological impact as well as the impact in children's social lives due to the pandemic is of great importance, research about their knowledge concerning the Sars-Cov-2 virus and the illness it causes as well as their beliefs about the changes in their school lives after their return to school have a great importance too. This knowledge could provide scholars with useful tools to design educational programs and interventions in order to tackle the effects of the pandemic and enhance students' biological knowledge per se. The present study aims to address elementary school-aged children's biological knowledge about the Sars-Cov-2 virus and the Covid-19 illness, as well as their ideas about school life during Covid-19 pandemic.

Children's Drawings of Sars-Cov-2 and the Covid-19 Pandemic. Many researchers, when studying children's ideas and beliefs, choose drawings as the appropriate research tool. Children's drawings are expected to give more detailed information regarding children's representations (Munitis *et al.,* 2022). In most studies conducted during the lockdown, researchers asked children to draw how they imagined the coronavirus looked like. The way the coronavirus is depicted in the drawings seems to be determined by children's age. More specifically, research findings suggest that 5 to 7-year-old children tend to draw monstrous creatures that could symbolize the public health risk, fear and terror, whereas older children seem to include anthropomorphic/humanoid characteristics like legs, hands, eyes and mouth in the virus depiction. It is only after the age of 10 that children's representations seem to be influenced by the media and to resemble scientific illustrations (Christidou *et al.,* 2022; Munitis *et al.,* 2022). It should be noted, however, that the studies presented above were contacted during the first two years of the pandemic and during lockdowns, a period where access to information about Sars-Cov-2 and the seriousness of Covid-19 implications was abundant.

Moreover, researchers also studied children’s drawings regarding the changes that the pandemic brought to their lives. Most children, regardless of their age, are well informed of the basic preventative practices to minimize the spreading of the virus (for example, masks, hand sanitizers, hand washing, social distancing). Thus, the drawings regarding preventative measures are the most realistically depicted. Further, children usually depict negative emotions, social distancing and isolation in their drawings. As far as it concerns older children, they also depict social isolation, reduction of affective behaviors, the lockdown (i.e. empty streets) and school closure (e.g. Bonoti *et al.,* 2022; Christidou *et al.,* 2021).

There appears to be very limited research about children’s ideas regarding medical treatment and the process of recovery from Covid-19. Limited findings suggest that only older children comprehend the pandemic in medical terms. This age group depict more often that younger age groups hospital staff and amenities, medicines, ambulances and vaccines (Munitis *et al.,* 2022).

The Present Study. The present study aims to investigate from a developmental perspective, elementary school-aged children’s ideas about Covid-19, through their drawings. At first, the present study aims to explore elementary school-aged children depictions of the Sars-Cov-2 virus (RQ1). Studies contacted during the lockdown suggest that children tend to depict Sars-Cov-2 as a dangerous creature by adding anthropomorphic or monstrous characteristics in their drawings (e.g. Christidou *et al.,* 2022; Munitis *et al.,* 2022). However, the early days of the Covid-19 pandemic were characterized by messages of fear about the previously unknown disease and its consequences for humanity. Nowadays, three years after the Covid-19 pandemic outbreak, the evolution of the virus, increased immunity and the scientific knowledge about the virus and the illness have led to changes in the public discourse about Covid-19. The general public tend to think of Covid-19 as a mild disease and news about the pandemic on media are scarce. Thus, our first research question was to identify whether children continue to depict Sars-Cov-2 as a dangerous, anthropomorphic creature or if their ideas about the virus have changed due to familiarization with the disease.

Second, we were keen to know children's ideas about transmission of the Sars-Cov-2 virus and the perceived changes due to pandemic in the school setting (RQ2). Studies conducted so far, focused on changes in children's life during the lockdown when schools were closed. Thus, children depict mainly preventative measures, social isolation, empty streets and school closure (Bonoti *et al.*, 2022; Christidou *et al.*, 2021). To the best of our knowledge, no study so far explores children's ideas about the transmission of the Sars-Cov-2 virus and the perceived changes due to pandemic in the school settings. The second research question of the present study is to explore children's ideas about the changes that have occurred in the school settings during the pandemic.

Finally, our third research question focuses on children'sunderstanding and ideas about recovery from the Covid-19 (RQ3). As mentioned above, research conducted the early days of Covid-19 pandemic is limited and shows that only older children comprehend the medical aspects of the pandemic (Munitis *et al.,* 2022). Hence, it would be interesting to investigate how younger as well as older children depict the process of recovery from Covid-19.

Method

Participants. Eighty-two elementary school children participated in the study (37 girls). Participants were divided into three groups according to their school grade: 2nd graders (M = 7.42, S.D. = 0.50, N = 26, 11 girls), 4th graders (M = 9.39, S.D. = 0.50, N= 33, 18 girls) and 6th graders (M = 11.48, S.D. = 0.51, N = 23, 8 girls).

Materials and Procedure. Participants were presented with a vignette, which describes the spread of Sars-Cov-2 virus in a distant planet. Children were asked to inform the residents of this planet about the Covid-19 pandemic, through three different drawings. More specifically, children were asked (1) to draw the Sars-Cov-2 virus, (2) to draw the school life during Covid-19 and (3) to suggest, tips for fast recovery from Covid-19 through their drawings. Students were also asked to answer three demographic questions (i.e. age, grade, gender). This research project has the approval of the University's Research Ethics Committee (No 136/2023). Data were collected in schools following national and international ethics standards. Participation in the study was anonymous and voluntary following parents' consent. At first, a trained researcher read the story and asked children to provide three different drawings, as described above. Children were free to use colored pencils or crayons of any color. The story, the demographic questionnaire and three sheets of A4 paper for drawing were provided to students by the researcher. For the purpose of this study, students were engaged for one school hour.

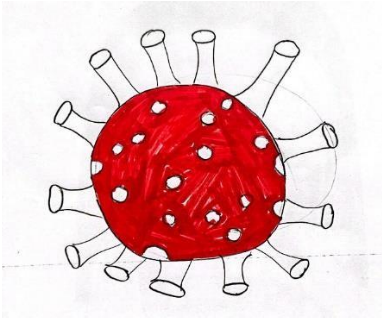
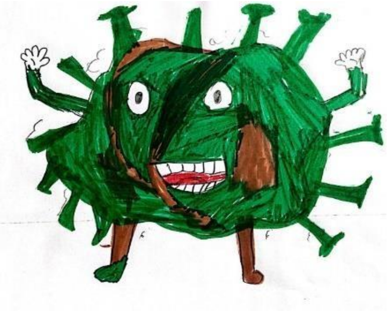
Data Analysis. The analysis of the children's drawings was informed by Guillemin's (2004) framework for the analysis of drawings for health-related issues. This framework suggests three sets where meanings are made: a) production of the image, b) the image itself c) and the site(s) where it is seen by various audiences. It also, suggests a series of questions to guide the analysis of the images. Guillemin's framework was adapted for the present study. In this study, researchers focused on the second set of questions -as presented in Guillemin's framework- and present results for two of the questions. Namely, *"What is being shown?"* and *"What is being represented?"*.

A trained researcher identified the categories that emerged from children's drawings regarding what is been shown and what is been represented. After the identification of the categories, she classified the drawings into the categories that emerged. A second researcher also classified 30% of the drawings into the categories. The inter-rater agreement between the researchers was substantial ($\kappa = .792$, 95% CI, .580 to 1.00, $p < .001$) and reached 100% after discussion.

Finally, to identify any age-related differences in children's drawings, we conducted a series of $\chi 2$ tests.

Results

Children's Drawings of Sars-Cov-2. Concerning the depiction of Coronavirus *(The words Coronavirus and Sars-Cov-2 virus are used interchangeably)* (i.e. *What is being shown?*), 43.9% of the participants (36 children) depicted the Sars-Cov-2 in a way that resembles the scientific illustrations (see figure 1), 40.2% (33 children) added anthropomorphic characteristics to their drawings, for example legs, hands, mouth, eyes (see figure 2) and 15.9% drew (13 children) various microorganisms (see figure 3).

Figure 1.	**Figure 2.**
Representation that resembles the scientific illustrations (4th grader, girl) 	*Anthropomorphic characteristics added to the virus depiction (6th grade, girl)* 

Regarding the representation of Sars-Cov-2 (i.e. *What is being represented?*), three categories emerged. The first category, which consisted of 57.3% of the participants (47 children), represented the danger of coronavirus, as the children attributed to the virus an aggressive and threatening look (see figure 4). In the second category, 31.7% of the participants represented the Sars-Cov-2 virus as part of the micro world (i.e. depiction of microorganisms – microbes, see figure 5) and the rest 15.9% (13 children) represented the virus including both scientific and non-scientific elements (see figure 6).

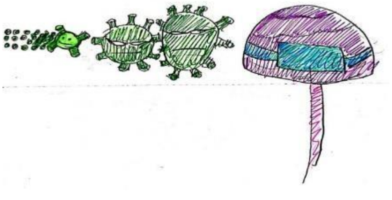
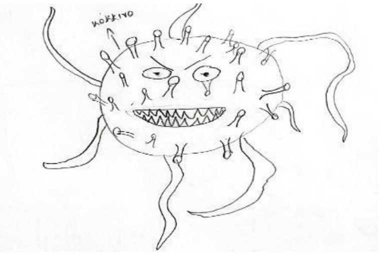
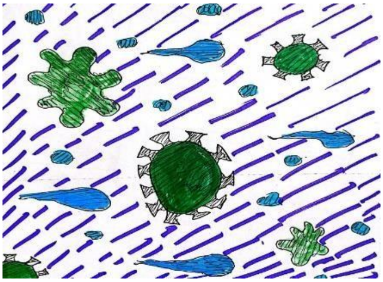
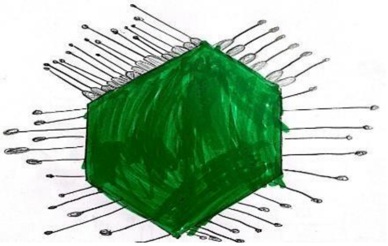
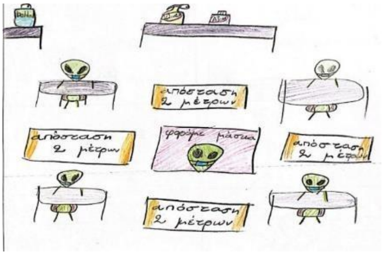
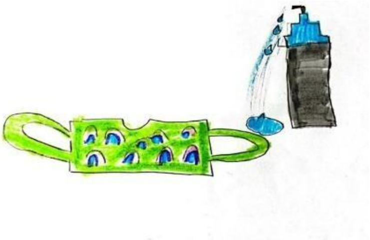
Figure 3.	**Figure 4.**
A depiction of various microorganisms (6th grader, boy) 	*The danger: Aggressive/ threatening look (6th grader, boy)* 

Figure 5.	**Figure 6.**

Sars-Cov-2 virus as part of the micro world (6th grader, boy)	*Virus depictions including scientific and non-scientific elements (2nd grader, boy)*
	

Children's Drawings of the School Life during Covid-19 Pandemic. Regarding the depiction of school life during Covid-19 pandemic (i.e. *What is beeing shown?*), the majority of participants (65.9%) depicted multiple scenes from school life (for example, students wearing masks inside and outside the classroom, using antiseptic and keeping distances, see figure 7). The rest, 34.1% of the participants (28 children), depicted only personal protective equipment, such as masks and antiseptics, without any reference to the school setting (see figure 8).

Figure 7. *A depiction of the school life during Covid-19 pandemic (6th grader, boy)*	**Figure 8.** *Personal protective equipment for Covid-19 (2nd grader, girl)*
 απόσταση 2 μέτρων απόσταση 2 μέτρων φοράμε μάσκα απόσταση 2 μέτρων απόσταση 2 μέτρων	

As far as it concerns the representations of school life during covid-19 (i.e. *What is beeing represented?*), we identified two categories. The majority of participants (64.3%) represented school life with control measures implemented (see figure 9) usually including negative emotions into their drawings (e.g. sadness), whereas the rest 35.4%

represented only the implementation of personal protective equipment (see figure 10).

Figure 9.
School life with control measures implemented (2nd grader, boy)

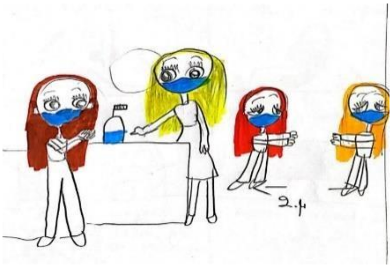
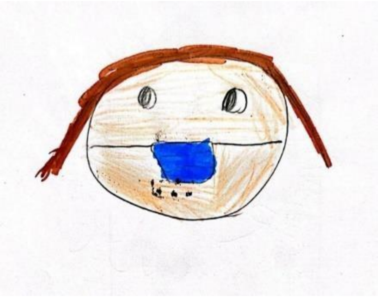


Figure 10.
Implementation of personal protective equipment (4th grader, girl)



Children's Ideas about Fast Recovery from Covid-19. As regards to the depiction of the recovery from Covid-19 (i.e. *What is being shown?*), 34.4% (31 children) depicted medicines, vaccines and different ways to strengthen the immune response, such as vitamins, fruits and vegetables (see figure 11). Further, 36.6 % of the participants (30 children) described a more holistic approach of the process of recovery (e.g. isolation and medication or medication and vaccines, see figure 12), while the rest 24.4% (20 children) suggested that the preferred way to recover quickly from Covid-19 is through isolating, sleeping, and maintaining distance (see figure 13).

Figure 11.
Medicines/ ways to strengthen the immune response (6ht grader, girl)

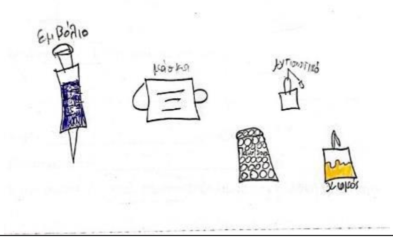

Εμβόλιο
μάσκα
αντισηπτικό
χυμός

Figure 12.
A depiction of the process of recovery (6th grader, boy)

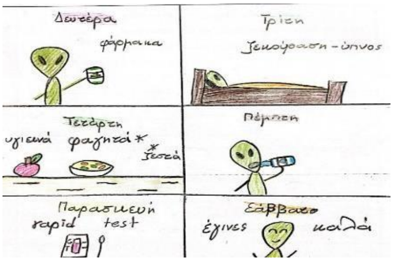
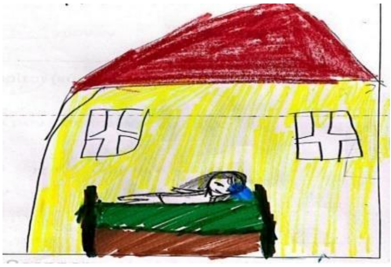

Δευτέρα
φάρμακα
Τρίτη
ξεκούραση - ύπνος
Τετάρτη
υγιεινά φαγητά*
*ζεστά
Πέμπτη
Παρασκευή
rapid test
Σάββατο
έγινες καλά

Figure 13.

Isolation (6ht grader, girl)



Finally, regarding the children’s representations of fast recovery from Covid-19 (i.e. *What is being represented?*), we identified three categories. Concerning the first category, 62.2% of the students (51 children) represented the process of recovery from the virus (see figure 14), while 26.8% of the students (22 children) represented the importance of science in fighting Covid-19 (see figure 15). The rest 11% of students (9 children) represented the importance of transmission prevention (see figure 16).

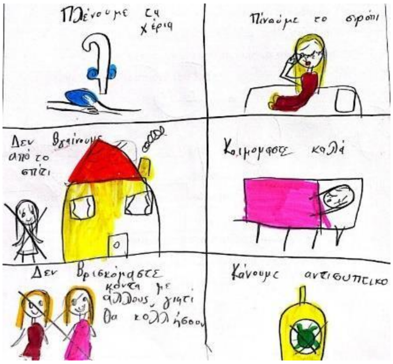
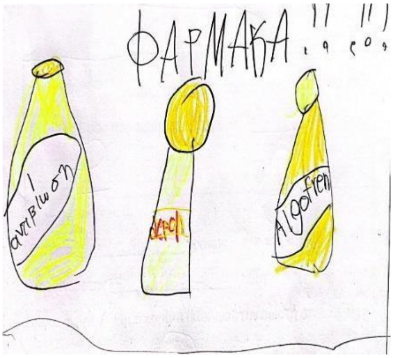
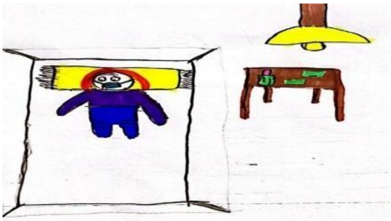
Figure 14. *The process of recovery from Covid-19 (2nd grader, boy)*  Πλένουμε τα χέρια Πίνουμε το σιρόπι Δεν βγαίνουμε από το σπίτι Κοιμομαστε καλά Δεν βρισκόμαστε κοντά με άλλους γιατί θα κολλήσουν Κάνουμε αντισηπτικο	**Figure 15.** *The Importance of Science in Fighting Covid-19 (4th grader, boy)*  ΦΑΡΜΑΚΑ!!!! αντιβίωση depon Algofren

Figure 16.

The Importance of Transmission Prevention (girl, 6th grade)



Age-Related Differences in Children's Drawings. In order to find out if there were any age-related differences in children's drawings, we conducted a series of χ^2 tests. Concerning the depictions of Sars-Cov-2, analyses suggested that there are not any statistically significant age-related differences (all *p*s>.05).

On the other hand, statistically significant differences were found in the way the three age groups depicted school life during Covid-19, $\chi^2(2)=13.92$, $p=.001$. More specifically, when asked about changes in school life during pandemic, second graders depicted more often personal protective equipment in their drawings than the older age groups (61.5% of 2nd graders, 27.3% of 4th graders and only 13% of 6th graders depicted personal protective equipment). On the contrary, older children (i.e. 4th graders and 6th graders) drew more often than the youngest age group scenes from the school life, or compared school life prior to- with the school life during the pandemic (38.5% of 2nd graders, 72.7% of 4th graders and 87% of 6th graders drew scenes from the school life).

Further, age-related differences were found in students' representations of school life during Covid-19, $\chi^2(2)=9.29$, $p<.05$. Younger age groups tended to depict the implementation of personal protective equipment (57.5% of the 2nd graders, 30.3% of the 4th graders and only 17.4% of the 6th graders depicted the implementation of personal protective equipment). On the contrary, older children (i.e. 4th graders and 6th graders) expressed negative emotions in their drawings more often than the youngest age group (42.3% of the 2nd graders, 69.7% of the 4th graders and 82.6% of the 6th graders drew scenes from the school life including negative emotions).

In addition, statistically significant differences were also found in the way different age groups depicted the recovery from Covid-19, $\chi^2(4)=16.61$, $p<.05$. In this task, second graders depicted more often medicines (i.e. as objects) than the older age groups (64% of the 2nd graders, 30.3% of the 4th graders and 21.7% of the 6th graders depicted medicines). On the other hand, 4th graders tended to depict social isolation – quarantine more often than the other two age groups (12% of the 2nd graders, 39.4% of the 4th graders and 60.9% of the 6th graders drew quarantine), while 6th graders seemed to focus more on the process of recovery from illness - a more holistic approach to recovery from illness - in comparison with the younger age groups (24% of the 2nd graders, 30.3% the 4th graders and 60.9% of the 6th graders depicted the process of recovery).

Finally, age-related differences were found in what is been represented in students' drawings of the recovery from Covid-19, $\chi^2(4)=21.33$, $p<.001$. More thoroughly, second graders depicted the value of medicines in the process of recovery from Covid-19 (57.7% of 2nd graders, 18.2% of 4th graders and only 4.3% of 6th graders depicted medicines as valuable). On the contrary, older children (i.e. 4th graders and 6th graders) represented more often a holistic approach of the process of recovery from Covid-19 (30.8% of the 2nd graders, 69.7% of the 4th graders and 87% of 6th graders represented the process of recovery).

Conclusion

The present study aimed to investigate from a developmental perspective, elementary school students' ideas about Sars-Cov-2 virus, changes in the school setting during Covid-19 pandemic as well as their ideas about quick recovery from the Covid-19 illness.

Regarding the depiction of the coronavirus, our results suggest that the majority of children tend to combine scientific and non-scientific elements when they are asked to depict the Sars-Cov-2 virus. One the one hand, these results indicate that children exhibit –at least in part- biological knowledge about the Sars-Cov-2 virus, even though the Coronavirus is not included in the school curriculum and thus, their knowledge is not a result of formal educational interventions, rather a representation influenced by media. This could also explain some of the non-scientific elements that were common among students' drawings (e.g. the virus was depicted green in most of the students' drawings). Moreover, the present study did not find any statistically significant age-related differences in how students depict the Sars-Cov-2 virus, indicating that the influence of media during the pandemic was comprehensive, significantly impacting the representations of Sar-Cov-2 in older and younger children.

Further, our results suggest that students, regardless of their age, tend to use anthropomorphic characteristics when drawing the Coronavirus. Previous findings (e.g. Christidou *et al.,* 2022; Munitis *et al.,* 2022) suggest that anthropomorphic characteristics tend to be more common in younger children than older. In the present study though, we did not find any age-related differences in the use of anthropomorphic characteristics in children's drawings, as the three different age groups that participated in this study used human-like characteristics in the depictions of Sars-Cov-2. Apart from the depiction of Sars-Cov-2 per se, anthropomorphic characteristics are widely apparent in the biological discourse. Scholars argue that the use of anthropomorphism might even promote understanding of biological concepts in students (e.g. Byrne *et al.,* 2009; Kattmann, 2008). Further, by using human-like characteristics children can easily indicate the danger that the coronavirus represents (almost 60% of the participants depicted the Sars-Cov-2 virus with an aggressive/ threatening look to warn alien life about the danger of this novel situation).

Concerning students' ideas about the changes in school life during the pandemic, students focused either on depicting personal protective equipment or implementing preventative measures. It should be noted that in drawings depicting students' faces or scenes from school life during COVID-19, students often depicted sad faces. It seems that drawing helps children to express their emotions about this novel situation and the changes in their every day (Christidou *et al.,* 2022; Cornaggia *et al.,* 2022; Gonzalez-Calvo *et al.,* 2022) and thus, sad faces might indicate students' dissatisfaction with the changes in school life due to the implementation of preventative measures. For example, students depicted sad faces for not being able to hug friends or have closer interactions with classmates (e.g. give and take pencils). Furthermore, our results suggest that older age groups compared with

2nd graders tend to depict scenes from the school life more often or to compare school life prior to Covid-19 with school life during Covid-19. This could relate to the 2nd graders lack of elementary school experience prior to Covid-19 pandemic.

The present study also explored students' ideas about the process of recovery from Covid-19. Students focused more on medicines, vaccines, social isolation as well as natural ways to enhance theimmune response (e.g. fruits and vegetables, walking in nature, resting, etc.). These results suggest that after three years in the pandemic, elementary school-aged children understand the medical aspects of thepandemic and are able to suggest the proper treatment for the disease, in contrast with previous findings which indicated that only older children comprehended the medical perspective of the pandemic (Munitis *et al.*, 2022).

Further, when children were asked to depict tips for fast recovery from Covid-19, some children depicted solely isolation and transmission prevention avoiding any other suggestion. One possible explanation might lie in the medical advice to isolate as long as one has a positive Covid-19 test. Further, it could also relate to children's personal experience with the disease. Many children have an asymptomatic infection, which means that they only had to isolate to prevent transmission. Finally, it seems that the older age group (i.e. the 6th graders) has adequate biological knowledge to understand the impact of the infection on the body and thus, depicted the process of recovery more thoroughly in comparison with younger age groups.

Though the results presented in this study are informative of children's ideas about the Coronavirus and Covid-19, in order to understand in depth students' ideas of Covid-19, future research should combine drawings with other research tools, such as interviews. The use of a single research tool for data collection might be an important limitation of the present study. Future research that would combine multiple research tools, such as drawings and interview or questionnaires, would result in a more comprehensive understanding of children's knowledge and ideas regarding the biological aspects of this phenomenon as well as their biological knowledge in general.

In conclusion, the present study aimed to investigate elementary school children ideas about the Sars-Cov-2 virus and the Covid-19 pandemic from a developmental perspective. Our findings suggest that elementary school students have some scientific knowledge of the Sars-Cov-2 virus and the Covid-19 disease three years after the declaration of the pandemic. Further, our data indicate that while all three age groups that participated in the study have scientific knowledge about Covid-19, it is only the older age groups that depict the pandemic's impact on school life as well as the process of recovery from Covid-19 in a more complex way, by adding multiple aspects of their experience in their drawings.

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SESSION 3
(Intercultural Communication, Bilingualism)

BRIDGING THE GAP: A DISTANCE TRAINING PROGRAM FOR LANGUAGE TEACHERS IN BILINGUAL ENVIRONMENTS

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Abstract
The digital transformation of teacher training is the key to the effectiveness of modern training programs (Shurygin et al., 2022). In this direction, the blended training model with the combination of synchronous and asynchronous learning comes to fill the gap in traditional programs (Bouras & Griva, 2022· Zagouras et al., 2022), contributing decisively to their effectiveness, creating the appropriate training framework and maximizing the benefits of distance education in modern era (Al-Hunaiyyan et al., 2021).

This paper outlines the design, implementation and evaluation of a 6-month distance training program offered to language teachers who teach in bilingual educational contexts. The purpose of the program was to enhance teachers' skills on issues related to teaching the Greek language in modern bilingual/intercultural environments. The training program was implemented to 43 Greek minority education teachers in Albania, from the area of Gjirokaster, Delvino and Agioi Saranda, in a synchronous and asynchronous digital context. Qualitative and quantitative methods were used to estimate the feasibility and the effectiveness of the program. The results indicated the broadening of modern methodological approaches to language teaching in bilingual/cross-cultural environments and the formation of critically reflective teachers in a world shaped by digitalization. The trainees acquired, through digital learning processes, the ability to implement innovative language activities in their classrooms, laying the foundations for the consolidation of a modern way of thinking of language teachers.

Keywords: *Albania, bilingual learning environments, blended training program, Distance education, language teachers*

Introduction

When studying the relevant literature, it is evident that a variety of definitions of training overlap. However, every single training effort aims at conveying knowledge and strengthening the skills of teachers to prepare them for the constantly changing conditions, which result in the alterations in teachers' attitudes. (Bouras & Griva, 2022) An appropriately trained teacher applies modern methodological approaches while teaching the language course, thus combining learning with pleasure, and at the same time adopting a critical attitude towards teaching and the educational environment as a whole (Al-Issa & Al-Bulushi, 2010). Strengthening the language skills of his/her students, a trained teacher helps them interact in the modern multicultural classroom and boosts the enjoyment of a language lesson which takes place in a stimulating and highly creative environment (Keengwe, 2010). In doing this, he/she motivates all students in the class while acquiring a broad framework of social skills, and collaborating with other colleagues from other specialties, offering the sought-after interdisciplinarity (Rahman & Sahayu, 2020).

It is in this direction, according to research (see Gilakjani & Sabouri, 2016· Gordon, 2010) that the properly trained teacher of a language course develops a continuous relationship with his/her students. Moreover he/she can manage any problems that arises more effectively by helping students to produce and understand a spoken and written language with great efficacy. Further, they can manage modern multilingual and multicultural educational environments by creating and maintaining open "channels" of communication, utilizing, and strengthening students' linguistic resources (Bouras & Griva, 2021). As a result, this creates authentic communication situations in the classroom, which are offered for reflection and experimentation with the target language. In turn this utilizes the appropriate tools for conscious and self-regulated learning, effective involvement in the process of understanding, and producing spoken and written language, while strengthening the communication ability of its students (Zamani & Ahangari, 2016); all in all, contributing to the awareness and understanding of something different. Through this effort, the teacher faces many obstacles such as the complexity of the socio-cultural context (Periani & Suputra, 2022), however, as a contemporary teacher, he/she demonstrates flexibility, "translating" the activities he/she has designed appropriately for his/her students into effective communication and interaction amongst them.

The integration of ICT into language teaching is of crucial importance for the qualified teacher of the 21st century (Aydın et al., 2009). It is a valuable language experience offered to students through digital language learning environments, providing a variety of opportunities, which improves and assesses their language skills. At this point it is worth noting that the simple quoting of digital material by the teacher of the language course is not sufficient as it does not produce the expected results (Sudarmo, 2021). Therefore, the teacher of the language course, who has been properly trained, plans activities in such a way that the effective connection of technology and learning is achieved in order to reach the educational goals he/she sets each time. It is a modern teacher who is able to aptly embrace digital tools and create a technologically supported learning environment in the classroom (Peredrienko et al., 2020) promoting and continuously improving the student's language skills.

This is why teachers should create a digital habitat for their language course which will embrace digital media creating a technologically supported learning context in the classroom (Kessler, 2018) In fact to strengthen their students digital knowledge during the course, the continuous training of teachers in ICT is necessary, This will occur through the integration of a variety of digital tools introduced in the language course:

- Students' creative thinking increases (Ahmadi & Reza, 2018)
- Their interest in learning is enhanced
- Higher cognitive skills are developed through teamwork activities
- Their learning involvement is enhanced
- Positive experiences about the target language are formed
- Their self-esteem is developed
- A safe framework for strengthening language skills is created (Kukulska-Hulme & Viberg, 2018)
- Intercultural contact is supported (O'Dowd, 2016)

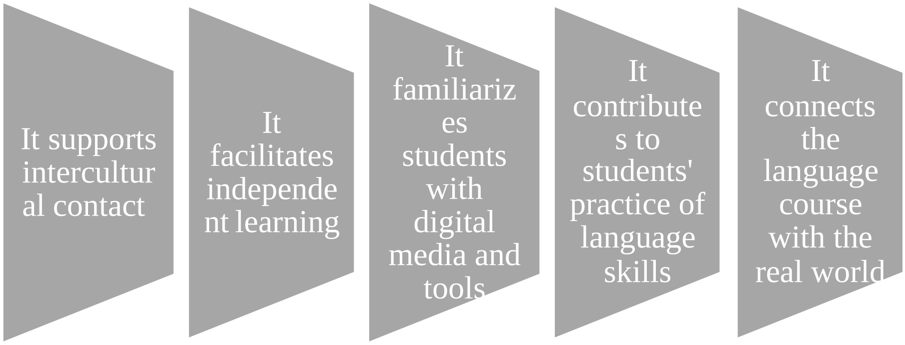
It supports intercultural contact
It facilitates independent learning
It familiarizes students with digital media and tools
It contributes to students' practice of language skills
It connects the language course with the real world

Figure 1. Advantages of Digital Learning Environments in the Language Course

The Context of Greek Language Education in Modern Albania

Formal Education

The education system in Albania consists of the nine-year basic education, which is compulsory for all students and is equivalent to the primary and secondary education provided in the Greek education system. The next level of education is the tertiary level and includes two types of schools: the General Lyceum, which lasts for three years and the Vocational Lyceum which lasts for two years (first level of study), three (second level), four years (third study level), with the last level giving the possibility of admission to the Higher Educational Institutions of the country. Moreover included above the basic structure of the Albanian educational system is the Greek-language education of the Greek minority. Public minority schools operate in those areas traditionally inhabited by the Greek minority, under the auspices of the Albanian state, and more specifically in the areas of Argyrokastro, Delvino and Agioi Saranda (Rapti, 2014). The curriculum of minority schools, depending on the level, include the teaching of Greek as an independent language course, otherwise the program is conducted exclusively in Greek. Greek language education follows the mandatory nine-year education in which the teaching of the Greek language is an integral part, with a progressive reduction of hours in the last grades. Regarding secondary education, the Greek language is taught two hours a week in all higher-level schools located in the minority zone and attended by students of Greek origin. Apart from the public Greek-language minority schools in Albania, there are also private schools funded by the Greek Ministry of Foreign Affairs and the Ministry of Education. These are the bilingual school "Omiros" in Kortsa and the minority school "Omiros" in Himara.

Nonformal Education

Students are also able to learn the Greek language through the private Greek language tutoring institutes which operate in both minority and non-minority areas. These respond to the needs of Greek language education from a public that varies according to their expectations but also their language skills and the level of their L1/L2 language.

The Research

The purpose of the program was to enhance teachers' skills on issues related to teaching the Greek language in modern bilingual / intercultural environments. More specifically, the aim of the program was for the teachers to be trained using innovative tools for managing the educational environment, as well as in the use of modern methods to teach the Greek language. Specifically, distance training was carried out, in modern and asynchronous environments through a special educational platform. According to the mapping of the needs (April to December 2019) of the teachers who teach the Greek language in bilingual educational environments throughout the region and based on the specifications dictated by the international literature, 10 thematic modules were designed with modern methods in the instruction of Greek.

Participants in the Implementation of the Training Program

The training program was tailored to the needs of 43 teachers of Greek minority education in Albania from the areas of Argyrokastro, Delvino and Agioi Saranda, in a synchronous and asynchronous digital context. These are the teachers of the three recognized Greek minority regions in the region of Albania.

Table 1. Demographic characteristics of the trainees-teachers

Gender	Man	Woman		
	16.3%	83.7%		
Age	21-30	31-40	41-50	50+
	7.0%	20.9%	46.5%	25.6%
Years of service	1-5	6-10	11-20	20+
	11.6%	7.0%	34.9%	46.5%
Position in education	School Director	Teacher		
	16.3%	83.7%		
Undergraduate studies	Department of Greek Language, Literature and Greek Culture	Academy of Greek Studies	Faculty of Education Sciences	Other
	69.8%	11.6%	16.3%	4.7%
Master's studies	Postgraduate	Other undergraduate degree	Ph.D.	Other
	20.9%	9.3%	2.3%	2.3%

Analysis of Questionnaire Data

The data from the questionnaires were analyzed quantitatively,using SPSS software (26th edition) with which the frequencies obtained from the responses of the trainees were recorded. The processing of the data resulting from the answers of the participating teachers to the closed and "open" type questions was implemented at the level of inductive statistics. More specifically, using tools of descriptive statistics, the frequencies resulting from the answers of the teachers of the Greek minority education in Albania were recorded and the corresponding graphs were created.

The Results of Teachers’ Questionnaires

Results from the Teachers' Needs Questionnaire

The wishes/expectations of the teachers from the training programs

The Tables show the results that refer to the wishes/expectations of the teachers from the training programs. Regarding the context in which the respondents want the training actions to take place, the majority (65.1%) consider that the training should be mandatory. Regarding the methods of evaluation in a training program, 86.3% of respondents want evaluation without exams, 9.3% would like written exams, and 25.6% oral exams, 25.6% prefer sample micro-teachings, 11.6% would like a research paper and 4.7% another way. In addition, 95.3% of teachers want their opinion and educational needs to count in the planning of training programs.

Table 2. Distribution of the Responses of the Sample in Terms of the Context of the Implementation of the Training Activities

		Frequency (N)	Rate (%)
	N/A	1	2.3
	The training should be mandatory for teachers of Greek minority education	27	62.8
	The training should be done on a voluntary basis	1	2.3

	The training should be voluntary, but it should be a condition for promotion in your job	14	32.6
	Total	43	100.0

Table 3. Distribution of Sample Responses in Terms of Agreement on how to Evaluate a Training Program

Method of Educational Program Evaluation	Yes		No	
	N	%	N	%
a) Only with attendance certificate	37	86	6	14
b) With written exams	4	9.3	39	90.7
c) With oral exams	11	25.6	32	74.4
d) With sample, micro-teachings	11	25.6	32	74.4
e) With research work	5	11.6	38	88.4
f) Another way	2	4.7	41	95.3

Table 4. Distribution of the Sample regarding the Agreement Regarding the Participation of Teachers in the Design of Training Programs

		Frequency (N)	Rate (%)
	Yes	41	95.3
	No	2	4.7
	Total	43	100.0

Results from the Final Evaluation Questionnaire

Table five records the difficulties that the respondents consider they encountered during their participation in the training program. Specifically, the teachers mention Internet connection problems (19.5%), problems with their computer (14.6%), the lack of time due to their workload at school (7.3%), difficulties related to etymology of each thematic (9.8%), difficulty handling the e-learning platform (2.4%) and the difficulties in completing specific activities (34.1%).

Table 5. Distribution of the Responses of the Sample regarding the Difficulties of Training

Training Program Difficulties	Yes		No	
	N	%	N	%
a) Internet connection problems	8	19.5	33	80.5
b) Computer problems	6	14.6	35	85.4
c) Lack of time due to school workload	3	7.3	38	92.7
d) Difficulties related to etymology of each thematic module	4	9.8	37	90.2
e) Difficulty handling e-learning platform	1	2.4	40	97.6
f) Difficulty completing specific activities	14	34.1	27	65.9

Results from the Follow-up Questionnaire

Table six records the results regarding the ways in which the training program affected teaching. 28.9% of the teachers who answered the specific questions report that their teaching ability improved. 23.7% that the way of organizing the language course improved, 68.4% reported as changes in teaching the application of modern methods and techniques of teaching the Greek language, 10.5% the understanding of the curriculum, 34.2% the design of material based on modern methods and techniques of teaching the Greek language, 42.1% familiarity with the teaching of the Greek language when using a computer, 21.1% familiarity with alternative methods assessment of the language course, 18.4% application of strategies for reading and writing skills and 28.9% application of listening and speaking skills.

Table 6. Distribution of Sample Responses in Terms of Agreement on the Effect of Course Management Training

Effect of training on course management	Yes		No	
	N	%	N	%
a) Improving teaching ability	11	28.9	27	71.1
b) Improving the way the language course is organized	9	23.7	29	76.3
c) Application of modern methods and techniques of teaching the Greek language	26	68.4	12	31.6
d) Understanding the Language Curriculum	4	10.5	34	89.5
e) Material design based on modern methods and techniques of teaching the Greek language	13	34.2	25	65.8
f) Getting used to teaching the Greek language using a computer	16	42.1	22	57.9
g) Familiarity with alternative methods of evaluating the language course	8	21.1	30	78.9
h) Application of strategies for Reading and Writing skills	7	18.4	31	81.6
i) Application of strategies for Listening and Speaking skills	11	28.9	27	71.1

Discussion

The training program was implemented combining a "synchronous" and "asynchronous" learning environment with teleconferences that took place in real time promoting the interaction between trainer and trainee as well as by posting material on the platform, thus enabling the trainee to follow their own pace of learning while building new knowledge promoting self-learning and self-improvement of participants (Rohotchenko et al., 2021). The trainees used the digital platform and within a modern digital learning environment were involved in activities such as dialogue, discussion, communication, and solving questions from the trainers.

The results indicated the enhancement of the knowledge and skills of the language teachers about "how to work" and "how to reflect on their work" as "reflective practitioners". Regarding the contribution of the program on the development of digital skills, the trained teachers particularly focused on the innovation of using information and communication technologies that will facilitate them to become more qualitative in their educational work. The results indicated the broadening of modern methodological approaches to languageteaching in bilingual/cross-cultural environments and the formation ofcritically reflective teachers in a world shaped by digitalization.

Consequently, the trainee teachers were enriched with new knowledge and skills about the Greek language and its teaching in contemporary educational contexts. Moreover, they contributed to the improvement of their personal and professional learning (Zehetmeier et al., 2015), they improved their degree of participation in innovative learning, they increased their sustained engagement and effective performance as modern teachers and experienced feelings of joy, satisfaction, and happiness. At the same time, they acquired the appropriate skills in order to face the ongoing challenges in the field of education, integrating modern methodological approaches in teaching the Greek language, by transforming it into a driving force for the general and better-quality improvement of the Greek minority education system in Albania (Bouras, 2020).

Additionally, special emphasis was placed on improving the language level of the trainees, as a high level of language use is completely intertwined with the students' employability. Besides, the effectiveness of the teacher, especially of the language course, isrelated to his/her proficiency in the target language (Moeller & Catalano, 2015) and his/hers in-depth expertise in techniques andmethods that create an appropriate educational environment.

On the other hand, the lack of the trainer's physical presence and face-to-face communication was emphasized by only a few trainees. Moreover, although most trainees are familiar with lifelong learning (Kenner & Weinerman, 2011), digital learning programs are characterized as "innovative" and necessary in the modern age (Bochulia, 2021). In addition, distance training programs contribute to the creation of a rich learning environment (Ko & Rossen, 2017) as they act as interactive tools that enable trainees to participate in contemporary digital activities and stay up to date on all contemporary issues in their time and place. Indeed, the design of modern training platforms makes them suitable for creating a participant-friendly (Singh et al., 2017) educational environment.

The trainees used the language creatively and actively participated in activities of making their own language materials for their classroom, engaging in a pedagogical and educational design of activities, in authentic learning environments. Finally, they acquired, through digital learning processes, the ability to implement innovative language activities in their classrooms, laying the foundations for the consolidation of a contemporary way of experiencing the learning of language.

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SESSION 3
(Intercultural Communication, Bilingualism)

FOSTERING INTERCULTURAL AWARENESS THROUGH L2 LITERATURE

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Abstract

It is beyond any doubt that rich cultural information is greatly embedded in literature (McNicholls, 2006). Subsequently, it is strongly regarded as a powerful tool in teaching the relativity of cultural values and the inherent 'problems' in cross-cultural communication. After all, literature's power lies in its unique ability to enable the reader to observe the world from multifarious aspects while cherishing the diversity of individual perception. Recent research shows that a rich literature second language environment does not just provide learners with a combination of comprehensible input and a low affective filter (Cho, Ahn & Krashen, 2005) or enhances students' intrinsic reading and writing motivation (Morrow, 2004). Still, it mainly forms a cross-thematic basis for language learning, along with offering students the opportunity to explore cross-cultural values and move from cultural awareness to empathy (Grotjahn, 2000). Especially children's literature is a dynamic vehicle to teach them about L2 culture, themselves, the world, and others (Griva & Kofou, 2019).

In this realm, the present paper presents a newly published book based on teaching Greek as a second/foreign language to children through literature. It is dedicated to Mariupol is published by the University of Western Macedonia and is written both in Greek and Ukrainian. Attempting to remap the Foreign Language Curriculum through Multiple Literacies (teaching language, literature, and culture) it addresses all three language dimensions: knowledge, interpersonal, and experience. It moves from general literature's themes to specific pedagogical concerns while including practice-oriented chapters with practical examples, materials, and tasks that pre- and in-service teachers can use to develop the complex skills involved in teaching a second language and help students build their intercultural competence.

Keywords: *intercultural awareness, literature, teaching Greek as a second foreign language*

Introduction

In our rapidly changing and increasingly interconnected world, we need a more dynamic conception of culture than has typically been used to design language teaching curricula. In this broader perception of culture, it could briefly be defined as a way of life. “It is the context within which we exist, think, feel and relate to others. It is the glue that binds a group of people together” (Brown, 2007, p. 188). In this sense intercultural awareness couldn’t be other than a multidimensional term; Accordingly, it is widely regarded as “…the ability of standing back from our point and becoming aware of not only our cultural values, beliefs and perceptions, but also those of other cultures.” (Zhu, 2011, p. 85). Therefore, it refers both to awareness of one’s own culture as well as of (an)other culture(s).

Given the foregoing, as far as it concerns the Foreign Language (FL) pedagogy Kramsch (1998, p.27) promoted the idea of the “intercultural speaker” who is aware of his/her own as well the others’ cultural identity. This goes in line with Byram and Cain’s (1998) claim that “linguistic and cultural competencies are integrated” (p. 44). A language is indeed a part of its culture and culture is a part of its language; that is the two are intricately interwoven such that “one cannot separate the two without losing the significance of either language or culture” (Brown, 2007, p. 183).

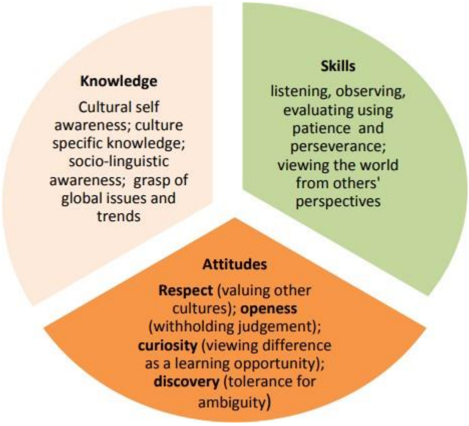
Since becoming culturally aware is a continual process (Guilherme, 2022), culturally sensitive practices need to be implemented in the L2 classroom. It should aim at creating a climate that is conducive to maximum learning and teaching for L2 students and at the same time offering them the opportunity to think ‘outside their box’ with a different set of lenses which will promote their cultural understanding and awareness. After all, there exists a general need in the era of 21st century for any type of school to create a more challenging, authentic, and collaborative learning environment for the students.

Thus, contemporary teachers face huge challenges: they need to be aware of the various cultural profiles in their classroom as well as teach the curriculum content and target language in a culturally sensitive fashion. Yet this can only be achieved through a subject, which demonstrates how language and culture are inextricably connected (Brown, 2007) and this couldn’t be other than Literature.

In this article, key components of intercultural awareness (ICA) are discussed along with their relevance to FL practices as well as suggestions as to how they can be implemented in the L2 classroom. To be more precise, based on a newly published Greek textbook which is also translated into Ukrainian called “T*eaching Greek as a Second/Foreign Language through Children's Literature: Theoretical Knowledge and Practical Application”* (Voyevoutko, Kaiafa, Griva & Iliopoulou, 2022) -being published by the University of Western Macedonia under the aegis of The Department of Ministry of Affairs and dedicated to war-ridden Mariupol-, the present article expounds the importance of cultivating intercultural awareness in teaching Greek as an L2 through literature. It aims at helping pre-/ in-service teachers to develop the complex skills involved in teaching L2 and consequently reinforce their students to build their intercultural competence.

From intercultural awareness to intercultural competence

ICA is considered the basis for developing intercultural competence. According to Deardoff (2006), 3 elements constitute intercultural competence: Knowledge, skills, and attitudes (Picture 1).


Knowledge
Cultural self awareness; culture specific knowledge; socio-linguistic awareness; grasp of global issues and trends
Skills
listening, observing, evaluating using patience and perseverance; viewing the world from others' perspectives
Attitudes
Respect (valuing other cultures); openess (withholding judgement); curiosity (viewing difference as a learning opportunity); discovery (tolerance for ambiguity)

Picture 1: Constituent elements of intercultural competence (adopted from Deardorff, 2006)

In this realm, in the present article, ICA is presented as an alternative ‘non-essentialist’ view of culture and language that better rationalizes the fluid yet dynamic relationship between them.

Literature in L2 classroom

Previous research has highlighted several benefits of incorporating literature within language learning in general and L2 in particular. Treating literature itself as an art form, its integration can create a learning environment that provides learners with a combination of comprehensible and pleasurable input (Cho et al., 2005; Hess, 2006; Rodrigo et al., 2004), and accordingly with a low affective filter (Krashen, 2004). It also helps learners to enrich their vocabulary (Wang & Guthrie, 2004) and improve their reading comprehension (Holden, 2003) while facilitating the development of a positive attitude towards reading in the L2. This in turn is likely to lead to more independent reading which can be beneficial for students’ language acquisition (Kim, 2004). Lastly, according to Dornyei (2005), using literature in the classroom can assist in “creating an overall positive motivational climate in the classroom” (p. 112).

Enhancing cultural awareness through L2 literature: Literature review

The pivotal role of reading literary texts in developing cultural awareness in an L2 classroom has been observed by several scholars, including Bredella (2000), Burwitz-Meltzer (2001), Delanoy (1993), and Kramsch (2003).

One of the main arguments for incorporating literary texts as a vehicle for boosting students’ ICA is concerned with the fact that works of literature enable the reader to observe the world from multitudinous viewpoints as well as worship the diversity of individual perception. In addition, as reading literature is an imaginative process, readers can “de-center their thinking by placing themselves in somebody else’s shoes” (Porto & Zembylas, 2020, p. 358). This potential to engage readers in the exploration “of the deepest layers of our selves through representations of other subjective worlds” (Matos, 2012, p. 4) makes literary texts important artistic expressions for intercultural development.

Despite the relevance placed on it, teaching the cultural component remains a discrete choice and option of individual teachers (Peiser & Jones, 2014).

From theory to practice

The book under our lenses delves into teaching Greek as an L2 to youngsters through literature as well as aiming at boosting their intercultural awareness according to Deardorff's model (2006) as presented in Picture 1. It moves from general literature's themes to specific pedagogical concerns while it includes practice-oriented chapters with practical examples, materials, and tasks. All the activities are based on Lasar's (1993) classification. That is:

(a) Pre-reading: Students are asked to guess the subject of a story based on pictures, they take part in classroom discussions regarding the title and/or the first paragraph of the story they are about to study and they are assigned mini-projects in groups.

(b) While-reading: The main focus is generally on reading and writing skills. Students are involved in answering comprehension check questions, writing a concise summary, putting jumbled sentences in the right order, as well as sentence completion activities enabling them to make "cause-effect" relationships.

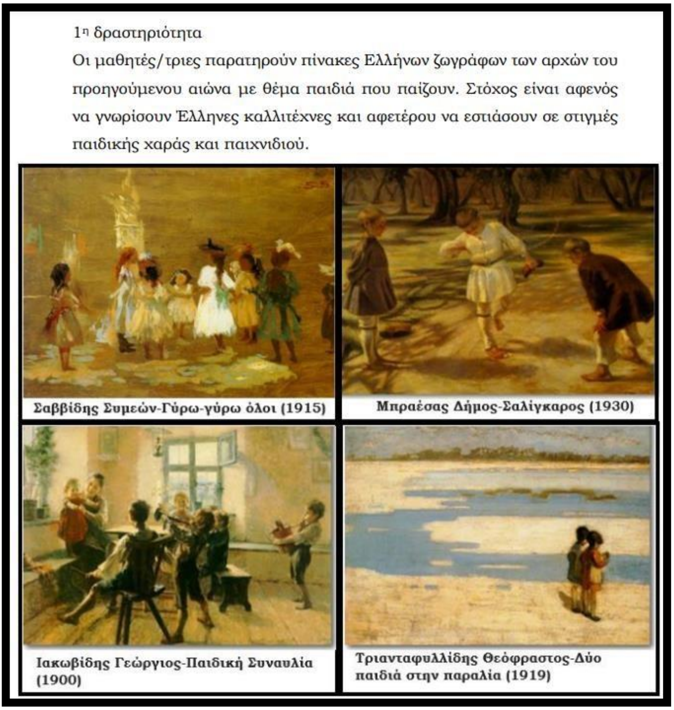
(c) Post-reading: It involves all four language dimensions, that is listening, speaking (role-playing, discussion, oral reading, dramatization, improvisation, presentations), reading, and writing (imagining the end from characters' point of view, reconstructing the set of a story's/poem's events on a different scenario).

However, regardless of the tasks' classification, intercultural skills, attitudes, and knowledge are harmoniously integrated with teaching language skills (Barrett et al., 2013).

Skills

ICA awareness is cultivated through the dimension of fostering critical pedagogical skills of analyzing, evaluating, hypothesizing, comparing, questioning, and commenting (Byram, 2012) while storytelling aims to contribute to the development of readers' intercultural skills (Steel, 2003). The stories presented in the book convey big ideas like forgiveness, prejudice, and coming of age. Such themes govern humans’ lives, no matter where they live or what language they speak. Encountering these themes in literature helps the readers to break down the barriers that divide cultures, focusing on the similarities that they all share.

Accordingly, in the following pre-reading task readers are provided with several pictures of famous Greek painters of the 20th century regarding traditional games. Readers are asked to observe, compare, and comment on their classmates’ answers by nourishing their critical thinking on cultural-based information (Picture 2).



1η δραστηριότητα

Οι μαθητές/τριες παρατηρούν πίνακες Ελλήνων ζωγράφων των αρχών του προηγούμενου αιώνα με θέμα παιδιά που παίζουν. Στόχος είναι αφενός να γνωρίσουν Έλληνες καλλιτέχνες και αφετέρου να εστιάσουν σε στιγμές παιδικής χαράς και παιχνιδιού.

Σαββίδης Συμεών-Γύρω-γύρω όλοι (1915)

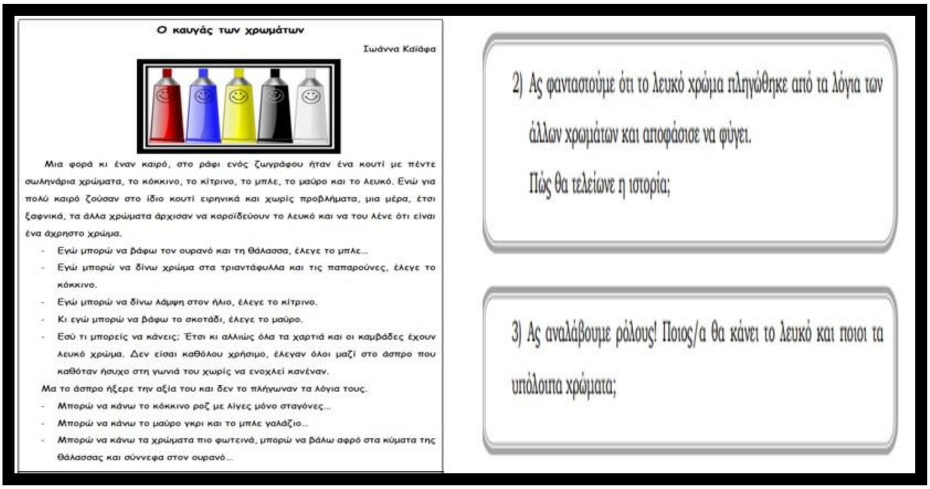
Μπραέσας Δήμος-Σαλίγκαρος (1930)

Ιακωβίδης Γεώργιος-Παιδική Συναυλία (1900)

Τριανταφυλλίδης Θεόφραστος-Δύο παιδιά στην παραλία (1919)

Picture 2: Fostering critical thinking skills (Voyevoutko et. al., 2022, p. 205)

Furthermore, based on Anna Kaifa’s story “*Ο καυγάς των χρωμάτων*” (The Quarrel of colors) -it focuses on discrimination- learners are asked to hypothesize the end of the story (Picture 3). Since literature boosts learners' imagination through mental imagery, they activate their prior knowledge and develop critical thinking skills, which are necessary for ICA. Moreover, by forming mental images while reading the story, they are expected to gain better recall and develop their abilities to make inferences and predictions (Hibbing & Rankin-Erickson, 2003, p. 54).



Ο καυγάς των χρωμάτων

Ιωάννα Καϊάφα

Μια φορά κι έναν καιρό, στο ράφι ενός ζωγράφου ήταν ένα κουτί με πέντε σωληνάρια χρώματα, το κόκκινο, το κίτρινο, το μπλε, το μαύρο και το λευκό. Ενώ για πολύ καιρό ζούσαν στο ίδιο κουτί ειρηνικά και χωρίς προβλήματα, μια μέρα, έτσι ξαφνικά, τα άλλα χρώματα άρχισαν να κοροϊδεύουν το λευκό και να του λένε ότι είναι ένα άχρηστο χρώμα.

- Εγώ μπορώ να βάφω τον ουρανό και τη θάλασσα, έλεγε το μπλε...
- Εγώ μπορώ να δίνω χρώμα στα τριαντάφυλλα και τις παπαρούνες, έλεγε το κόκκινο.
- Εγώ μπορώ να δίνω λάμψη στον ήλιο, έλεγε το κίτρινο.
- Κι εγώ μπορώ να βάφω το σκοτάδι, έλεγε το μαύρο.
- Εσύ τι μπορείς να κάνεις; Έτσι κι αλλιώς όλα τα χαρτιά και οι καμβάδες έχουν λευκό χρώμα. Δεν είσαι καθόλου χρήσιμο, έλεγαν όλοι μαζί στο άσπρο που καθόταν ήσυχο στη γωνιά του χωρίς να ενοχλεί κανέναν.

Μα το άσπρο ήξερε την αξία του και δεν το πλήγωναν τα λόγια τους.

- Μπορώ να κάνω το κόκκινο ροζ με λίγες μόνο σταγόνες...
- Μπορώ να κάνω το μαύρο γκρι και το μπλε γαλάζιο...
- Μπορώ να κάνω τα χρώματα πιο φωτεινά, μπορώ να βάλω αφρό στα κύματα της θάλασσας και σύννεφα στον ουρανό...

2) Ας φανταστούμε ότι το λευκό χρώμα πληγώθηκε από τα λόγια των άλλων χρωμάτων και αποφάσισε να φύγει.
Πώς θα τελείωνε η ιστορία;

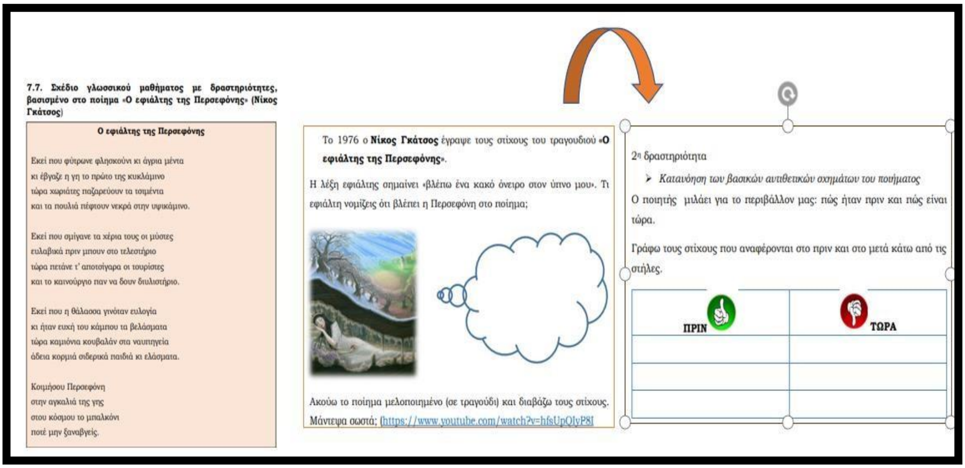
3) Ας αναλάβουμε ρόλους! Ποιος/α θα κάνει το λευκό και ποιοι τα υπόλοιπα χρώματα;

Picture 3: Enhancing imagination (Voyevoutko et. al., 2022, p. 132)

Given that mastering cultural awareness is a successful step to tolerance and effective communication in different situations of everyday life, communicating skills are also encouraged. By working in small, structured student groups, learners explore collaboratively a story/ a poem either as a whole or as a part while gaining an in-depth and enriched understanding of the text. This is in line with Harvey Daniel's claim that the sharing of thoughts about written texts is the core of literature circles (2002, p. 30). The student discussions of literary works also provide them with opportunities to practice oral skills in a certain social setting based on improvised speech.

Bearing in mind that communication can also be challenging and complex in a cross-cultural context, readers are also engaged with challenging cross-thematic ideas through literature (e.g. geography and global citizenship, art and science, history-focused). In the following example (Picture 4) readers study either in groups or in pairs Nikos Gatsos's poem "*Ο Εφιάλτης της Περσεφόνης*" (Persefone's nightmare) through environmental values of geography, art, and science.

Specifically, the poem focuses mainly on the aesthetic pollution and abuse of the once sacred, respectful, and untouchable place of Eleusina. It makes many hints, either direct or indirect, about the downgrading of life quality and public health.



7.7. Σχέδιο γλωσσικού μαθήματος με δραστηριότητες, βασισμένο στο ποίημα «Ο εφιάλτης της Περσεφόνης» (Νίκος Γκάτσος)

Ο εφιάλτης της Περσεφόνης

Εκεί που φύτρωνε φλησκούνι κι άγρια μέντα
κι έβγαζε η γη το πρώτο της κυκλάμινο
τώρα χωριάτες παζαρεύουν τα τσιμέντα
και τα πουλιά πέφτουν νεκρά στην υψικάμινο.

Εκεί που σμίγανε τα χέρια τους οι μύστες
ευλαβικά πριν μπουν στο τελεστήριο
τώρα πετάνε τ' αποτσίγαρα οι τουρίστες
και το καινούργιο παν να δουν διυλιστήριο.

Εκεί που η θάλασσα γινόταν ευλογία
κι ήταν ευχή του κάμπου τα βελάσματα
τώρα καμιόνια κουβαλάν στα ναυπηγεία
άδεια κορμιά σιδερικά παιδιά κι ελάσματα.

Κοιμήσου Περσεφόνη
στην αγκαλιά της γης
στου κόσμου το μπαλκόνι
ποτέ μην ξαναβγείς.

Το 1976 ο **Νίκος Γκάτσος** έγραψε τους στίχους του τραγουδιού **«Ο εφιάλτης της Περσεφόνης»**.

Η λέξη εφιάλτης σημαίνει «βλέπω ένα κακό όνειρο στον ύπνο μου». Τι εφιάλτη νομίζεις ότι βλέπει η Περσεφόνη στο ποίημα;

Ακούω το ποίημα μελοποιημένο (σε τραγούδι) και διαβάζω τους στίχους. Μάντεψα σωστά; (https://www.youtube.com/watch?v=hfsUpQIyP8I

2η δραστηριότητα

- *Κατανόηση των βασικών αντιθετικών σχημάτων του ποιήματος*

Ο ποιητής μιλάει για το περιβάλλον μας: πώς ήταν πριν και πώς είναι τώρα.

Γράφω τους στίχους που αναφέρονται στο πριν και στο μετά κάτω από τις στήλες.

ΠΡΙΝ	ΤΩΡΑ

Picture 4: Facilitating communicative skills in cross-thematic environments (Voyevoutko et. al., 2022, p. 220-222)

1.1 Attitudes

Readers are involved in tasks by combining “description, reflection, interpretation with exploration, creation, and intervention” (Guilherme 2002, p. 217) in an attempt to ‘broaden’ their attitudes. They are asked to trigger their curiosity, communicate in unfamiliar contexts, nurture their willingness to make mistakes and learn from them, comfort with ambiguity, empathy, and imagination, and finally cultivate open-mindedness, self-reflectiveness, and respect for the other.

In the following example concerning a story entitled "*The Quarrel of colors*" by Joanna Caiapha as mentioned above (Voyevoutko et. al., 2022, p.131), the general aims of the tasks serve as tools for enhancing cross-cultural awareness. To be more precise, tasks apart from being communicative, creative, playful, and experiential, they regard students’ attitudes towards:

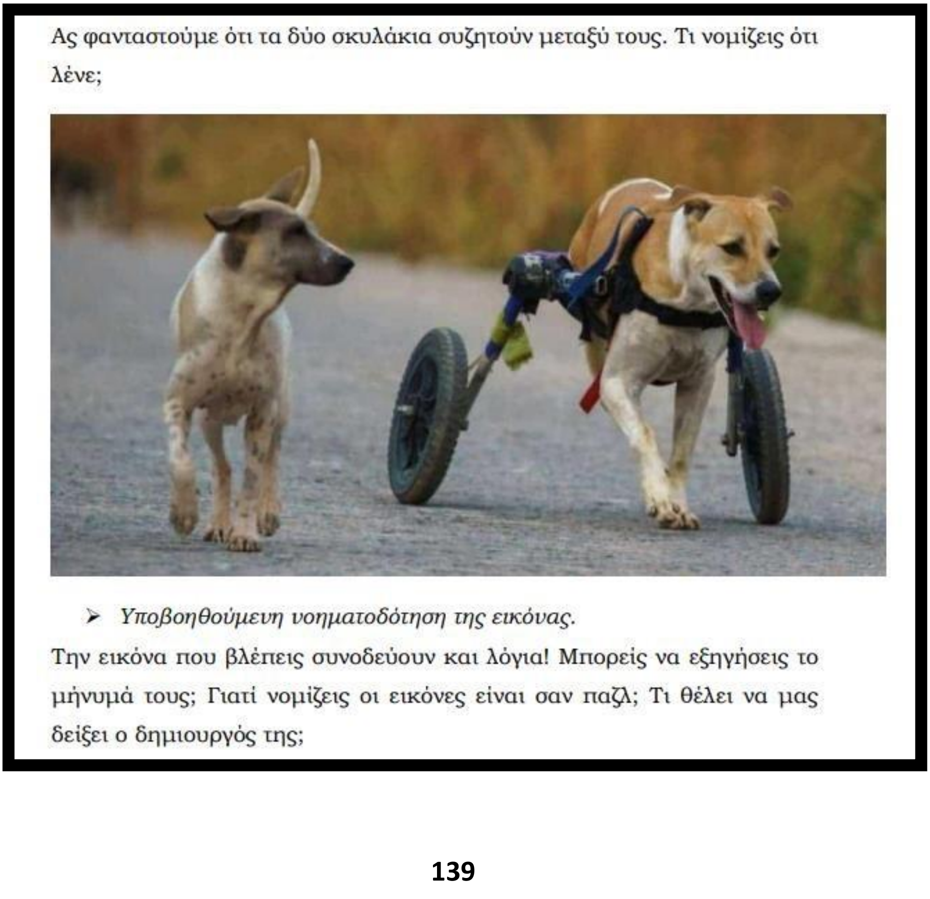
(a) The eradication of racial discrimination

(b) The acceptance of diversity

(c) The value of cooperation.

Similarly, the reasoning for studying Nikos Gatsos's poem "*Φιλντισένιο καραβάκι*" (Ivory little boat) is about raising students' awareness against the violation of children's rights all over the world and at the same time displaying the human pain as a unifying element of people (Voyevoutko et. al., 2022, p.204).

In another example, students are asked in a pre-task activity to pretend they are dogs in a given picture and imagine their dialogue in an attempt to embrace their awareness towards diversity (Picture 5) by identifying options for conflict situations and/or solutions. Dramatization is expected to boost the readers' ability to visualize the text, relate it to themselves and their world, ask questions, make statements of understanding with greater accuracy, and finally, get self-control of their attitudes and a motive to abandon the "monolithic" ones -if there any, of course.



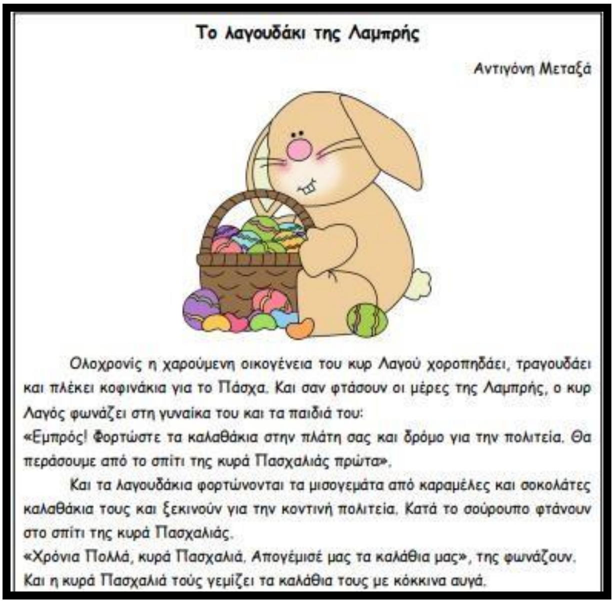
Ας φανταστούμε ότι τα δύο σκυλάκια συζητούν μεταξύ τους. Τι νομίζεις ότι λένε;

- *Υποβοηθούμενη νοηματοδότηση της εικόνας.*

Την εικόνα που βλέπεις συνοδεύουν και λόγια! Μπορείς να εξηγήσεις το μήνυμά τους; Γιατί νομίζεις οι εικόνες είναι σαν παζλ; Τι θέλει να μας δείξει ο δημιουργός της;

Picture 5: Dramatization and attitudes (Voyevoutko et. al., 2022, p. 199)

Moreover, a teacher-moderated discussion incorporating culture-dependent differences in perception of readers' reality and conclusive text interpretation, along with questions about the impact of cultural factors on the story, is applied in the following example based on Greek Orthodox Easter, "*The baby rabbit of Easter"* of Metaxa Antigoni (Picture 6). Here the focus is on cultural beliefs.



Το λαγουδάκι της Λαμπρής

Αντιγόνη Μεταξά

Ολοχρονίς η χαρούμενη οικογένεια του κυρ Λαγού χοροπηδάει, τραγουδάει και πλέκει κοφινάκια για το Πάσχα. Και σαν φτάσουν οι μέρες της Λαμπρής, ο κυρ Λαγός φωνάζει στη γυναίκα του και τα παιδιά του:

«Εμπρός! Φορτώστε τα καλαθάκια στην πλάτη σας και δρόμο για την πολιτεία. Θα περάσουμε από το σπίτι της κυρά Πασχαλιάς πρώτα».

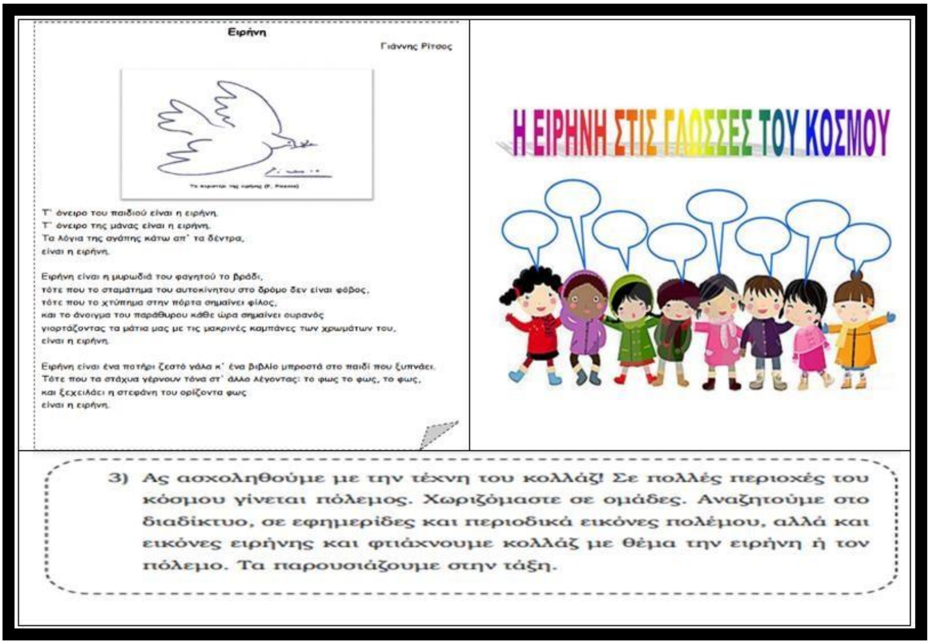
Και τα λαγουδάκια φορτώνονται τα μισογεμάτα από καραμέλες και σοκολάτες καλαθάκια τους και ξεκινούν για την κοντινή πολιτεία. Κατά το σούρουπο φτάνουν στο σπίτι της κυρά Πασχαλιάς.

«Χρόνια Πολλά, κυρά Πασχαλιά. Απογέμισέ μας τα καλάθια μας», της φωνάζουν.

Και η κυρά Πασχαλιά τούς γεμίζει τα καλάθια τους με κόκκινα αυγά.

Picture 6: Cultural stands (Voyevoutko et. al., 2022, p. 112)

Regarding cross-curricular learning along with the development of cultural values and especially social and human justice, readers are involved both in stories/poems of relevant subjects and in activities fostering these values. In Giannis Ritsos's poem "*Eirini*" (Peace) readers are asked to search on the web for ways that different countries depict peace and war (Picture 7). This cross-cultural task is expected to promote students' positive conflict transformation, and development and, in general, contribute to peace-building.



Ειρήνη

Γιάννης Ρίτσος

Τ' όνειρο του παιδιού είναι η ειρήνη.
Τ' όνειρο της μάνας είναι η ειρήνη.
Τα λόγια της αγάπης κάτω απ' τα δέντρα,
είναι η ειρήνη.

Ειρήνη είναι η μυρωδιά του φαγητού το βράδι,
τότε που το σταμάτημα του αυτοκίνητου στο δρόμο δεν είναι φόβος,
τότε που το χτύπημα στην πόρτα σημαίνει φίλος,
και το άνοιγμα του παράθυρου κάθε ώρα σημαίνει ουρανός
γιορτάζοντας τα μάτια μας με τις μακρινές καμπάνες των χρωμάτων του,
είναι η ειρήνη.

Ειρήνη είναι ένα ποτήρι ζεστό γάλα κ' ένα βιβλίο μπροστά στο παιδί που ξυπνάει.
Τότε που τα στάχυα γέρνουν τόνα στ' άλλο λέγοντας: το φως το φως, το φως,
και ξεχειλάει η στεφάνη του ορίζοντα φως
είναι η ειρήνη.

Η ΕΙΡΗΝΗ ΣΤΙΣ ΓΛΩΣΣΕΣ ΤΟΥ ΚΟΣΜΟΥ

3) Ας ασχοληθούμε με την τέχνη του κολλάζ! Σε πολλές περιοχές του κόσμου γίνεται πόλεμος. Χωριζόμαστε σε ομάδες. Αναζητούμε στο διαδίκτυο, σε εφημερίδες και περιοδικά εικόνες πολέμου, αλλά και εικόνες ειρήνης και φτιάχνουμε κολλάζ με θέμα την ειρήνη ή τον πόλεμο. Τα παρουσιάζουμε στην τάξη.

Picture 7: Crosscultural learning ((Voyevoutko et. al., 2022, p. 211)

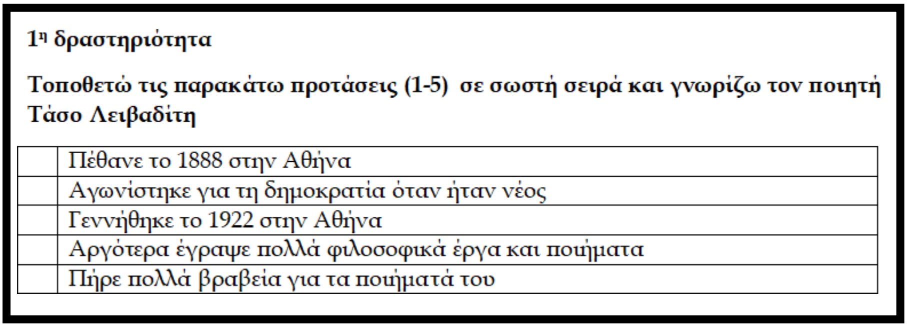
1.2 Knowledge

Taking into consideration that literature offers students essential ways to interact with culture, learn about culture (getting familiar with the culture in question, including its social norms, values, and history) well, and cultivate self-awareness (mindful of readers' cultural context and the way he/she is perceived by others), such types of knowledge are applied in all the tasks to be presented in an attempt to support effective and appropriate interaction in a variety of cultural contexts.

For example in a post-reading task based on a story of Aggeliki Varella about Dyonisios Solomos, the Greek national poet, students are asked to search on the web about the Greek soldiers' weapons in the Revolution of 1821.*"Ο Διονύσιος Σολωμός είναι ο αγωνιστής με την πένα. Οι άλλοι αγωνιστές, όμως,* ***τι όπλα κρατούσαν****; Κάνουμε μια έρευνα σε λευκώματα και στο διαδίκτυο, συγκεντρώνουμε εικόνες και τις παρουσιάζουμε στην τάξη"* (Voyevoutko et. al., 2022, p. 143). By doing so they build their historical knowledge while making cultural observations.

In the same context, since metaphors embody culture and reflect culture, drawing language learners' attention to their presence in L2 can facilitate their comprehension of the cultural and metaphorical meanings in texts (Boers 2000). Therefore, readers are used to many tasks not just as a vehicle for learning Greek but also as a tool for learning the Greek culture. To illustrate, readers are asked to search on an electronic dictionary for the actual meaning of a word (Ivory) featured in a poem title and then to "unpack" its metaphoric use. "*Αναζητάς στο ηλεκτρονικό λεξικό τη σημασία της λέξης* ***«Φιλντισένιο».*** *Γιατί νομίζεις ο ποιητής χαρακτηρίζει με αυτή τη λέξη το καραβάκι;"* (Voyevoutko et. al, p. 207).

Additionally, readers by learning in advance the life of Tasos Leivaditis, the poet they are about to study (Picture 8), do not only gain general knowledge, but also sociocultural one deriving from the time (1888, 1922), the place (Athens), and his/her socio-cultural background (fighter for political democracy, philosopher, awarded for his writing).



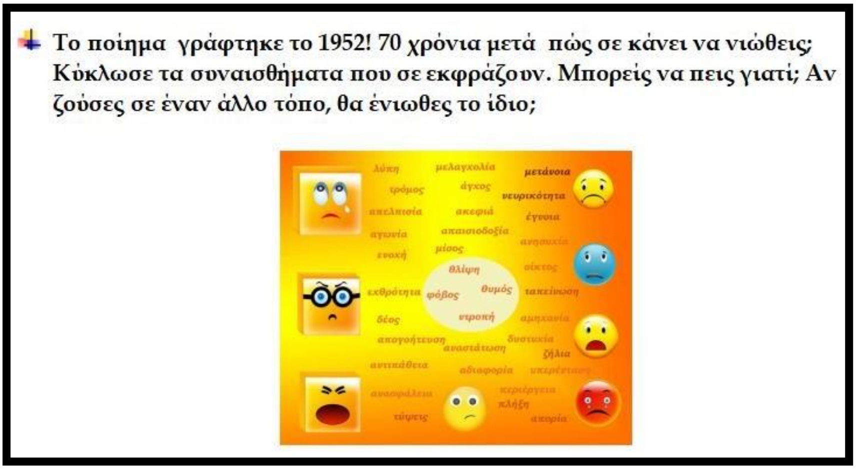
1η δραστηριότητα

Τοποθετώ τις παρακάτω προτάσεις (1-5) σε σωστή σειρά και γνωρίζω τον ποιητή Τάσο Λειβαδίτη

	Πέθανε το 1888 στην Αθήνα
	Αγωνίστηκε για τη δημοκρατία όταν ήταν νέος
	Γεννήθηκε το 1922 στην Αθήνα
	Αργότερα έγραψε πολλά φιλοσοφικά έργα και ποιήματα
	Πήρε πολλά βραβεία για τα ποιήματά του

Picture 8: Embracing sociocultural knowledge (Voyevoutko et. al., 2022, p. 193)

Learners are also presented a story and they are asked for its interpretation in the light of their own culture. Furthermore, they are exposed to previous cultural experts' interpretations of the text they read and compare them with their reading while they are provided with focused discovery activities guiding them to find out things for themselves as in the following example. In a post-reading activity, based on Tasos Leivaditis's poem "*This Star is for All of Us"* (Voyevoutko et. al., 2022, p. 194), students are asked the following: "*The poem was written in 1952! 70 years afterward, how do you feel* *about its meaning? Circle the emotions that fit best for you. If you were living in a different country, at some other time, would you feel the same*?" (Picture 9).



- Το ποίημα γράφτηκε το 1952! 70 χρόνια μετά πώς σε κάνει να νιώθεις; Κύκλωσε τα συναισθήματα που σε εκφράζουν. Μπορείς να πεις γιατί; Αν ζούσες σε έναν άλλο τόπο, θα ένιωθες το ίδιο;

λύπη
μελαγχολία
μετάνοια
τρόμος
άγχος
νευρικότητα
απελπισία
ακεφιά
έγνοια
αγωνία
απαισιοδοξία
ανησυχία
ενοχή
μίσος
θλίψη
οίκτος
εχθρότητα
φόβος
θυμός
ταπείνωση
δέος
ντροπή
αμηχανία
απογοήτευση
αναστάτωση
δυστυχία
ζήλια
αντιπάθεια
αδιαφορία
υπερένταση
ανασφάλεια
περιέργεια
πλήξη
τύψεις
απορία

Picture 9: Focusing on self-knowledge (Voyevoutko et. al., 2022, p. 195)

In this way -through a series of steps and activities- readers are taken from their comfortable, contemporary, and, therefore, familiar world of talking about themselves towards the production of a work of fiction derived from their interests and experiences (Bussinger, 2013). As a result, they develop a sense-based and culturally sensitive vocabulary.

2. Concluding remarks

As a powerful force that bridges across differences, culture brings people together, and thus underpins social cohesion, peace, and security. Not surprisingly, cultural awareness has emerged over the last few decades as a significant part of conceptualizing the cultural dimension of language teaching. That is, L2 learners need to understand L2 communication as a cultural process and at the same time be aware of their own culturally based communicative behaviour and that of others. Literature can undoubtedly foster intercultural competence since it helps learners internalize attitudes, skills, and knowledge associated with effective and appropriate intercultural communication. However, in many language classrooms, the story/poem is not being read as literature but as a piece of information (Carlisle, 2000, p. 13).

In this paper literature-based language instruction is enhanced. In this sense, literature is seen as an aesthetic experience. By engaging with cultural awareness literature initiatives in L2, students can learn about similarities and differences between cultures, growing to appreciate the identities of themselves, their educators, and their peers. After all, cultural exchanges in the classroom can benefit L2 learners emotionally as well as educationally. Especially when creative writing is engaged, students are actively encouraged to express themselves, to find language and forms within which they can externalize their culturally based self, and consequently bridge the gap between personal identity and the target language and culture.

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SESSION 3
(Intercultural Communication, Bilingualism)

JOINING CULTURAL TOURS IN GREECE AND LEARNING A FOREIGN LANGUAGE THROUGH DIGITAL TOOLS

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Abstract

The focus of the present paper is on the design, implementation and evaluation of a CLIL programme entitled which was piloted with 5th grade Primary School students in Northern Greece. The basic aim was to adopt digital tools in order to create innovative educational escape rooms, so as to develop students' skills in the target language (EFL) and at the same time to include context and meaning in terms of Greek cultural and historic aspects, of the Greek geographical districts. The programme was piloted for 5 months, providing students with the opportunity to "travel to Greek neighbourhoods" and making them familiar with aspects of certain subjects: culture, history and geography through a foreign language (EFL). Web2 tools, videos, games, websites were incorporated to provide authentic material, sin order to enhance communication in the English language and also to focus on students' cultural awareness and intercultural understanding. Through the evaluation of the programme, the positive effect of the CLIL approach on the students' skills in the target language was revealed along with the development of their cognitive skills in the subject matter. It was also indicated that the project developed a creative, motivating, digital setting for students and promoted their active involvement and enthusiastic participation.

Keywords: *CLIL, cultural awareness, digital tools, escape games, intercultural understanding.*

1. Introduction

(CLIL) Content Language Integrated Learning is considered to be an innovative approach adopted to comprise holistic features, since it emphasizes on meaning as well as on content. The particular CLIL program was designed and implemented with 5th grade students of a primary school in Greece in order to create innovative educational

Escape Rooms, to develop skills in English (target language) and to emphasize content and meaning in terms of geography, history, culture for each one of the nine Greek geographical districts.

2. Literature review

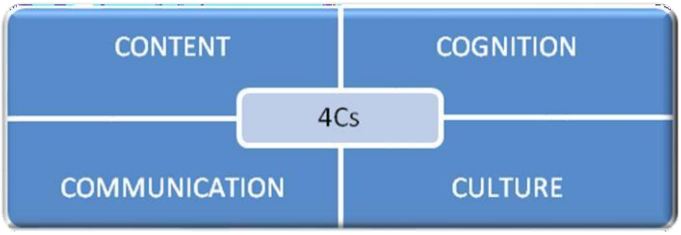
The term (CLIL) Content Language Integrated Learning was adopted –according to Lorenzo, Casal, Moore (2010) in their article "The Effects of Content and Language Integrated Learning in European Education: Key Findings from the Andalusian Bilingual Sections Evaluation Project"- as an umbrella term. It involved foreign language activities as a tool in order to learn a non language subject, so as they have a joint curricular role (Coyle, 2006).

CLIL may be described as a flexible, innovative and dynamic approach that can be adopted by all levels of education -from primary to secondary and university education- and can be used to teach children as well as adults (Coyle, Holmes & King, 2009); that is because CLIL may vary when applied, covering a wide range of models and programmes (from weak/soft CLIL to hard/strong CLIL) that depend mostly on the subject taught through the target language (Ball, 2016). Also, 10-20 minutes language showers may be adopted or even a partial immersion model (where only 50% of the curriculum subject is taught in the target language), according to the CLIL manual for E.U. for the CLIL4u project. CLIL may as well involve projects, acting, puppets, science experiments, etc. and the curriculum subjects together with the language classes may be mutually enriched and developed (Coyle, 2006).

In order for quality of the learning and educational experience to be ensured, Mehisto, Marsh και Frigols (2008) noted that the following characteristics of CLIL need to be considered:

- multiple focus,
- safe and enriching learning environment,
- authenticity,
- active learning,
- scaffolding,
- co – operation.

Also, in order for teachers and students to be helped, when introducing CLIL to the educational process, the following 4 principles -and the way they are connected- need to be taken into account: Content, Communication, Cognition and Culture (Coyle, Holmes και King, 2009).



Picture 1. The 4Cs curriculum

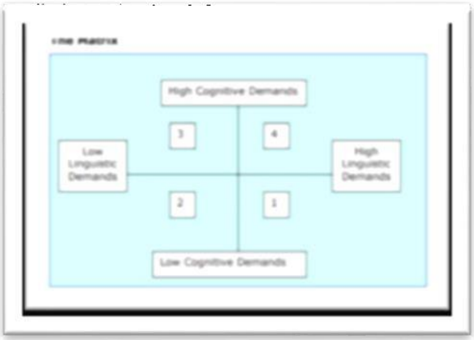
However, recently, one more principle - that is competence - has been introduced to strengthen the Cs framework and therefore, nowadays, the 5Cs curriculum has been mentioned and highlighted: Content, Cognition, Communication, Culture, Competence.

Also, CLIL is based on the triptych language of learning, language for learning, and language through learning. So, when it comes to detailed - lesson planning the structure of the 3As tool can be used and followed: Analyse, Add, Apply, (Coyle, 2005).

The 3 As tool operates in three stages:

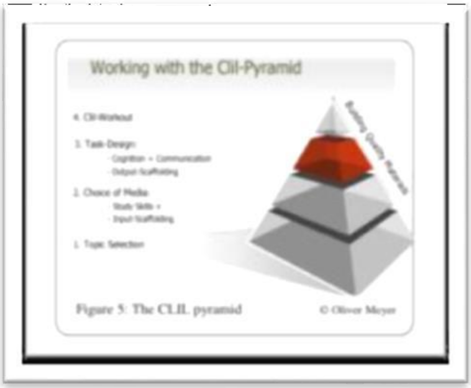
- Stage 1: *Analyze* (Analyze the content for the language *of* learning).
- Stage 2: *Add* (Add language content *for* learning).
- Stage 3: *Apply* (Apply the content of language *through* learning).

Another CLIL tool regarding development of the materials is The Matrix used in order to determine the way cognition and language are interrelated and to monitor the educational materials (Coyle, 2005).


The Matrix
High Cognitive Demands
3
4
Low Linguistic Demands
High Linguistic Demands
2
1
Low Cognitive Demands

Picture 2. The Matrix (Coyle, 2005)

The CLIL pyramid, designed to visualize the quality of CLIL in terms of the Cs when creating materials and designing activities is also a tool that is intended to build quality materials starting with the content and the subject.


Working with the Cil-Pyramid
4. Cil-Workout
3. Task-Design
- Cognition + Communication
- Output-Scaffolding
2. Choice of Media
- Study Skills +
- Input-Scaffolding
1. Topic Selection
Building Quality Materials
Figure 5: The CLIL pyramid
© Oliver Meyer

Picture 3. The CLIL Pyramid, (Meyer, 2010)

3. Methodology

The particular research programme was based on the principles of CLIL so as:

- educational escape rooms to be created,
- students' skills to be developed,
- context and meaning in terms of cultural and history aspects of Greek geographical districts to be included,
- authentic materials to be adopted,

- students’ cultural awareness and intercultural understanding to be enhanced.

3.1. Participants - Duration

The programme was piloted with sixteen 5th grade students (10 to 11 years old), of a Primary School in Northern Greece. It involved twelve interventions. More specifically, the particular educational programme engaged sixteen 5th grade students to attend twelve 3-hour sessions, from November 2021 to March 2022.

3.2. Method and data collection

“Joining cultural tours in Greece and learning a foreign language through digital tools” was intended to create digital educational environments and educational escape rooms so as to promote students’ skills in the target language (EFL) and at the same time to include context and meaning in terms of Greek cultural and historic aspects, of nine Greek geographical districts.

At first, a consent form, signed by parents, and a Google form pretest was given to students to identify their needs in terms of the English language and their background knowledge regarding geography, local history and cultural elements of Greece.

As it has already been mentioned, CLIL -as an educational practice- can be applied to all educational levels covering a wide range of approaches and models. So, a Weak/ soft CLIL model was adopted for this programme so as to improve students’ English language skills and their competence in the subjects of geography, history and culture.

Designing and planning the CLIL lessons was a process based on:

- —Theme based approach
- —Game based approach – gamification
- —Task based framework
- —Escape rooms (genially)
- —Web2 tools
- Cultural & intercultural elements

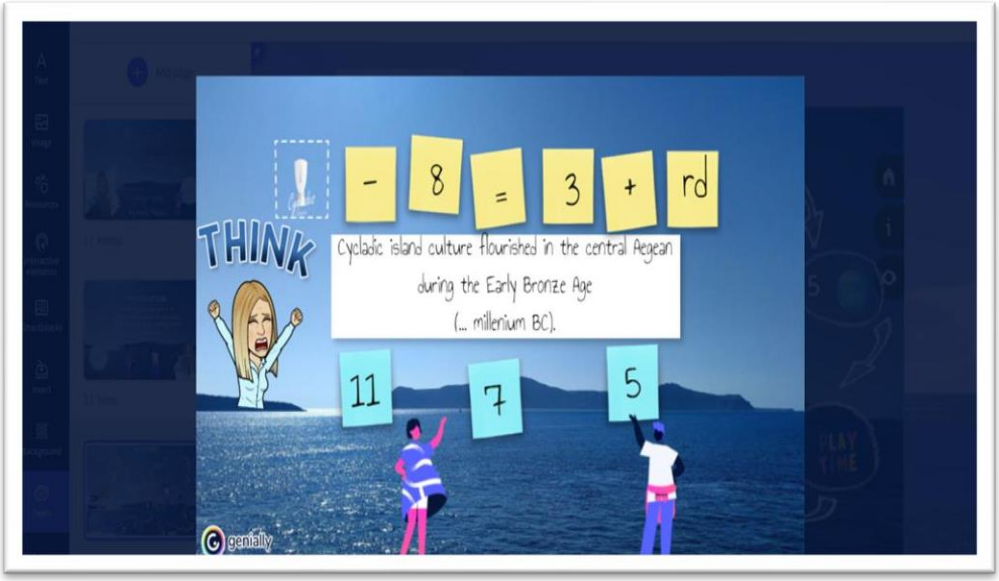
For the purposes of this programme, 11 escape rooms were created using genially, a platform that can be adopted by teachers as a tool to teach and learn through interactive learning materials, through infographics, presentations, gamification.

Table 1 Escape rooms

Escape room 1	**Greece**
Escape room 2	**Central Greece**
Escape room 3	**Aegean islands**
Escape room 4	**Christmas** escape while travelling to Greece
Escape room 5	**Crete**
Escape room 6	**Ionian Islands**
Escape room 7	**Peloponnese**
Escape room 8	**Epirus**
Escape room 9	**Thessaly**
Escape room 10	**Thrace**
Escape room 11	**Macedonia**

Each one of the 11 escape rooms was designed focusing on the nine geographical districts of Greece following the 3 stages: Pre stage, Task cycle, Follow-up stage (*Willis, 1996)*. More specifically:

- Pre-stage: was incorporated in the escape rooms as part of the game (missions and tasks).
- Task cycle: involved clues, missions, tasks, puzzles, digital games, web2 tools, in order for the key to be found so as to lead students to the next escape room.
- Follow up stage: included assignments designed to practice, revise and assess new structures, vocabulary and skills.

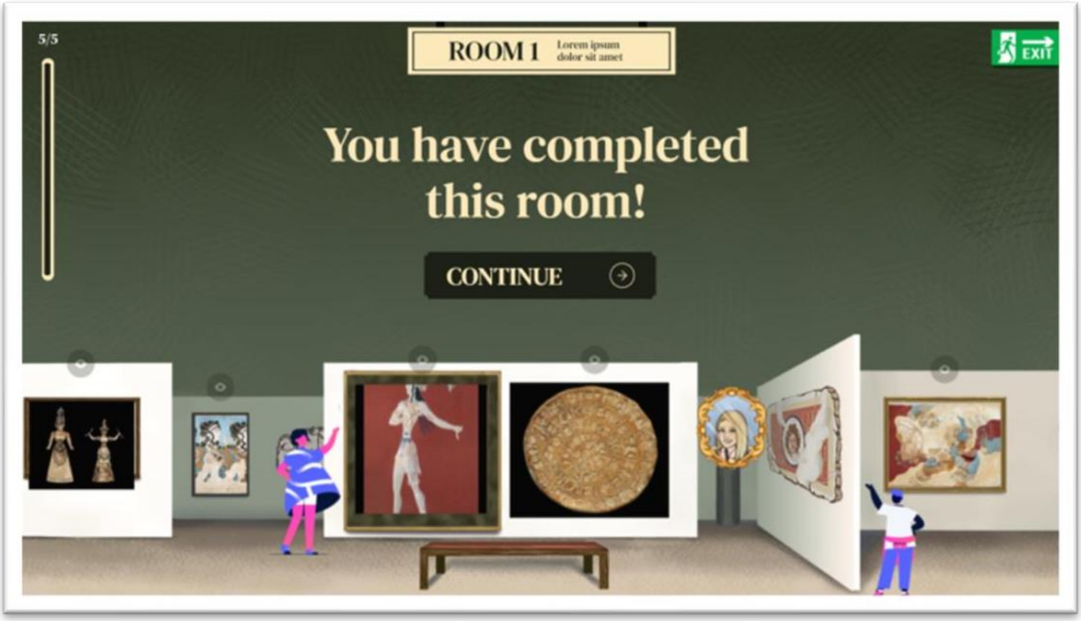


Cycladic island culture flourished in the central Aegean during the Early Bronze Age (... millenium BC).

Picture 4. Screenshot from the escape rooms

Some of the main aims and objectives of the escape rooms were:

- to promote students' knowledge in geographical, historic and cultural aspects,
- to enhance students' cultural awareness and intercultural understanding.
- to increase their interest in terms of the English language,
- to familiarize students with the terminology related to geography, history and culture,
- to improve student's ability to use English in order to communicate,
- to promote receptive and productive skills,
- to develop their self confidence in the target language,
- to enhance their I.T. skills.



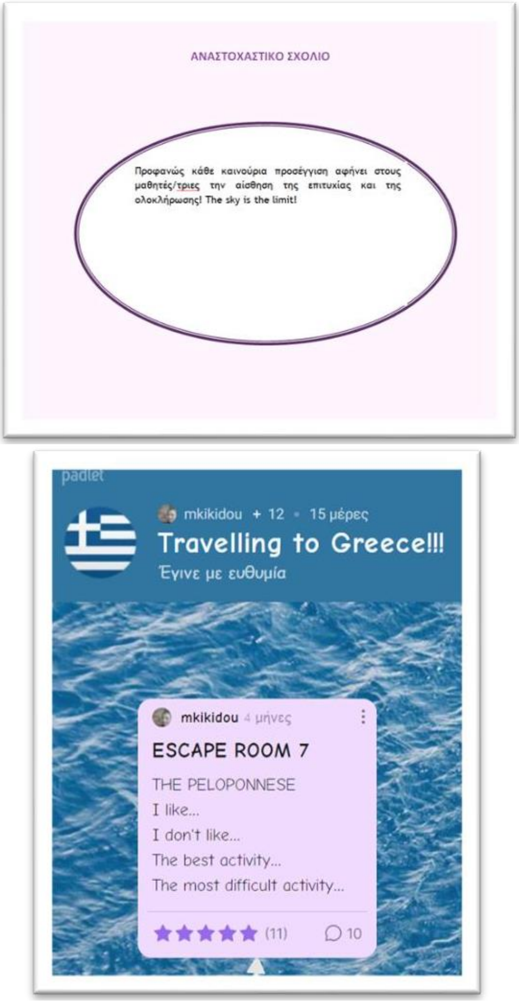
You have completed this room!

Picture 5. Screenshot from the escape rooms

3.3. Assessment - evaluation

Assessment f the programme was based on alternative ways as part of the summative, formative and final evaluation. It was a significant part and it noted the importance of the pilot programme in terms of design, implementation and results. Therefore, during implementation, the educational programme was evaluated with:

- Pre & Post test (summative evaluation)
- Teacher's/ Researcher's journal (on going – formative evaluation)
- Digital padlet (on going – formative evaluation)
- Satisfaction questionnaire – at the end of the programme



ΑΝΑΣΤΟΧΑΣΤΙΚΟ ΣΧΟΛΙΟ

Προφανώς κάθε καινούρια προσέγγιση αφήνει στους μαθητές/τριες την αίσθηση της επιτυχίας και της ολοκλήρωσης! The sky is the limit!

Travelling to Greece!!!

Έγινε με ευθυμία

ESCAPE ROOM 7

THE PELOPONNESE

I like...

I don't like...

The best activity...

The most difficult activity...

Picture 5, 6. Screenshots from the electronic researcher's journal and from the digital padlet.

4. Discussion - Limitations

The educational programme revealed the contribution of CLIL and digital educational escape rooms to language and content learning. Furthermore, it highlighted the positive impact of CLIL on EFL students' performance as well as on the subjects of geography, history and culture in terms of content. Of course, it was clear that students were motivated and collaboration was enhanced throughout the implementation of the programme.

In spite of the fact that the number of students involved was limited and the difficulties that the researcher encountered (time, participants, and small number of previous researches in Greece) were important, it should be noted that there is a need to introduce CLIL in State Primary School education. Therefore, it would have been useful to adopt CLIL educational practices and educational escape games in Greek primary education on a systematic basis as an alternative educational practice to the existing curricula.

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SESSION 3

(Intercultural Communication, Bilingualism)

DEVELOPING INTERCULTURAL COMMUNICATION VIA DIGITAL TECHNOLOGIES: AN EDUCATIONAL PROGRAM IN BILINGUAL SCHOOL "OMIROS"

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Abstract

Digital technologies are expanding in a massive way, bringing overall changes, especially in education (Qureshi, Khan, Raza, Imran& Ismail,2021). The explosion *of new technologies results into employing new teaching strategies in second/ foreign language (L2/FL) learning, creating a technology enhanced, student- centered, more motivational environment for online and intercultural communication, where students interact and develop intercultural communicative skills (Griva & Kofou, 2020).*

In this paper, we present an educational program implemented to the 5th and 6th Grade students of the Bilingual Primary School "Omiros" with the purpose to develop their intercultural communication strategies in Greek as a second/foreign language in a digital learning context. The students from Bilingual School "Omiros" communicated and collaborated with students of the 5th and 6th Grades of the Experimental Primary School in Florina. They were involved in authentic communicative tasks by using a variety of user- friendly Web 2.0 online tools, they collaborated and presented their work during synchronous online sessions on Zoom. The results of the pilot implementation showed positive effects on L2/FL skills development, students' digital competencies, and also on students' motivation (Markou & Griva, 2022).

***Keywords**: Digital environment, intercultural communication, new technologies, second/foreign language learning, web 2.0 tools.*

Introduction

Intercultural communication, intercultural communication pedagogy contribute to individuals' becoming competent communicators across cultural different contexts and act as intercultural encounters (Biesta, 2023· Dasli, & Simpson, 2023). On the other hand, digital technologies are expanding in a massive way, bringing overall changes, especially in education (Qureshi, Khan, Raza, Imran & Ismail, 2021). The explosion of new technologies has resulted into employing new teaching strategies in second/ foreign language (L2/FL) learning, creating a technology enhanced, student- centered, more motivational environment for online and intercultural communication, where students communicate, interact and develop intercultural communicative skills (Griva & Kofou, 2020). Recently studies focused on how new technologies could be used in order to develop students' intercultural competence in an authentic communicative context (Tran & Duong, 2018· Pinzón, 2020). Through a systematic review and a metanalysis of 47 pilot studies, a technology enhanced second language learning context, consisting of various Web 2.0. digital tools is needed to set an effective intercultural dialogue between learners (Markou, 2021·Markou & Griva, 2022).

Developing intercultural communication skills in a technology enhanced educational framework

Intercultural communicative competence is a life-long developmental process (Blair, 2017) and new technologies could create an effective collaborative environment to develop these skills (Alzhanova & Chaklikova, 2022). Recent research has focused on how telecollaboration and virtual exchanges could be used in second/foreign language classrooms as a powerful tool for intercultural exchanges (Godwin-Jones, 2019). A number of researches (Ensor, Kleban & Rodrigues, 2017· Kohn & Hoffstaedter, 2017· Hur, Shen & Cho, 2020) confirm the educational potential of online interaction between students who are native speakers of the target language and students' who are learning the target language as a second/ foreign language. Students have the opportunity to collaborate in digital environments, enhancing their digital literacy but also their global communication skills (O'Dowd, 2016; Tham, Duin, Veeramoothoo & Fuglsby, 2021). Challenges in implementing similar educational programs in primary education included a lack of experience in the field of telecollaboration exchange projects, networking difficulties (Salas, 2018) and limited time (Pueyo, 2018).

For the purpose of this study, a systematic literature review and a metanalysis of recent international studies on digital language learning contexts and intercultural communicative competencies were conducted. The results indicated that the digital setting for intercultural communication development includes:

-an educational platform
-synchronous and asynchronous communicative tools
-collaborative digital tools
-digital instruments for creating learning materials
-assessment tools (see also Markou,2022; Markou & Griva, 2022).

The educational program "Interculturally Communicate-Collaborate as a Junior EU citizen"

The purpose and objectives of the program

The purpose of the educational program was to develop students' intercultural communicative strategies in Greek as a second/foreign language, while non- native Greek speaking students were interacting with native Greek speaking students, in digital learning environments. The following objectives were set:

-develop students’ intercultural skills

-develop students’ language skills in Greek as a second/foreign language

-improve students’ digital literacy skills

The participants

Two samples were included in the program:

Sample 1: Twenty-one (21) students, who attended the Bilingual Albanian- Greek School “Omiros” in Korca, participated in the first pilot phase of the program during the previous spring semester 2022.

Sample 2: Thirty-seven (37) students from the Bilingual Albanian- Greek School and forty-three (43) students from the Experimental Primary School of Florina participated in a twinning program between the Bilingual Albanian- Greek School “Omiros” of Korca and the Experimental Primary School of Florina, from November 2022 to June 2023

The syllabus of the educational program “Interculturally Communicate-Collaborate as a Junior EU citizen”

The syllabus of the educational program consists of three thematic axes including a number of thematic units (Figure 1).

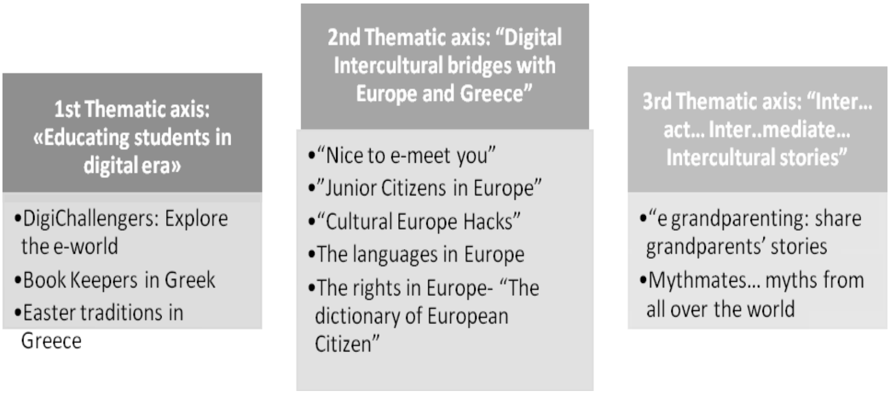
1st Thematic axis: «Educating students in digital era»
•DigiChallengers: Explore the e-world
•Book Keepers in Greek
•Easter traditions in Greece
2nd Thematic axis: “Digital Intercultural bridges with Europe and Greece”
•“Nice to e-meet you”
•”Junior Citizens in Europe”
•“Cultural Europe Hacks”
•The languages in Europe
•The rights in Europe- “The dictionary of European Citizen”
3rd Thematic axis: “Inter… act… Inter..mediate… Intercultural stories”
•“e grandparenting: share grandparents’ stories
•Mythmates… myths from all over the world

Figure 1: Thematic axes and units of the syllabus

In the first thematic axis, a variety of student- friendly digital tools for digital storytelling and digital artifacts construction was used to develop students' intercultural communication skills and prepare them for the 2nd stage of implementation.

In the second thematic axis, students had the opportunity to identify similarities of their own culture with other cultures in Europe. They were involved in authentic communicative tasks and collaborated and exchange ideas with students of different cultural background (native Greek speaking students). For example, they used a variety of Web 2.0. tools in order to describe their daily routine, their customs in the Christmas and Easter holidays. In the third thematic axis, the students of both samples (see 3.2) enhanced their intercultural skills through sharing and exchanging their own cultural traditions, myths, and stories.

The procedure of the program

The implementation of the program took place in 2 phases.

In the *first phase (pilot phase)* with the twenty-one (21) students attending the Bilingual Albanian- Greek School "Omiros" of Korca, we used the educational platform Edmodo to organize the lessons. Through Google Earth, students had the opportunity to travel virtually in Europe, to present their own stories, their favorite books and Easter traditions with the aid of Google Documents, Genial.ly, Canva and other student-friendly tools. For example, with Gennial.ly students learn about Odysseus Elitis, read the poem "Anemoi". With Google earth students traveled to places where Elitis mentioned in the poem and wrote a letter about the places they wanted to visit. The results from pilot implementation showed positive effects on students' intercultural skills, their second/foreign language skills, well as their digital competencies.

In the *second phase (main phase),* the students from the 5th and 6th Grades of the Bilingual Albanian- Greek School "Omiros" communicated and collaborated with the students of the 5th and 6th Grades of the Experimental Primary School in Florina. The twinning program lasted for 8 months, from November 2022 to June 2023. The Google classroom was used as an educational platform for lessons organization. Additionally, a Padlet was used to gather or post students' digital artifacts (Travel passport, custom presentation, mind maps about Europe) tutorials for Web 2.0. tools use and additional digital materials (presentantions).

Each lesson plan was organized through an interactive presentation with Gennial.ly which included a literary text or a poem from Greek literacy. A variety of web 2.0. user-friendly digital tools were used, as Wakelet, Storyjumber, Canva, for digital stories, Google Documents for collaborative activities and presentations, Quizzziz and Kahoot for interactive quizzzes. Moreover, virtual problem-solving games with Google Earth, including "virtual stations" in Europe where students took information by scanning a qr code or taking part in an interactive activity, raised students' curiosity and motivation for further participation. For example, they had to confront the mystery of Blue Parthenon (https://earth.google.com/web/data=MkEKPwo9CiExdzl5T3lpb0pselZzcFI5YnVibnJqTXFuTnRHc3RoeVISFgoUMEUyNDFFMzY0NzI5OTcyQzU2QTcgAQ) (Image 1). Students traveled to Parthenon, to White Tower in Thessaloniki (Image 2), to Knossos palace in Crete, they took part in interactive activities like word games (Image 3). In the end of each thematic unit, students collaborated and communicated on Zoom and had the opportunity to communicate with other students and present their projects about children rights, languages in Europe, took part in Europe debates and solved interactive activities.

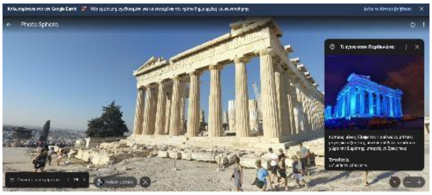

Image 1: Mystery with Blue Parthenon

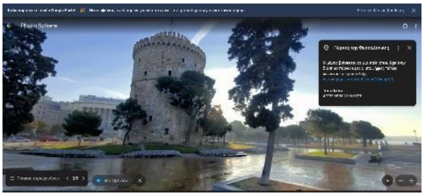

Image 2: White tower activity

Formative and alternative tools assessment, such as short questionnaires (for example with Google Forms, Quizzlet) quizzzes (with Kahoot, Quizzziz, learning apps), digital polls (with fast poll), escape rooms (Genial.ly), problem-solving games (Google Earth with interactive elements constructed with learning apps, wordwall, jigsaw planet et al.), were used to evaluate students' intercultural communicate skills, language skills, but also students' satisfaction from the educational program.

Methodology of the program

The program followed the proposed five-stage framework of Griva and Kofou (2020), focusing on intercultural communicative strategies' development in an interactive digital context. For more details see Markou and Griva (2022).

1st stage: Defining student learning styles and background
2nd stage: Raising strategy awareness
3rd stage: Modeling and teaching strategies
4th stage: Coordinated Practice
5th stage: Assessment

Table 1: Five-stage framework for intercultural communication strategies development, Griva and Kofou (2020).

1st stage: "Defining student learning styles and background".

In this stage, an assessment tool was constructed to investigate students' learning styles and previous experience in relation to intercultural communicative strategies. Additionally, online tools as Quizzizz, Fast post were implemented for this purpose.

2nd stage: "Raising strategy awareness".

In this stage, digital tool as Google Earth, Genially, Book Creator, Storyjumber and Learning Apps were used to create interactive activities, digital stories, escape rooms with dialogues.

3rd stage: "Modeling and teaching strategies".

In this stage, students worked in collaborative activities, which included interactive dialogues, digital stories, constructed with Google Documents, Genially, Canva and other collaborative tools and developed certain intercultural communicative strategies.

4th stage: "Coordinated Practice"

In this stage, students had transfer intercultural communicative strategies in a new communicative context, as in a synchronous communication with other students through Zoom, took part in communicative activities, for example a debate for Europe, or solve a Mystery, for example “The Mona Liza disappearance”.

5th stage: “Assessment”

In this stage, alternative assessment tools were employed, such as self-assessment questionnaires, constructed with Quizzizz, Kahoot, and short polls with Fast poll in order to record and evaluate students’ intercultural communication skills.

Conclusion

The results of the implementation of the program “Interculturally Communicate-Collaborate as a Junior EU citizen” confirmed that new technologies and digital tools create a motivational environment for online interaction and intercultural communication (Markou & Griva, 2022). Furthermore, it showed positive effects on intercultural communication skills, second foreign language skills, as well as on digital competencies. Similar projects also confirm the positive learning impact of the new technologies (Kohn & Hoffstaedter, 2017· Casañ-Pitarch & Candel-Mora, 2021).

It is worth mentioning that the program was innovative and enhanced intercultural communicative strategies in Greek as a Second/Foreign Language Learning, since there have not implemented similar educational programs in Greek as a Second/ Foreign Language in Primary education in the specific context.

More and more educational programs can be implemented aiming at students’ empowering for intercultural dialogues (O’Dowd & Dooly, 2020; López-Rocha, 2021) through telecollaboration and virtual exchanges that proved to be powerful tools for the development of intercultural communicative competencies (O’Dowd & Dooly, 2020), also in challenging primary education (García-Martínez & Gracia-Téllez, 2018· Ingelsson & Linder, 2018·Pueyo, 2018).

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SESSION 4
(Internationalization and Interdisciplinary Education)

ASSESSING ENTREPRENEURIAL MINDSET IN HIGHER EDUCATION: EVIDENCE FROM WESTERN MACEDONIA

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Abstract

This study presents an in-depth examination of the entrepreneurial mindset within the University of Western Macedonia (UOWM) through the utilization of the HEInnovate self-reflection tool. HEInnovate, a free, confidential, and open-access tool developed through the partnership of the European Commission and the OECD, guides institutions through a process of identification, prioritization, and action planning in eight key areas. It is not a benchmarking tool but rather a diagnostic tool that helps to identify areas of strength and weakness, explore the institution's entrepreneurial and innovative character, and track progress over time. The study aimed to gain insight into the current state of entrepreneurial thinking among UOWM and identify potential areas for improvement. A sample of undergraduate, graduate, MSC and PhD students, faculty members and administrative officials at UOWM were surveyed using recognized measures to determine their entrepreneurial attitude. The results, overall, were encouraging, as all of the key areas scored above average. However, there is still potential for improvement, especially regarding measuring impact. While *entrepreneurial teaching and learning are well incorporated, there are opportunities for growth at UOWM. The findings offer insights to the university on the current developments in innovation and entrepreneurship and determine its next steps in strengthening the weakest areas diagnosed.*

Key Words: *Entrepreneurial Education, Higher Education Institutes, Innovation Assessment, Innovative Education, Self-Assessment*

Introduction

The role of entrepreneurship in promoting economic growth, innovation, and societal development is widely acknowledged (Lourenço et al., 2012; Zahra & Wright, 2016; Zhang et al., 2014). From an academic standpoint, the entrepreneurial mindset is grounded in theory and is typically defined as the ability to quickly perceive, respond, and organize under great uncertainty (McGrath & MacMillan, 2000). A more recent definition states that the entrepreneurial mindset is a cognitive framework that enables individuals to create value by recognizing opportunities, making decisions when information is scarce and demonstrating adaptability and resilience in intricate and unpredictable circumstances (Daspit et al., 2021). This perspective reflects the societal function of entrepreneurship and puts forth a comprehensive methodology for understanding the consequences of entrepreneurial endeavours.

In this particular context, it can be observed that higher education institutions play a crucial role as fundamental constituents of the entrepreneurial ecosystem (Pugh et al., 2018). According to Bogatyreva et al. and Mukhtar et al. the entrepreneurial culture of educational institutions promotes students to heighten their confidence and creativity (Bogatyreva et al., 2019; Mukhtar et al., 2021). Cultivating an entrepreneurial mindset among students in higher education institutions has garnered considerable interest (Boldureanu et al., 2020; Etzkowitz, 2016; Guerrero et al., 2016; Mascarenhas et al., 2017; Ridley et al., 2017). Moreover, fostering entrepreneurial mindset grants students the requisite knowledge, competencies, and dispositions to discern prospects, undertake hazards, and generate worth (Cui et al., 2021). Concerning the educators, it is becoming imperative to prioritize the cognitive dimension of the learning process within their lectures and motivate students to cultivate their entrepreneurial aspirations. Mukhtar et al. showcased that there is need for updated entrepreneurial curricula aligning with recent technological advancements (Mukhtar et al., 2021).

Over the past few years, there has been a growing focus on incorporating forms of entrepreneurship into the academic programs at the tertiary level, intending to foster an entrepreneurial mindset and equip students with the necessary skills to tackle the continually evolving complexities of our contemporary society. This study aims to investigate the notion of an entrepreneurial mindset within the framework of a Higher Education Institution (HEI), scrutinizing its importance, attributes, and possible effects on student's and the academic community’s, in general, growth and career advancement. Through acquiring knowledge regarding the entrepreneurial mindset, individuals in positions of authority within the educational and political spheres can develop efficacious tactics and programs to promote entrepreneurship education. This can facilitate the creation of an innovative culture and enable upcoming entrepreneurial leaders to thrive.

Methodology

Due to our interest, this research is structured in two stages. The initial stage of the research methodology encompasses familiarising with the HEInnovate network. In 2020, the Organization for Economic Co-operation and Development (OECD) conducted a study emphasising in supporting innovation and entrepreneurship in Greek HEIs (OECD, 2021). The University of Western Macedonia (UOWM) was one of the universities participating in the study, which focused on four out of the eight dimensions of the HEInnovate self-assessment tool (The internationalized institution, Digital transformation and capability, Entrepreneurial teaching, and learning, Knowledge exchange and collaboration). The HEInnovate tool is designed for HEIs interested in improving their entrepreneurial and innovative capabilities. The involvement of the OECD study has contributed to a comprehensive comprehension of the innovative capacity and entrepreneurial environment in the higher education sector of Greece at a macro-level. The pivotal aspect of this stage involved UOWM’s participation in four rigorous webinars that established, examined, and enhanced the study’s conceptual, methodological, and empirical underpinnings. Furthermore, OECD initiated a comprehensive set of “train the trainers” workshops with a primary focus on leadership, introducing the self-assessment tool and how to use it according to the institution's needs. Throughout this phase, UOWM presented its progress on the four topics discussed, contributing to the final OECD report.

The subsequent stage of the research methodology entailed a more detailed analysis, utilising a case study methodology centred UOWM. The initial stage of this procedure entailed the establishment of a collective on the HEInnovate platform. Establishing the group was a calculated tactic to cultivate a cooperative and efficient research scene, thereby advancing the research endeavour. After forming the group, a crucial decision was made to identify the focus groups that would be studied. The objective was to guarantee a thorough and inclusive assortment, thereby augmenting the strength and applicability of the results. Subsequently, the focus groups underwent a methodical procedure of data gathering, which entailed dispensing questionnaires and evaluations through the Innovation and Entrepreneurship Unit.

The Innovation and Entrepreneurship Unit initiated discussions with the focus groups to collect data in an interactive and participatory manner. This approach facilitated the exploration of intricate matters in a subtle and contextually grounded method. The conclusion of this stage involved the methodical gathering of information through the dissemination of the assessment results. The data collection was implemented with comprehensiveness and precision. Finally, the collected data served as the empirical basis for subsequent data analysis and interpretation.

Case Study

The present case study represents the second stage of this research. The primary objective of the study is to focus on the implementation of the higher education entrepreneurial mindset evaluation within the Greek region of Western Macedonia. UOWM is the only higher education institution in the region. Thus, the study is centred on UOWM.

UOWM consists of 7 faculties and 22 departments. In order to attain a more comprehensive assessment of the institution's entrepreneurial mindset, it was decided to opt for survey participants from various segments of the academic community. Undergraduate, postgraduate, and Ph.D students, as well as faculty and administrative officials across UOWM, were conducted via the institution's innovation and entrepreneurship unit to take part in the self-assessment during a two-month period.

Fifty (50) individuals completed their self-assessments within this time span. Table 1 demonstrates that despite the overall call for gender balance in participation, the participation rate of male individuals was higher, accounting for 60%, while the female participation rate was 28%. The remaining 12% of the participants did not disclose their gender identity.

Table 1. Participation Percentages

Participants' Demographics	**Percentage**
Males	60%
Females	28%
N/A	12%

The distribution of the participants in the focus groups is portrayed in Table 2. The self-assessment had its widest appeal to the undergraduate students, who comprised the 38% of the participants. This was followed by postgraduate students, at 24%, and Ph.D. students, at 20%. Faculty and administrative officials represented a minor proportion of participants, collectively accounting for 18%. Given this rationale, faculty and administrative officials were perceived as one entity.

Table 2. Focus Groups

Groups	**Participation Percentage**
Faculty & Administration	18%
Ph.D. Students	20%
MSc Students	24%
BSc Students	38%

The participants connected to the free self-assessment tool of HEInnovate website and joined a group created by the research team. Subsequently, the participants provided their responses to the 42 five-point Likert-type statements across the eight distinct categories of the assessment.

Results

The following section showcases the results derived from our conducted case study. The findings offer valuable perspectives on the conceptualization of entrepreneurship within the University of Western

Macedonia and enhance our comprehension of the areas and methodologies that require enhancement. The results are depicted through graphical representations, which are explicated and analysed below.

In Figure 1 are depicted the average scores of the rating of each one of the eight categories of the HE Innovate self-assessment for UOWM. The data includes both the mean score across all groups as well as the individual scores for each respective group. On average, UOWM, scores high at the categories “Leadership and Governance” “Digital Transformation and Capability”, and “The Internationalised Institution” and has the lowest score at the category “Measuring Impact”.

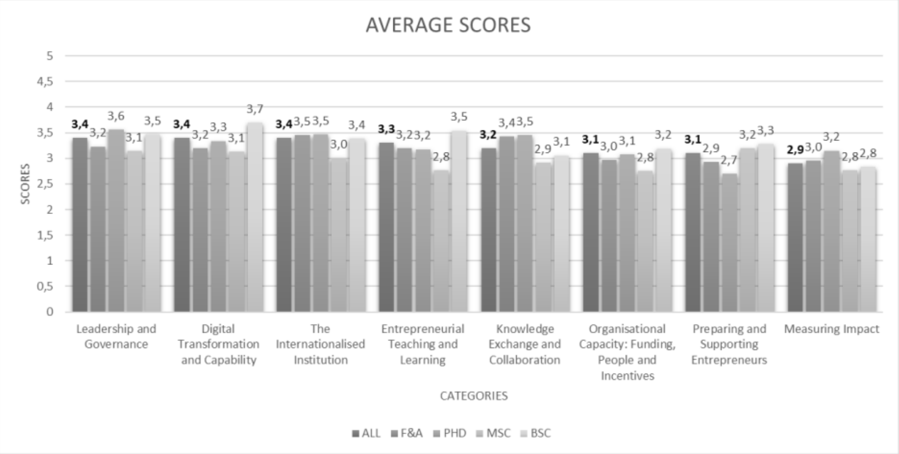

Figure 1 Average Scores by Category

Regarding “Leadership and Governance”, Figure 2 indicated that UOWM acquired the highest score for the was the assertion that it serves as a catalyst for entrepreneurship and innovation in the context of regional, social and community development. Conversely, the lowest scoring was attributed to the statement regarding UOWM’s strong dedication to executing the entrepreneurial agenda.

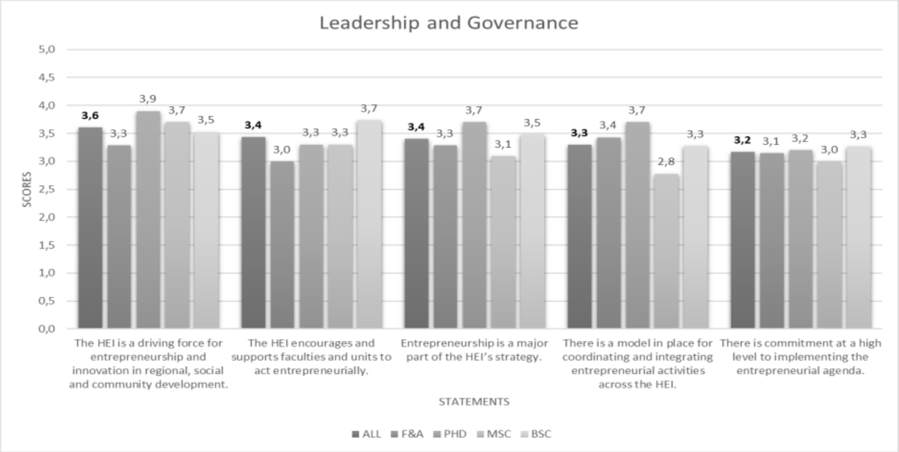

Figure 2 Average Statement Scores – Leadership & Governance

In the category "Digital Transformation and Capability" (Figure 3) the statement that received the highest score was that UOWM is actively promoting the utilization of digital technologies to improve the quality and fairness of teaching learning and assessment. The statement indicating that the UOWM effectively utilizes its digital capacity to foster sustainable and inclusive innovation and entrepreneurship received the lowest score.

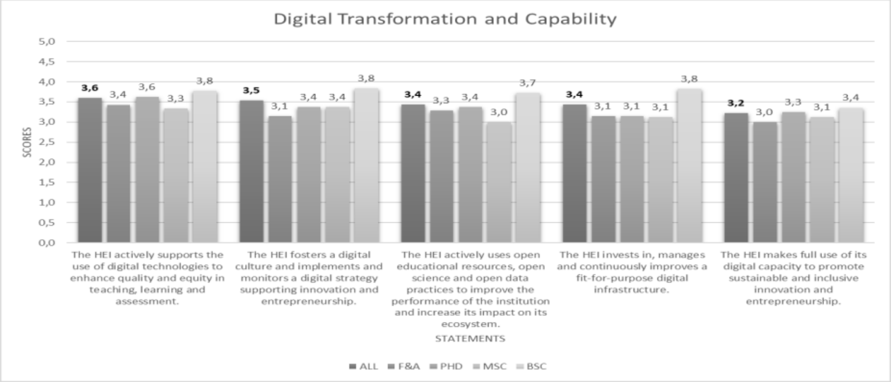

Figure 3 Average Statement Scores – Digital Transformation & Capability

Concerning "The internationalised Institution" (Figure 4), the data indicates a notable mean score in relation to the UOWM's endorsement of the global mobility of its faculty and students. Conversely, a comparatively lower score is regarding the institution's efforts torecruit and engage international and entrepreneurial personnel.

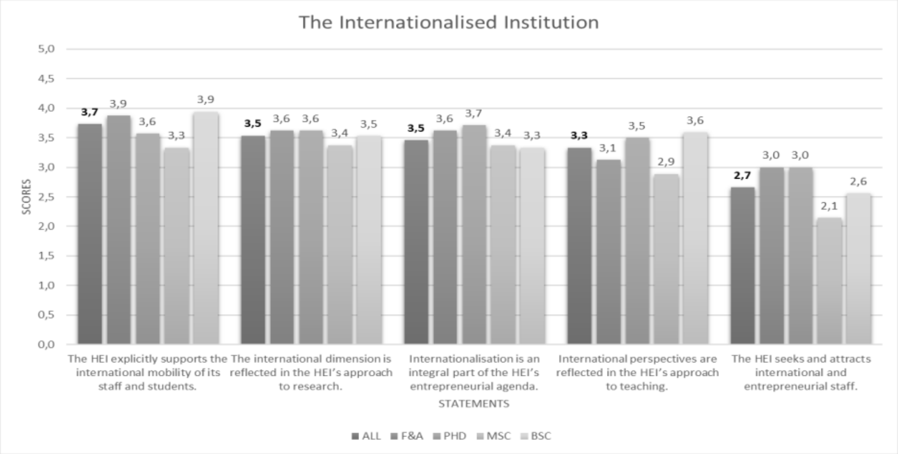

Figure 4 Average Statement Scores – The internationalised Institution

In the context of "Entrepreneurial Teaching and Learning" (Figure 5) the highest score pertained to the provision of varied formal learning opportunities by the university for cultivating entrepreneurial skills and mindset. The statement with the lowest score pertains to the validation of entrepreneurial learning outcomes by the university that influences the development and implementation of the entrepreneurial curriculum.

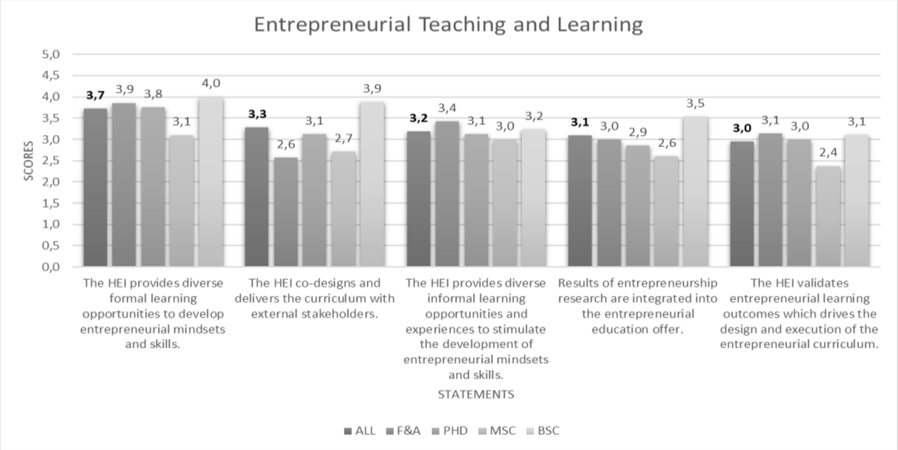

Figure 5 Average Statement Scores – Entrepreneurial Teaching and Learning

Figure 6 illustrates that in the category “Knowledge Exchange and Collaboration” the highest-rated statement indicates that UOWM offers its faculty and students the chance to engage in innovative activities with external entities and businesses. On the other hand, the lowest-rated statement suggests that the institution’s connections with incubators, science parks and other external initiatives are not as robust.

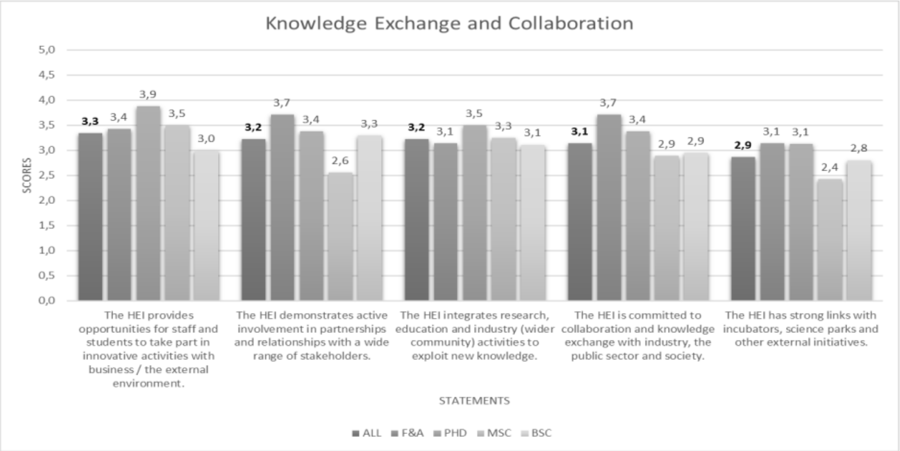

Figure 6: Average Statement Scores – Knowledge Exchange and Collaboration

In the category “Preparing and Supporting Entrepreneurs” (Figure 7), mentorship and other modes of personal growth provided by seasoned professionals from both academic and industrial backgrounds emerging as the most prominent option. On the contrary, the assertion that the institution enables its entrepreneurs to access financing was ranked unfavourably.

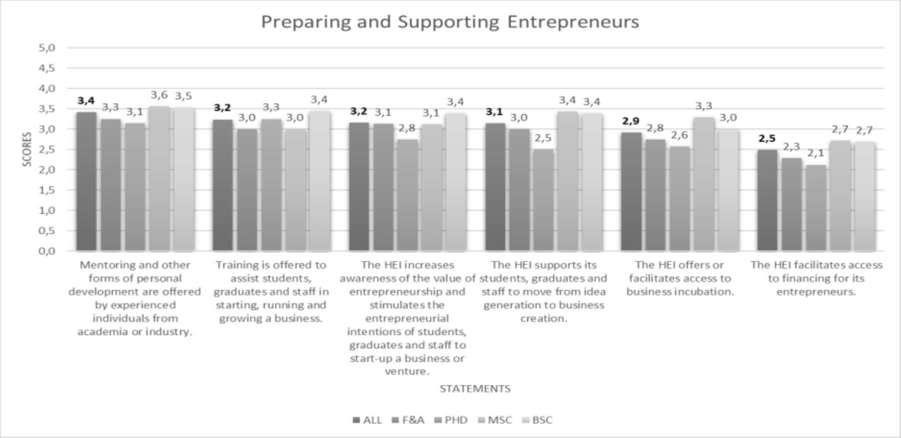

Figure 7 Average Statement Scores – Preparing and Supporting Entrepreneurs

Regarding “Organizational capacity: Funding, People and Incentives” (Figure 8) the assessment indicates a favourable rating for the institution's capacity and culture to cultivate novel partnerships and collaborations throughout its various departments. However, the evaluation reveals a poor rating for providing incentives and rewards to personnel who actively endorse the entrepreneurial agenda.

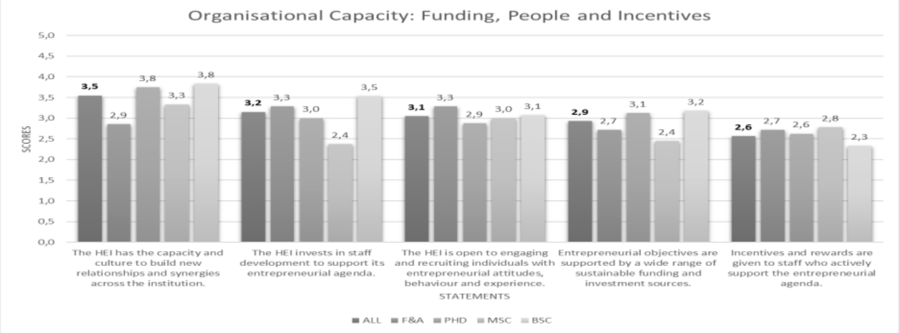

Figure 8 Average Statement Scores – Organizational Capacity: Funding, People, and Incentives

Finally, with regards to the category “Measuring Impact” (Figure 9), the statement with the highest score pertains to the institution's consistent evaluation of its international endeavours in connection with its entrepreneurial objectives. Oppositely, the statement with the lowest score concerns to the institution's periodic assessment of how its personnel and resources contribute to its entrepreneurial agenda.

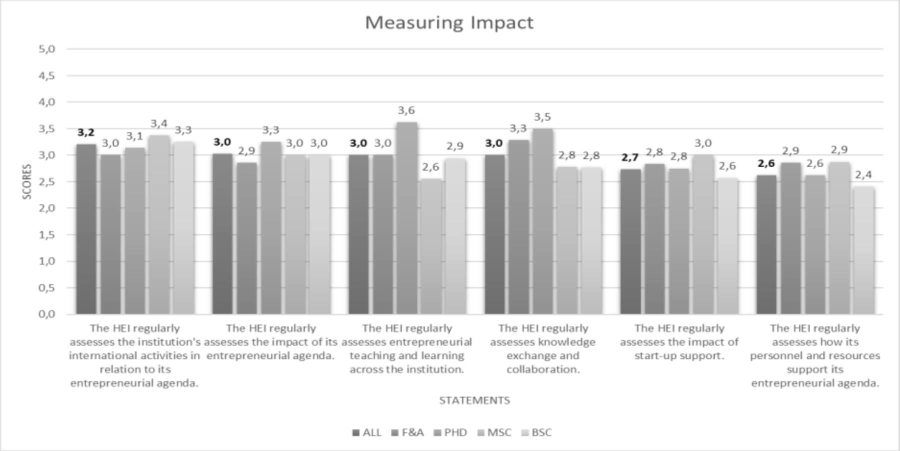

Figure 9 Average Statement Scores – Measuring Impact

Discussion

The University of Western Macedonia is characterised by a pervasive culture of entrepreneurship that extends beyond the student population to encompass the faculty and administration. The objective of this investigation is to provide empirical substantiation of the aforementioned culture. According to the statement evaluation of the participants, the statements that were analysed contained elements that were both effective and ineffective regarding the consolidation of the entrepreneurial mindset within the institution.

The domains where the institution appears to fulfil its goals, at least to a certain extent, include teaching, opportunities' availability, the university's role, and internationalisation. In terms of education, it seems as though the institution provides a diverse assortment of formal learning opportunities with the intention of building entrepreneurial competencies and a mindset. By encouraging the use of digital technologies across the departments, the institution is working toward its goal of providing high quality education. On the subject of the availability of opportunities, it appears that the institution provides its students, educators, and employees with the chance to engage with external innovative activities and receive mentoring directions from experienced individuals. Concerning the role of the university, the results showcased that its existence acts as a driving force for the region's social and community development. In addition, it seems that there is an emphasis placed on cultivating relationships across the board in the entire institution. Regarding the endeavours for an internationalised institution, international and cross-border mobility of students, educators, and employees is supported, and the international activities and initiatives are assessed on the scope of entrepreneurship. The university, also, has latitude to enhance its performance in areas related to its personnel, the provided incentives and initiatives, the better exploitation of its resources, and its strategic agenda planning. Concerning the personnel, there is a growing demand for the increase of the international appeal of entrepreneurial personnel, which comes along with the need to examine the existing personnel's support for entrepreneurial initiatives. Furthermore, there is a demonstrated desire for the increase of incentives and initiatives, such as affiliation with incubators and science parks, access to funding, rewarding of entrepreneurship supporters, and validation of their entrepreneurial outcomes. As for the utilization of resources, there is a need for improved utilization of digital capacity. Overall, a solid commitment to the strategic entrepreneurial agenda of the institution is imperative.

The next phase of this study involves the findings dissemination to foster a boarder discussion within the university's entrepreneurship and innovation unit. In this context, there is a plan for group discussions with all members of the academic community. Additionally, there is an intention to communicate the findings and the discussion feedback to the university's open for debate strategic planning platform. Recognising the on-going need for assessments, it is important to conduct regular evaluations on an annual basis for progress monitoring and adaptation to the university's entrepreneurial attitude changing demands.

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Appendix: *Table 3 HEInnovate Self-Assessment Likert Scale Questions* (heinnovate.eu)

HEInnovate Self-Assessment Likert Scale Questions
LEADERSHIP AND GOVERNANCE
Entrepreneurship is a major part of the HEI’s strategy.
There is commitment at a high level to implementing the entrepreneurial agenda.
There is a model in place for coordinating and integrating entrepreneurial activities across the HEI.
The HEI encourages and supports faculties and units to act entrepreneurially.
The HEI is a driving force for entrepreneurship and innovation in regional, social and community development.
ORGANISATIONAL CAPACITY: FUNDING, PEOPLE AND INCENTIVES
Entrepreneurial objectives are supported by a wide range of sustainable funding and investment sources.
The HEI has the capacity and culture to build new relationships and synergies across the institution.
The HEI is open to engaging and recruiting individuals with entrepreneurial attitudes, behaviour and experience.
The HEI invests in staff development to support its entrepreneurial agenda.
Incentives and rewards are given to staff who actively support the entrepreneurial agenda.
ENTREPRENEURIAL TEACHING AND LEARNING
The HEI provides diverse formal learning opportunities to develop entrepreneurial mindsets and skills.
The HEI provides diverse informal learning opportunities and experiences to stimulate the development of entrepreneurial mindsets and skills.
The HEI validates entrepreneurial learning outcomes which drives the design and execution of the entrepreneurial curriculum.
The HEI co-designs and delivers the curriculum with external stakeholders.
Results of entrepreneurship research are integrated into the entrepreneurial education offer.
PREPARING AND SUPPORTING ENTREPRENEURS
The HEI increases awareness of the value of entrepreneurship and stimulates the entrepreneurial intentions of students, graduates and staff to start-up a business or venture.
The HEI supports its students, graduates and staff to move from idea generation to business creation.
Training is offered to assist students, graduates and staff in starting, running and growing a business.
Mentoring and other forms of personal development are offered by experienced individuals from academia or industry.
The HEI facilitates access to financing for its entrepreneurs.
The HEI offers or facilitates access to business incubation.
DIGITAL TRANSFORMATION AND CAPABILITY
The HEI fosters a digital culture and implements and monitors a digital strategy supporting innovation and entrepreneurship.
The HEI invests in, manages and continuously improves a fit-for-purpose digital infrastructure.
The HEI actively supports the use of digital technologies to enhance quality and equity in teaching, learning and assessment.
The HEI actively uses open educational resources, open science and open data practices to improve the performance of the institution and increase its impact on its ecosystem.
The HEI makes full use of its digital capacity to promote sustainable and inclusive innovation and entrepreneurship.
KNOWLEDGE EXCHANGE AND COLLABORATION
The HEI is committed to collaboration and knowledge exchange with industry, the public sector and society.
The HEI demonstrates active involvement in partnerships and relationships with a wide range of stakeholders.
The HEI has strong links with incubators, science parks and other external initiatives.
The HEI provides opportunities for staff and students to take part in innovative activities with business / the external environment.
The HEI integrates research, education and industry (wider community) activities to exploit new knowledge.
THE INTERNATIONALISED INSTITUTION
Internationalisation is an integral part of the HEI’s entrepreneurial agenda.
The HEI explicitly supports the international mobility of its staff and students.
The HEI seeks and attracts international and entrepreneurial staff.
International perspectives are reflected in the HEI’s approach to teaching.
The international dimension is reflected in the HEI’s approach to research.
MEASURING IMPACT
The HEI regularly assesses the impact of its entrepreneurial agenda.
The HEI regularly assesses how its personnel and resources support its entrepreneurial agenda.
The HEI regularly assesses entrepreneurial teaching and learning across the institution.
The HEI regularly assesses the impact of start-up support.
The HEI regularly assesses knowledge exchange and collaboration.
The HEI regularly assesses the institution's international activities in relation to its entrepreneurial agenda.

SESSION 4
(Internationalization and Interdisciplinary Education)

TEACHING METHODS AND TECHNIQUES: AN INFLUENCING FACTOR ON ENCOURAGING CREATIVITY AMONG STUDENTS

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Abstract

It is widely acknowledged that obtaining objective knowledge regarding the creativity of teaching in primary schools can be challenging due to the sensitive nature of the topic. Nonetheless, through this research, we aimed to identify specific parameters that highlight the importance and benefits of cultivating creativity in students, particularly in mother tongue and literature classes. Besides the curriculum, the methods and techniques (as Storytelling, Drama and Role Play, Debate and Discussion, Project-Based Learning, ICT and multimedia etc.), employed by teachers in interpreting literary texts are among the most crucial factors that foster divergent opinions among students. Additionally, this study has demonstrated that teaching literature creatively fosters independent thinking and enhances students' self-expression abilities.

Keywords: *Teaching practices, creativity, literary instruction, teaching methods, techniques*

Introduction

Classroom research is a specific methodological research which involves a methodical investigation of educational practices, situations, and actions that transpire in the classroom. Several theorists suggest that teachers engage in classroom research to enhance their teaching methods, to test educational theories in real-life settings, and to appraise and execute school priorities (Hopkins, 2008). Research has shown that the classroom serves as a platform where teachers endeavor to address two critical questions: how effectively students are learning and how efficiently teachers are teaching. Through participatory observation, gathering feedback on student learning, and meticulously designing experiments, teachers can easily obtain information about students' learning abilities and ways to enhance the learning process itself. Positive outcomes from classroom research do not appear immediately, but are the consequence of sustained efforts over an extended period, during which everyone learns how to provide and receive feedback. Encouraging ideas for classroom research and linking them to the priorities established in the school development plan can be beneficial (Jovanovska, 2014). Notably, classroom research can be tremendously dynamic and valuable, such that even a teacher's modest endeavor can yield significant outcomes. All that is required is a promising idea that can be explored to enhance classroom practices. Crucial emphasis should be placed on the following questions: What is currently transpiring? What are the problematic areas? What can be done to improve the situation?

Teaching in primary education is a complex endeavor encompassing various elements, that is, it is an amalgam of emotional, intellectual, physical, and aesthetic elements, among others (Richards, 2014). Classroom life, builds on respect, care, trust, and integrity, evolves class by class, lesson by lesson, and year by year. According to Bloom, creation (synthesis) represents the highest form of human thinking, thus making the development of creativity the ultimate objective and priority in all learning environments. Creativity denotes innovation, improvisation, and goes beyond the limits of traditional patterns and clichés. Although creativity is a highly esteemed educational goal, research and practical experience confirm that it is challenging to achieve in existing conditions. Maksic and Gjurisic-Bojanovic's (2004) research on the relationship between creativity, knowledge, and academic success indicates that a low but significant correlation exists between creativity and academic accomplishment, serving as an indicator of mastery of school-based knowledge. Intrinsic motivation for active learning and opinion formation among students stems from curiosity, ambition, the desire for self-actualization, high personal standards, and perseverance. However, teachers play a crucial role in uncovering their students' potential. They need to have not only a deep knowledge of a particular subject (in this case, literature), but also possess specific qualities that enable them to communicate effectively with their students. To encourage their students' general creative competence, teachers utilize a variety of activities. By providing sensory stimulation and enriching information with the use of technology and visual aids, they assist students in transforming perceptual content into creative work (Arnaudova & Achkovska-

Leshkovska, 2000). To achieve such effects, it is desirable to direct the teaching process towards problem-solving, self-discovery, drawing conclusions, and so on. Teachers should encourage students to explore and draw their own conclusions. It is crucial for teachers to allocate time for students who want to work on projects that are not related to the curriculum. According to the renowned educationalist Wolfgang Klafki (2007), a teaching method is a set of organizational and executive forms of goal-oriented teaching and learning within the framework of teaching. This definition of the teaching method highlights the goal-oriented nature of the teacher and student's activity, as they collaborate on a particular task and strive to achieve a specific goal, all within a certain institutional framework. The teaching method determines the goals of teaching (what should be taught, in what order it should be taught, and how it should be taught) and structures the teaching by choosing the forms and media for teaching. The methods for encouraging creativity depend partly on the subject being taught and partly on the student's learning style. Therefore, for a teaching method to be appropriate and effective in encouraging creativity among students, it must be suitable for the character of the student (as students have different learning styles and abilities, needs, and interests) and the type of learning that should be achieved. Experts suggest that the methods for encouraging creativity in the teaching of literature are based on research on learning, such as phonemic awareness, which involves building fluency and vocabulary from all aspects of understanding literature. These methods encourage the activation of prior knowledge among students and create a stimulating reading environment by involving students in the selection of texts and reading materials, through discussions about what they have read, and by recognizing values that are close to the students' cultural identity (McCormack & Pasquarelli, 2009). With these methods, the goals of teaching, teaching procedures (principles), selection of texts and exercises, and structuring of the lesson are formulated. There are various methods that can encourage students to think creatively, such as the innovation method, "If..." method, vivid picture method, "Brainstorming" method, and more.

Teaching the mother language course is a privilege for every teacher. This privilege arises from the fact that in almost all education systems worldwide, the mother language curriculum is crucial for laying the foundation of literacy for each individual and for maintaining the continuity of the mission of national heritage and the development of an individual's perception of identity affiliation (Iliev et al., 2017). Given this reality, this paper aims to explore the conditions that encourage creativity in the teaching of literature in primary schools.

Creative Approach to Language Teaching: Research Framework

The research population for this study consists of individuals between the ages of 12 and 64. The population is made up of primary education students and teachers. A sample is a subset of the population in which the observed characteristic is represented similarly to the population as a whole. The research sample for this study is both simple and random, and is designed based on the research topic and the availability of data for selecting the sample.

The research sample is consists of 350 students and 76 teachers from the following primary schools: "Prof. Ibrahim Kelmendi" in Preševo, "Vuk Karadžić" in Novi Pazar, "Pavle Popović" in Vranić (Belgrade), and "Ucitelj Tasa" in Niš. The research was conducted in compliance with ethical guidelines for research and scientificstandards. The elementary school principals were asked for their consent to conduct the research. The questionnaires were anonymous, and instructions for completion were provided on the first page. The respondents participated voluntarily and were informed about the research's purpose from the outset. A survey questionnaire was designed for both teachers and students.

We formulated a general hypothesis for our research: ***The methods and techniques used by teachers to interpret literary texts encourage specific aspects of creativity in primary school students.***

To further investigate this general hypothesis, we developed two separate hypotheses.

Special hypothesis 1: *The application of innovative methods and techniques in the teaching of literature by teachers is not affected by their age*.

Special hypothesis 2: *Teachers promote students' free expression by utilizing innovative teaching methods and techniques*.

We then divided special hypothesis 1 into two working hypotheses:

Working hypothesis 1: *There is no statistically significant difference in teachers' responses regarding the application of innovative methods and techniques in teaching literature based on their age.*

Working hypothesis 2: *There is no statistically significant difference in teachers' responses regarding the use of ICT and multimedia in teaching literature based on their age.*

For the second special hypothesis, we developed two working hypotheses as well:

Working hypothesis 1: *The majority of students in literature classes ask questions that are discussed in class.*

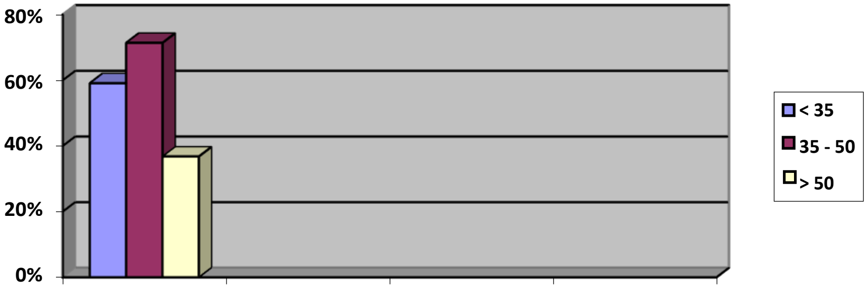
Working hypothesis 2: *Most students in literature classes discuss their ideas about the books they read with their teacher*.

Analysis of the Obtained Results

The results of the Kruskal-Wallis test for the question "***I apply innovative methods and techniques in the teaching of literature***" show a statistically significant difference among teachers in the three age categories. **Graph no. 1** displays that 59.1% of teachers under 35 years old and 71.4% of teachers aged 35 to 50 use innovative methods and techniques in the teaching of literature. In contrast, only 36.8% of teachers over 50 use innovative methods and techniques in teaching literature.

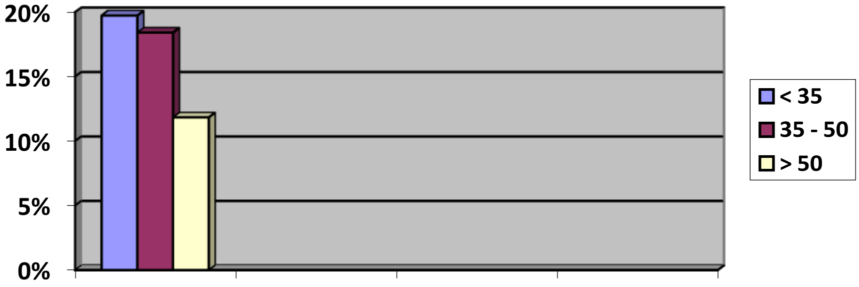
Graph no. 1

I apply innovative methods and techniques in the teaching of literature



The analysis of the results from **Graph no. 1** reveals that teachers over the age of 50 use innovative methods and techniques in teaching literature the least. The Kruskal-Wallis test results for the question "***Have you attended creative teaching training in the last 4 years***?" indicate a statistically significant difference among teachers in the three age categories. According to the data presented in **Graph no. 2**, it can be observed that 19.74% of teachers under 35 years old and 18.42% of teachers aged 35 to 50 years had the chance to attend creative teaching training, while only 11.84% of teachers over 50 were able to attend such training.

Graph no. 2
Have you attended creative teaching training in the last 4 years?

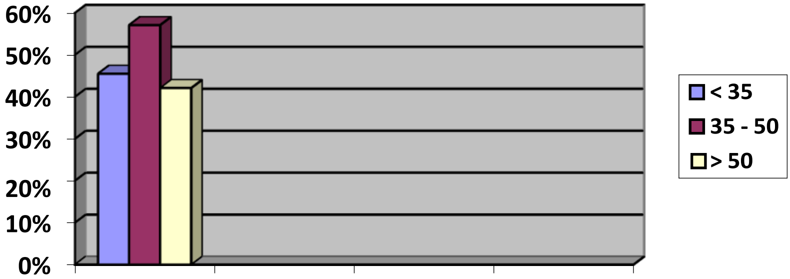


The data in Graph no. 2 corresponds to the data in **Graph no. 1**, where it can be observed that only 36.8% of teachers in the age category over 50 apply innovative methods and techniques in teaching mother tongue and literature.

Therefore, we can reject working hypothesis 1 for the first special hypothesis: "*There is no statistically significant difference between the answers given by the teachers about the application of innovative methods and techniques in the teaching of literature in terms of their age*."

The results of the Kruskal-Wallis test for the question "***Do you apply ICT and multimedia in the teaching of literature?***" yield a $\chi 2(2)$ value of 0.508, with a probability of $p = 0.776$. As $p > 0.05$, we conclude that there is no statistically significant difference in relation to the stated question between teachers of the three age categories. Considering **Graph no. 3**, it can be determined that the highest percentage of teachers of all age groups use ICT and multimedia in teaching literature. Specifically, 45.5% of teachers under the age of 35, 57.1% of teachers aged 35 to 50, and 42.1% of teachers over 50 use ICT and multimedia in teaching literature.

Graph no. 3
I apply ICT and multimedia in the teaching of literature!



From here we can conclude that working hypothesis 2, for the first special hypothesis: *There is no statistically significant difference between the answers given by the teachers about the application of ICT and multimedia in the teaching of literature in terms of their age,* is confirmed.

As a result of the obtained results, we conclude that the Special Hypothesis 1: *The application of innovative methods and techniques in the teaching of literature by teachers does not depend on their age,* is partially confirmed.

The Kruskal-Wallis test results from the Student Questionnaire are as follows:

For the question "***In literature classes, I ask questions that are discussed in the class***," the following results were obtained: $\chi 2$ (2) = 0.125, with a probability of r = 0.940. Since p > 0.05, we can conclude that there is no statistically significant difference in terms of theanswers to the given question between students of VI, VII, and VIII grades. Out of the total number of surveyed students, 53.7% answeredthe question in the affirmative. Thus, the working hypothesis 1, for the second special hypothesis: "The majority of the surveyed students in the literature classes ask questions that are discussed in the class," is confirmed.

For the question ***I discuss my ideas from the books I read with the teacher***, the following results were obtained: $\chi2$ (2) = 2.184, with probability $\rho = 0.337$.

Since $p > 0.05$, we can conclude that there is no statistically significant difference in terms of the answers to the given question between students of VI, VII, and VIII grades. Out of the total number of surveyed students, 56.6% answered the question in the affirmative. Therefore, the working hypothesis 2, for the second special hypothesis: The majority of the surveyed students in literature classes discuss their ideas from the books read with the teacher, is confirmed.

Based on the obtained results, we can conclude that Special Hypothesis 2: *Teachers promote the free expression of students by using innovative methods and techniques in teaching*, is confirmed.

In conclusion, through extensive statistical analysis, both theoretical and empirical aspects of this research show that the first special hypothesis is partially confirmed while the second special hypothesis is confirmed with a low probability percentage. Therefore, we can draw a general conclusion that the overall hypothesis of the research is confirmed with a low probability percentage. This means that the methods and techniques used by teachers in interpreting literary texts encourage certain aspects of creativity among primary school students, but not at a level that is satisfactory.

Conclusions and Recommendation

The results of the research indicate that teaching literature in primary schools can motivate students to read books to some extent. Reading books enables students to explore new worlds, strengthen their imagination and fantasy, which is the foundation for developing creativity. The classroom interaction is also noteworthy, with students asking questions that are discussed in class. An important indicator of encouraging creativity in literature classes is when students show interest in sharing their thoughts and ideas with the teacher afterreading books.

The data shows that teachers over the age of 50 use innovative methods and techniques the least in the teaching of literature, possibly due to only 11.84% of teachers in this age category attending creative teaching training, compared to 18.42% of teachers aged 35 to 50 and 19.74% of teachers under 35 who have attended creative teaching training. Further analysis of the results demonstrates that teachers aged

35 to 50 mostly apply ICT and multimedia in teaching. It is surprising that the younger generation of teachers, under the age of 35, use ICT and multimedia less in teaching than the older age group of teachers from 35 to 50. This could be because younger teachers lack the work experience necessary to successfully implement ICT and multimedia in teaching. Conversely, the data for the oldest group of teachers (over 50 years old) is expected.

Based on the research conclusions, we suggest several recommendations for policy makers in primary education. To promote creativity in literature teaching, it is essential to strengthen the curricula of the Mother Language and Literature course by developing new learning objectives. A teacher who fosters creativity is essential, and thus creative teaching training should be organized for primary education teachers as frequently as possible, involving as many teachers as possible. Additionally, a manual for innovative teaching methods and techniques in literature teaching should be designed and made available to all Mother Language and Literature teachers.

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SESSION 4
(Internationalization and Interdisciplinary Education)

ENTREPRENEURSHIP AND EDUCATION: DISSEMINATING THE 'ECONOMIC GENIUS' THROUGH GREEK TEXTBOOKS (19 th CENTURY TO 1977)

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Abstract
Through the study of Greek primary education textbooks, covering a full century, from the 1870s to the 1970s, this paper presents and analyses the ways in which ingenuity has been standardised as a national characteristic or charisma, and has been disseminated to generations of Greek school-boys and girls. Three categories of textbooks were used: primers, history and geography textbooks for pupils in the third, fourth, fifth, and sixth grades of primary schools. The common theme seems to be the persistent and ever-lasting conflict between the 'studious', 'ingenious', 'risky', and 'patriotic' Greeks (in ancient, medieval and modern times) and the 'uneducated', 'uncivilized', and 'barbaric' foes (Persians, Romans, Ottomans and Turks), which led to the establishment independent Greece. Four dominant types of 'genius' emerge from the source material: economic, political, military, and intellectual. Greek children, inspired by the glorious deeds of genius ancestors, representing different types of ingenuity, are directly and indirectly encouraged to exploit this natural potential which all Greek share for the benefit of their nation. This paper focuses on Greek economic genius.

Keywords: *entrepreneurship, economic genius, textbooks, 19th century, 20th century*

Introduction

*(The present research was conducted as part of the Hellenic Foundation for Research and Innovation (H.F.R.I.) supported project "A Demon to Trust: Refashioning the 'Greek Genius' in Modern Times (2020-22)". Director of the program was Basil C. Gounaris, Professor of Modern History in the Department of History and Archeology at Aristotle University of Thessaloniki)***.**

In a late 19th century *Teaching Guide*, Vlassios Skordelis (1835-1898), a Greek philologist and educator, referred to intelligence and business acumen as the pre-eminent national virtues of the Greeks.

("[A] person's intelligence, entrepreneurship, studiousness, ambition, sobriety, and self-sacrificing love of one's relatives, a sense of honor, and

love of their country are valuable virtues that are even acknowledged by our enemies; they are also strong foundations from which a strong national character can be established through careful education [...]". See Skordelis, 1890, p. 5. See also Foukas, 2014, p. 199-220.) This discourse, which can be labelled 'the virtue of Odysseus', *(It is characteristic that in 1939's primer for the sixth grade of the primary school, which continues to circulate, with minor modifications, and in 1947 a text is anthologized titled: "Philoctetes" (the pages in the two books 26-31 are the same), referring to 'intelligent' (p. 27) and 'cunning' (p. 29) Odysseus. See, Kontogiannis et al., 1939. See also Gounaris, 2023, p. 1-21.)* extols intelligence, extraversion, adventurous spirit and risk-taking, all combined with a healthy dose of opportunism (Kalyvas, 2020, p. 20).

This paper aims to sketch aspects of the 'Greek genius', which is perceived as an inheritable attribute of the Greek people, through the study of Greek primary education textbooks, from the end of the 19th century up to 1977, a year of major educational reform in Greece (Dimaras, 2013, p. 249-262). Three categories of textbooks *(Male and female students, through textbooks, are inculcated with a national identity, stereotypes, ideologies, myths and legends, disasters and triumphs. See Kapsalis & Haralampous, 2007, p. 3-104; Haralampous, 2011, p. 617-628.)* serve as primary sources: primers [=books for teaching children to read], history textbooks and geography textbooks destined for pupils of the third, fourth, fifth and sixth grade of primary schools. This research focuses on the following questions: 1) Is enterprise a Greek characteristic? 2) What are the forms of entrepreneurship presented in textbooks? 3) Which standards are presented to students? 4) What are the most promising commercial areas? 5) What do Greek entrepreneurs do with their wealth?

Four dominant types of 'genius' emerge from the source material: political, military, economic, and intellectual (Foukas, 2023, p. 111-124). Greek pupils are urged to inspirit from the glorious deeds of their ingenious ancestors and put their natural gifts to good use for the benefit of their nation as a whole. Throughout this paper, economic genius is emphasised.

Economic genius: "Greeks are inherently commercial and entrepreneurial"

According to textbooks, Greece has always been a commercial and maritime country thanks to its geographical location, natural environment, and the inherent characteristics of its people –that is, their entrepreneurial and commercial spirit (Ginopoulos, 1929, p. 17; Hristias, 1977, p. 67, 69).

In the antiquity, the Achaeans, the most ancient Greeks, had started farming the land but soon built ships and began trading with the Aegean islands and Crete. Eventually, they dominate the Aegean and their ships bravely crossing the sea to reach Egypt (Kyriazopoulos et al., n.d., p. 8-9). Before them, the Minoans of Crete had also sailed the seas and turned to commerce with all civilised peoples of the East (Kamaterou-Glytsi, 1976, p. 21). However, Greece was too poor to sustain a large population. As a result, primary school pupils learned that ancient Greeks had to build a merchant fleet and embark on traveling, setting up a string of colonies throughout the Mediterranean and the Black Sea. Wherever they settled, they cultivated the land and traded with both the locals and their metropolis back in Greece. Most Greek colonies prospered economically. A notable example was Marseille, founded by Greeks from Phocaea. The colonists preserved their language, religion and customs (Benekos & Alexopoulos, n.d., p. 5-7; Giannopoulos, n.d., p. 43; Kamaterou-Glytsi, 1976, p. 44-45).

Ancient Greeks were not the only example of Greek entrepreneurial spirit. Emperor Justinian is praised in Byzantine history textbooks for his commercial genius, since he was the one who masterminded the smugglings of silkworm seeds from China and introduced them to Constantinople, Thebes, Corinth and the rest of Europe (Vrahnos, 1921, p. 24-25).

Owing to their multi-faceted ancestral genius, the Greeks won prominence in the maritime and commercial affairs of the Ottoman Empire and received special privileges from the Sultan (Ginopoulos, 1929, p. 17-18; Kafentzis, 1975, p. 20). Typical examples of places with a high concentration of flourishing commercial spirit included Naoussa, Edessa, Kastoria, and Mademohoria, all of them in Macedonia, the island of Chios, the villages of Mount Pelion, and, above all, Ambelakia, a village on the slopes of Mount Kissavos, in Thessaly (Horafas, 1935, p. 12; Sakkadakis, 1971, p. 16). The case of Ambelakia, in particular, was taught as an example of collective entrepreneurial genius *("[A]mbelakia in Thessaly reached its peak and was the richest community. In this community, dyeing red cotton fabrics was developed, which were sold throughout Europe. In Ambelakia, the people founded the first cooperative in Greece, which made huge profits and built a* *large school, supported Greek letters, and published valuable books. [...]". See Kyriazopoulos & Diamantopoulos, 1967, p. 18.).* Its cooperative proved highly successful, setting up business through branch offices in other cities, in Greece proper and beyond (Trieste, Constantinople, and Izmir) (Petrounias, 1945, p. 32; Kyriazopoulos & Diamantopoulos, 1967, p. 18; Sakkadakis, 1971, p. 16). However, the people of Ambelakia were careful to use their wealth for the benefit of their community and the nation as a whole, especially through the promotion of education on the eve of the Greek Struggle for Independence (Petrounias, 1945, p. 32).

As the colonists of antiquity, early Modern Greek Diaspora also served as an example of the Greek commercial genius. Many Greeks, retailers of every kind, emigrated abroad and established prosperous communities in European cities (Lazarou, 1934, p. 32). Not only did they stand out individually but, confirming the preponderance of communal spirit, they also established associations which flourished as centres of Hellenic culture *("[I]n the end, these communities proved to be excellent breeding grounds [...]". See Kyriazopoulos & Diamantopoulos, 1967, p. 18-19.).* The communities of Venice, Odessa, Trieste or Vienna were cases in point. Their most affluent members also assisted their homeland as benefactors (Kyriazopoulos & Diamantopoulos, 1967, 18-19; Sakkadakis, 1971, p. 16). A place of honour in the history textbooks is usually reserved for the Greek merchants of Odessa, from whose ranks arose the founding fathers of *Filiki Etaireia* [=The Society of Friends], the secret society that undertook to lay the ground for the Greek national revolution.

All textbooks concur that Hydra, Spetses, and Psara, the three tiny but wealthy islands, stand out as prime examples of Greek seafaring and commercial genius. The inhabitants of Hydra, always inclined to adventure, took the lead in crossing the Mediterranean Sea and the Atlantic Ocean as far as America. Several other Greek islands followed suit (Andreadis, 1932, p. 212-223; Lazarou, 1934, p. 26; Kyriazopoulos & Diamantopoulos, 1967, p. 25-26). Greeks also appeared as shopkeepers in Europe's largest ports. They invariably used their savings to support activities furthering the national cause, including shipbuilding, armament procuring, as well as the setting up of schools and libraries or the publication of books and journals in their homelands. Model merchants and sailors turned glorious fighters of Greek independence, including Konstantinos Kanaris (1793-1877) and

Andreas Miaoulis (1769-1835) (Petrounias, 1945, p. 100-102) *(The genius of Miaoulis is best presented by Kontogiannis et al., 1939, p. 105-106. Kafentzis indirectly presented Miaoulis' naval and business genius. Kafentzis, 1975, p. 84.).* Miaoulis is presented in the history textbook of 1934 as possessing exceptional ingenuity (Lazarou, 1934, p. 96). In the primer of 1939 pupils are invited to compare him with Themistocles *(Throughout the primer published in 1927, Miaoulis' boldness and intelligence are discussed in detail, which led him to become a wealthy man who devoted most of his earnings to the Greek Revolution. See Antonatos, 1927, p. 97-98; Kontogiannis et al., 1939, p. 180.).* Greek sailors as a whole are presented as bold and deft, courageous and risky, precisely because they are Greeks (Petrounias, 1945, p. 33, 39, 90-91). Female entrepreneurship was highlighted in the primer of 1929. An unnamed Greek woman, thanks to her fortitude, perseverance and intelligence, managed to set up a business association and, ultimately, organise a Greek community, thus offering an example for female pupils to emulate (Elatos & Voutiras, 1929, p. 85-106) *(As far as I know, this is the only example of female entrepreneurship found in the Greek textbooks of the 20th century. On the cover there is a picture of a woman spinning fibre).*

Most importantly, textbooks drew pupils' attention to exemplary models of national benefactors, such as Lazaros Kountouriotis *("Lazaros Kountouriotis was only thirty years old. He was magnanimous, eloquent, and prudent. Although he had only one eye, he was very sharp. He ran the naval struggle, in which he sacrificed more than two million drachmas". See Horafas, 1935, p. 65. "The Kountouriotis family from Hydra was so rich that they kept their golden coins in water tanks. Both their money and their ships were used for the Greek Revolution". Petrounias, 1945, p. 34. See also Agapitos, 1877, p. 102; Fotiadis et al., 1963, p. 283-285.).* Andreas Syngros *("[I]n his life, Andreas Syngros was characterised by his desire to do good. His numerous benefactions continued even after his death, through his will, which was appropriately dubbed 'poem of benevolence'. Because of this, a few rich people's names remain as revered as Andreas Syngros' [...]". See Fotiadis et al., 1963 and 1968, p. 287.).* Evangelos Zappas *(Evangelos Zappas is featured prominently in the 1939 primer. Zappas is described as 'self-taught' (p. 189), 'a pioneer in boldness and bravery' (p. 189), and 'an intelligent and fearless figure' (p. 192). A detailed description of his intelligence can be found on page 192. See Kontogiannis et al., 1939, p. 189-197. See also Agapitos, 1877, p. 463, 465-466)* or Georgios Averoff (Kontogiannis et al., 1939, p. 75). All of them were merchants and entrepreneurs, who 'sacrificed' their wealth for the benefit of their native land. Their commercial success at a young age was stressed as proof of their natural ingenuity. In the case of Syngros, the primers of 1963 and 1968 underline his ability to learn Turkish at a young age, a clear sign of his exceptional intelligence. Previous textbooks had underlined that, by the age of twenty, Syngros had already accumulated a small fortune which he invested in a small commercial business (Fotiadis et al., 1963 and 1968, p. 286). Two years later, he had risen to an associate of the large company for which he was working– a clear sign of entrepreneurial genius.

Conclusions

Stereotypical references to the Greek genius became standardised after the establishment of the independent Greek state in 1830. Textbooks played a key role in reproducing this discourse through selected biographical data and other narrative means throughout the 19th and 20th centuries. Textbooks presented Greek history in terms of deeds of great men, and occasionally women, thus cultivating a sense of continuity from the self-sacrifice and heroism of ancient mythological figures (such as Odysseus) to the heroes of the Greek War of Independence and beyond.

The term ‘genius’ is often used as a national characteristic or talent and is frequently conflated with other ‘founding myths’. Greek textbooks reveals a people ever capable of succeeding in every task thanks to a quality that occasionally emerges in the form of craft and guile, as in the cases of Odysseus, Themistocles, or the founders of *Filiki Etaireia*, and several military leaders during the Greek War of Independence (Kanaris, and Miaoulis, etc.).

This material is full with references to the Greek genius being recognised as a ‘natural gift’ by others, mostly Europeans, who were prone to feel connected to classical antiquity and the ‘glorious ancestors’ of contemporary Greeks (Triantafyllidis, 1876, p. 42; Ginopoulos, 1929, p. 96).

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SESSION 4
(Internationalization and Interdisciplinary Education)

EDUCATION FOR SUSTAINABLE DEVELOPMENT IN KINDERGARTEN: RECENT RESEARCH TRENDS AND IMPEDIMENTS

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Abstract
According to the literature, there has been a significant delay in implementing Education for Sustainable Development (ESD) in the context of pre-school education. This seems to be gradually changing, as the recent literature continuously highlights the importance of young children's contact with social and environmental issues and their active participation in the dialogue to address them. The aim of this research is to identify all the latest research data on ESD in early childhood education. More specifically, the research questions are defined as follows: a) What are the main research trends in the international literature on ESD in pre-school education and b) What are the main impediments in implementing ESD in kindergarten. To answer the above research questions, a narrative literature review was conducted. The above methodological choice is suggested to draw conclusions through a consistent approach of synthesis and summarization of existing research. Scientific journals, books and studies from Greek and foreign universities were examined throughout the literature review. Some of the key findings were the excessive focus on the environment at the expense of the other two pillars of sustainability (economy, society) and the occasional or superficial application of ESD in pre-school education. As a result of the above, there is probably a need for a holistic reorganization of the modern kindergarten to reflect all the principles of sustainable development in all aspects of its daily operation.

Keywords: *Education for sustainable development, Early childhood education, Kindergarten, Literature review, Sustainable development, Sustainable development goals*

Introduction

The major social and environmental problems of modern times have forced policy makers and international organizations to take action to improve current living conditions and ensure the well-being of future generations. Sustainable development is a priority for all developed countries and a key objective for many developing countries (Nhamo et al., 2021; Scoones et al., 2020). The management of human, economic and environmental resources is identified as imperative to reduce current inequalities between countries or social groups, and to maintain intergenerational equity (Kanie et al., 2014; Saxena et al., 2021). However, implementing sustainable development principles is not an easy task (Caniglia et al., 2021; Moratis & Melissen, 2018). Although sustainability as a concept seems quite clear and is formulated in an explicit way, each state or cultural group may interpret it and move towards it in a different way. Each country has its own culture, its own problems, and its own priorities. Local issues in particular can be a determining factor in how the whole sustainable agenda is implemented (Salvia et al., 2019). The intensity of global environmental issues may vary from continent to continent and have different types of impact in each place. However, even if the parameters of place and distinct cultural context are ignored for a moment, the stability of the very core of sustainability can be challenged when the variables of time, technological and scientific advances enter the equation (Wals, 2019). What is considered sustainable at a particular moment in time may not be in the future. Therefore, promoting a model of global sustainability is extremely challenging and requires constant evaluation and redefinition.

To solve the above problems and for an even more efficient and modern implementation of sustainable development, in September 2015 the United Nations defined the 17 Sustainable Development Goals (Bali Swain & Yang-Wallentin, 2020; Fu, 2019). These goals were created to replace the "Millennium Development Goals" and to eliminate any shortcomings, deficiencies, and weaknesses of that framework (Leal Filho et al., 2019). Essentially, the Sustainable Development Goals are a new network of information, goals, sub-goals, and indicators that aim to improve the quality of life in the present era and ensure the well-being of future generations (Hak et al., 2016). The sectors for which all this information is provided include, among others, energy management, quality education, urban daily life, health, institutions and land and water biodiversity conservation (Robert et al., 2005). The identification of this new, detailed, and broad framework of 17 goals has not completely eliminated the difficulties of adopting a sustainable lifestyle, and as a result the sustainable development agenda continues to be criticized (Camacho, 2015). The intense political and economic pressures, conflicts between countries, the maintenance of global inequalities in favor of the Western World and the attempt to implement the goals horizontally without differentiation by country are just a few of the problems that remained or emerged after the 17 Sustainable Development Goals were made public (Briant Carant, 2017; Caiado et al., 2018; Stewart, 2015). It is worth noting, however, that these remaining difficulties are not recorded in the literature as a reason to discredit the new framework of goals, but as a need to improve the way it is implemented through cooperation, continuous information and education at all levels (Halkos & Gkampoura, 2021; Kopnina, 2020).

Education for Sustainable Education

It is common ground that education is one of the most powerful "tools" for societies to adopt a more sustainable way of functioning and to increase the degree of its achievement (Milana et al., 2016; Schreiber-Barsch & Mauch, 2019). From pre-school to higher education (Caputo et al., 2021) and lifelong learning (Quiroz-Niño & Murga-Menoyo, 2017), providing scientific knowledge and skills seems to contribute to the drive for sustainability. By creating, maintaining, strengthening, and promoting a flexible and adaptable knowledge base for sustainable development, achieving the goals set by the United Nations in 2015 seems to become more feasible (Rieckmann, 2017). Education for sustainable development (henceforth, ESD) appears as an evolution of environmental education, offering a more comprehensive framework, which beyond the environment, focuses on the emergence of time values and the meaningful organization of societies' everyday life around them (Bonnett, 2002; Scheunpflug & Asbrand, 2006). Looking at the definitions of ESD that can be found in the literature, it is evident that it aims to provide knowledge and skills to help students find new solutions to current and intertemporal social, economic and environmental issues (Boeve-de Pauw et al., 2015). ESD, being multifaceted and based on various elements, aims to empower tomorrow's citizens that will ultimately lead to a sustainable change (Kopnina, 2020). More specifically, ESD is based on holistic and systemic approach (Ferreira, et al., 2019) as it is intended that children perceive the world not according to the elements that construct it, but based on the links that are created between these elements. Especially when referring to sustainable management of human, financial and environmental resources, we have to do with complex and multifactorial relationships that can be better identified when the whole situation is approached holistically. Moreover, ESD involves critical reflection (Warburton, 2003) because the revision of personal and collective practices is a prerequisite for change, and it also involves a transformative approach to learning through an adaptive process (Giangrande et al., 2019; Leal Filho, et al., 2018). The transformative dimension is necessary as the aim is not only to acquire new knowledge, but also new ways of thinking. Finally, ESD has an emancipatory aspect (Nolet, 2016; Warburton, 2003), as it looks forward to students with critical action, self-realization, and self-determination.

Educating for sustainable development based on the specific 17 goals set by the United Nations is also an educational approach that has been chosen at all educational levels since the goals were determined (Cottafava et al., 2019; Rieckmann, 2017). The 17 goals network itself, in addition to being a set of information, can be an excellent teaching framework. In this perspective, ESD takes place not only to achieve the 17 sustainable development goals, but at the same time the goals themselves are the basis on which all relevant educational activities are organized (Malik, 2018). By analyzing the necessity of creating the network, the links, the indicators, the statistics and the overlaps between the goals, students are able to further understand the importance and the implementation of a sustainable lifestyle (Kioupi & Voulvoulis, 2019; Öztürk, 2020). The educational material that has been created and continues to be created based on the 17 Sustainable Development Goals can undoubtedly serve as a solid foundation for any educational institution wishing to implement similar educational activities (UNESCO, n.d.).

Education for Sustainable Education in Kindergarten

Examining the literature on the implementation of ESD in pre-school education, once again the focus is on the necessary empowerment of kindergarten students in order to change the way they live, think and act (Güler Yıldız et al., 2021; Hedefalk, Almqvist, & Östman, 2015). Essentially, by making the necessary 'up-to-bottom' didactic transformations and using effective teaching approaches, the purpose of ESD in modern kindergarten is for preschool students tocomprehend the concept of sustainability and to master the first level knowledge and skills of an active citizen (Kalafati, 2021; Liu et al., 2022; Norðdahl, 2020).

It should undoubtedly be noted that ESD in kindergarten was recently implemented, especially if one considers that in comparison to higher educational levels (Eriksen, 2013). As far as compulsory education is concerned, ESD in previous years took place mainly in primary school, junior high school and senior high school. The reason for this was the previously prevailing perception that kindergarten students lack the maturity to deal with the cognitive domain of sustainability (Norðdahl, 2020; Samuelsson et al., 2019; Somerville & Williams, 2015). This notion seems to be changing in recent years, as the aforementioned hesitation about what toddlers can achieve when engaging with the principles of sustainable development, has begun to recede. The modern literature highlights the importance of engaging young children with the world through a sustainability perspective, and kindergarten seems to become the starting point for lifelong learning regarding sustainability (Engdahl, 2021). The consolidation of this new approach is based on a more general belief that a sound curricular transformation can enable the teaching of any subject matter even at lower age levels (Ødegaard, 2021). By adopting such a model, no subject is excluded from preschool education, enabling an even more holistic approach to knowledge and an even broader scientific literacy in kindergarten.

Based on what has been mentioned above, the research questions of this study are defined as follows: a) What are the main research trends in the international literature on ESD in pre-school education? and b) What are the main impediments in implementing ESD in kindergarten?

Methodology

To answer the above research questions, a narrative literature review was conducted (Bolderston, 2008; Jahan et al., 2016; Petticrew & Roberts, 2006). This review methodology is proposed to draw conclusions through a consistent approach of synthesizing and summarizing existing research (Green, Johnson, & Adams, 2006; Pautasso, 2019). The purpose of the whole process was not to identify all research related to sustainable development and ESD in kindergarten, as this is the case during a systematic literature review. Instead, a focus on selected studies was attempted to identify the main trends prevailing in the relevant international literature and to clarify the main problems of implementing ESD in the modern kindergarten (Ridley, 2012; Wright et al., 2009).

All the studies ultimately included in this research were selected using specific inclusion and exclusion criteria. In terms of timeframes, the search included studies from 2000 onwards, when ESD as a term begins to emerge, especially after the 2005-2014 decade was declared as the decade of the specific educational context (Venkataraman,2009). Regarding the type of journals reviewed, only those that ensure the quality of their publications through a double-blind peer review system were selected. In addition, scientific books, and dissertations indigital repositories of Greek Higher Education Institutions and the national archive of doctoral dissertations were examined. The electronic platforms "Scopus" and "Google Scholar" were used to search especially for foreign language studies. The keywords selected as search terms in the above research timeline were: 'preschool education', 'sustainable development', 'sustainable development goals' 'education for sustainable development' and 'sustainable school'.

The process of selecting and analysing research in the narrative review does not follow the strictness of the systematic review, but it does have specific steps and methodological features (Ridley, 2012). Initially, using the aforementioned keywords, studies published within the years 2000-2023 were identified that could potentially provide data relevant to the research questions posed in this study. By reviewing the abstracts of the scientific articles, the abstracts of the studies conducted by the Greek Higher Education Institutions and the introductions of the chapters from the selected scientific books, some papers were rejected, and some were marked as acceptable. Then, the papers that were finally selected were grouped according to the research question for which they could offer valuable data and analyzed in terms of their content. In a final stage, the information offered was synthesized to produce in-depth answers to each research question. During the process, elements of a quantitative approach were also used, as an attempt was made to classify the problems of implementing ESD in kindergarten according to the frequency of occurrence in the studies examined.

RESULTS

Main trends in the international literature on ESD in early childhood education

When examining the literature, it appears that the main countries in which research efforts on the implementation of ESD in kindergarten are recorded are Australia, Sweden, and the United States of America. This is followed by mostly European countries, but the majority of scientific studies exploring relevant data come from the continents of Australia and America. It is also clear from the literature that research in this field, regardless of geographical origin, seems to be increasing in recent years. This increase is even more intense since 2015, when the 17 Sustainable Development Goals were published by the United Nations. However, despite the positive aspect of this increase, it should be noted that most of this research is mainly qualitative approaches, as there are still not enough quantitative research efforts. In particular, there seems to be a lack of extensive research on the implementation and evaluation of sustainable development education projects in kindergarten with a large number of students and a potential for generalizations. On the contrary, it is of great research interest that relevant contemporary research seems to involve not only pupils and teachers, but also parents and relevant stakeholders. Another important point that emerges from the examination of the research is that the implementation of ESD in kindergarten seems to have extremely positive effects on both children's cognitive background and skills. The general conclusion outlined is that pupils in kindergartens where ESD takes place seem to benefit by gaining new knowledge and changing attitudes towards various relevant issues. In addition, it is documented that Information and Communication Technologies are an important part of the implementing ESD in preschool education.

Issues when implementing ESD in Kindergarten

Table 1 lists the rates of occurrence of problems during the implementation of ESD in kindergarten, as recorded in recent research. The main one (40%) seems to be the over-concentration of educational interventions on the environmental pillar and the ignorance of the other two pillars of sustainability, i.e., society and economy. The second (28%) most frequent problem recorded is that the current structure and organization of kindergartens does not seem capable of fully supporting ESD, which is an extremely important obstacle in the whole effort to integrate it into the preschool educational context. More specifically, it is documented that modern kindergartens can implement occasional or superficial educational projects for sustainable development, but are not able to restructure their organization and functioning so that all aspects of their daily operation reflect the 17 sustainable development goals. The lack of relevant training of teachers on the knowledge field of sustainable development is recorded as the third (21%) most frequently encountered problem of effective implementation of ESD in today's kindergartens. Finally, some of the other problems that are cumulatively recorded in the literature in a smaller percentage (11%) are insufficient support from parents, lack of involvement of relevant stakeholders, and outdated curricula, within which sustainable development is not present or not properly emphasized (Table 1).

Table 4. Problem incidence rates during ESD in Kindergarten

Environment as the main pillar of engagement	Poor logistical infrastructure	Lack of relevant knowledge	Other problems
40%	28%	21%	11%

Conclusions

The link between ESD and preschool age seems to be of increasing interest to more and more researchers in recent years. This finding is assessed as positive, as it can be argued that it is a precursor to an even more extensive consolidation of sustainable development principles in the educational everyday life of preschool students. In this direction, more quantitative research evaluating organized ESD projects in the context of preschool education will undoubtedly be beneficial. The fact that the current research activity includes parents and out-of-school stakeholders in addition to students and teachers is also of outstanding importance. This is so, because it demonstrates a significant level of comprehension regarding the complexity of sustainability and how factors influence its achievement. This holistic approach by the researchers ensures that both the concept of sustainability and ESD are properly addressed.

Regarding the identified problems, it would be beneficial for modern kindergartens to adapt the existing logistical infrastructure or acquire new ones that can substantially support ESD. Increasing educational activities on the pillars of economy and society is without doubt a necessary immediate step for an even better implementation of ESD. However, as mentioned above, a modern kindergarten should not treat sustainable development as just another subject, but should instead organize its overall operation around its principles. The necessary changes start with the supporting material and technical infrastructure and extend to the curriculum, the social face of the school and the interface with local institutions. Through a cross age perspective, the sustainable kindergarten can be the starting point of raising people’s awareness and promoting a sustainable lifestyle. Early childhood education is in a position to play a key role in fostering active citizenship and instilling the values underlying the 17 Sustainable Development Goals.

The link between ESD and preschool age seems to be of increasing interest to more and more researchers in recent years. This finding is assessed as positive, as it can be argued that it is a precursor to an even more extensive consolidation of sustainable development principles in the educational everyday life of pre-school students. In this direction, more quantitative research evaluating organized ESD projects in the context of pre-school education will undoubtedly be needed. The fact that the current research activity includes parents and out-of-school stakeholders in addition to students and teachers is also of outstanding importance because it demonstrates that at least some understanding of the complexity of the sustainability task and how factors influence its achievement has been gained. The holistic management of the field under investigation by the researchers ensures that both the concept of sustainability and ESD are properly addressed.

To support and facilitate all the above, it is obvious that the kindergarten teachers involved should have the necessary relevant training. In addition to their personal development that may take place at the individual level, there is a need for the promotion of ESD by educational policy makers. Through seminars, training, and changes in the curricula of higher education institutions, it is possible to enhance the knowledge and skills of current and potential preschool teachers.

What has been analyzed so far also provides directions for further research. An exploration of all pedagogical aspects is required to ensure that kindergarten can be successfully integrated into the aforementioned scientifically learning structured continuum of education for sustainability. The young age of kindergarten students requires extensive educational research to determine the ideal didactic transformation of the concepts discussed in the ESD. Especially for the pillars of economy and society that seem according to the results to be marginalized, it is important to implement and evaluate educational interventions which can clarify that sustainable development is not only about the environment. The research interest regarding the holistic management of the concept of sustainability, beyond its scientific correctness, lies mainly in the didactic use of the set of values underlying its three pillars. As the ideal didactic transformation of sustainable development for kindergarten is enriched and researched, the exclusion of younger students from the sustainability endeavor will diminish.

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SESSION 4
(Internationalization and Interdisciplinary Education)

EXPLORING THE IMPACT OF NONFORMAL EDUCATION AND MINDFULNESS ON LEADERSHIP DEVELOPMENT IN CIVIL SOCIETY ORGANIZATIONS: EVIDENCE FROM A EUROPEAN SOLIDARITY CORPS PROJECT

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Abstract

Effective leadership is essential for civil society organizations to succeed. Traditional programs for developing leaders, however, might not always be available to or appropriate for leaders in civil society organizations. In this study, we investigate the effects of innovative nonformal education and mindfulness on the growth of leaders in civil society groups. The application of mindfulness-based activities, such as meditation and mindfulness exercises, is the main focus of this article as a way to improve leadership competences like communication, decision-making and resilience. We also explore how nonformal education can be used to help leaders in civil society receive mindfulness instruction and assistance. A sample of thirty leaders from various civil society organizations from Western and Central Macedonia participated in the training project, which was carried out in two phases. The research was based on a mixed-method approach that combines qualitative and quantitative methods. The main results of the study concluded that after the nonformal education and training on mindfulness, the participants reported an increase in their ability to keep conflicts that occur in their workplace to a minimum *and to easily express their thoughts and opinions. Also, their concentration allows them to work with less errors or omissions. Also the study offers further support to educators, policymakers, and practitioners working in this area.*

Key Words: *Civil Society Organizations, Innovation, Leadership, Mindfulness, Nonformal Education*

Introduction

Innovation is a critical component that distinguishes organizations from their competitors in the contemporary world. It involves the development and implementation of creative ideas, processes, products, or services that yield meaningful improvements and address the evolving needs of stakeholders. By embracing innovation, organizations can unlock new opportunities, enhance efficiency, and adapt to a rapidly changing environment (Lawson, Benn & Samson, Daniel.,2001).

Moreover, effective leadership plays a pivotal role in the success and impact of civil society organizations. These organizations, driven by a mission to address social, environmental, or cultural issues, rely on strong leadership to guide their operations, engage stakeholders, and achieve their goals. To have a positive impact on CSOs, the first step is to work with the leaders. If these people implement the idea, then it will definitely have an effect (Pedler, et al., 1991). However, traditional leadership development programs may not always be readily accessible or suitable for individuals involved in civil society organizations. This creates a need to explore alternative approaches that can effectively cultivate and enhance leadership skills within this unique context. While traditional leadership programs may provide valuable insights and skills, they may not address the specific challenges faced by civil society organizations or reflect their unique values and objectives.

Individuals involved in civil society organizations may have diverse backgrounds and experiences, bringing a range of perspectives and skill sets to their roles. Customized leadership development programs that consider this diversity can be instrumental in nurturing and harnessing the full potential of these leaders.

The aim of this study is to examine the impact of nonformal education and mindfulness interventions on leadership development in civil society organizations, specifically within the context of an EU-funded European Solidarity Corps project. We seek to explore the effectiveness of the nonformal education and mindfulness interventions in enhancing leadership competences, including communication, decision-making, and resilience. Through our research, we foresee to provide findings of the benefits of incorporating nonformal education and mindfulness practices in the development of leaders in civil society organizations. These findings support the use of mindfulness as a valuable tool for enhancing leadership competencies and promoting a positive work environment. By embracing mindfulness practices and integrating them into leadership development initiatives, educators, policymakers, and practitioners can empower leaders to thrive in their roles and make a lasting impact within civil society organizations. The insights shared in this paper are drawn from a European Solidarity Corps project (2020-3-EL02-ESC31-006508), end were presented at the "Education Across Borders: Innovative Education - Strengthening the Future" conference in Korçë, on April 28–29, 2023.

Nonformal Education and Leadership Development in Civil Society Organizations

Given the limitations of traditional leadership programs, nonformal education emerges as a promising approach for leadership development within civil society organizations. Nonformal education encompasses a wide range of learning experiences that take place outside of formal educational settings (Coombs, P. H., & Ahmed, M., 1974). These experiences are characterized by their practical orientation, experiential learning methodologies, and emphasis on personal growth and development. Nonformal education offers a flexible and adaptable framework for leadership development, allowing individuals to engage in relevant and context-specific learning activities. These activities can include workshops, seminars, peer-to-peer collaborations, mentorship programs, and participatory projects. By incorporating nonformal education approaches, civil society organizations can provide leaders with hands-on experiences, foster critical thinking, and promote skills such as teamwork, communication, and adaptability.

Furthermore, it is worth noting that 2023 has been designated as the European Year of Skills. This initiative aims to promote the importance of skill development across various domains, including leadership. By aligning with this European-wide focus on skills, civil society organizations can seize the opportunity to prioritize nonformal learning as a means to enhance leadership competencies and contribute to the overall development of their leaders.

Mindfulness in Leadership Development

In addition to nonformal education, mindfulness practices have gained recognition as valuable tools for leadership development. Mindfulness involves cultivating a state of present-moment awareness, nonjudgmental observation, and intentional focus (Jon Kabat-Zinn, 1994). It encourages individuals to become more self-aware, attuned to their thoughts and emotions, and better able to manage stress and distractions. This definition, articulated by Kabat-Zinn, is widely recognized and forms the foundation of mindfulness-based interventions and programs.

Mindfulness practices can enhance leadership capabilities within civil society organizations by improving emotional intelligence, decision-making skills, and interpersonal relationships (Arendt JFW, Pircher Verdorfer A., and Kugler KG, 2019). Leaders who cultivate mindfulness can navigate challenges with clarity, empathy, and resilience. By fostering mindfulness, civil society organizations can create a culture that values self-reflection, well-being, and the ability to respond effectively to complex situations (Sutcliffe, Kathleen & Vogus, Timothy & Dane, Erik, 2016).

The European Solidarity Corps Project “DoMiLeS” and its Impact

The European Solidarity Corps project “DoMiLeS”, as presented at the "Education Across Borders: Innovative Education - Strengthening the Future" conference, offered valuable insights into the impact of nonformal education and mindfulness on leadership development within civil society organizations. The project's findings revealed that the integration of nonformal education and mindfulness practices positively influences leadership development. Participants who engaged in these activities demonstrated enhanced self-awareness, emotional resilience, and a deeper understanding of their roles within civil society organizations. They exhibited increased adaptability, creative problem-solving skills, and a heightened ability to inspire and engage others.

Based on the evidence from the European Solidarity Corps project and the broader understanding of leadership development in civil society organizations, several recommendations can be made. Firstly, organizations should embrace and invest in nonformal education initiatives tailored to the unique needs and contexts of civil society leaders. This may include workshops, mentorship programs, experiential learning opportunities, and collaborative projects.

Secondly, integrating mindfulness practices into leadership development programs can enhance self-awareness, emotional resilience, and interpersonal skills. Mindfulness training can help leaders manage stress, cultivate empathy, and make informed decisions in complex situations.

Lastly, it is crucial for civil society organizations to create a supportive and inclusive environment that values continuous learning, feedback, and the exchange of diverse perspectives. This culture fosters the growth and development of leaders within the organization and enables them to adapt to the ever-evolving challenges and opportunities they face.

Research Aim: Exploring the Impact of Innovative Nonformal Education and Mindfulness on Leadership Growth in Civil Society Groups

The primary objective of this research was to investigate the effects of innovative nonformal education and mindfulness practices on the growth and development of leaders within civil society groups. By focusing on these two key elements, namely nonformal education, and mindfulness, we aimed to shed light on their potential to enhance leadership competencies and contribute to the overall effectiveness of leaders in civil society organizations.

The research delved into the specific ways in which innovative nonformal education initiatives, tailored to the needs of civil society leaders, can foster the development of essential leadership competencies. These competences include effective communication, decision-making, and resilience, which are vital for navigating complex challenges and driving positive change within civil society groups.

Furthermore, the research explored the integration of mindfulness-based activities, such as meditation and self-awareness exercises, within leadership development programs. By incorporating these practices into leadership training, we seek to understand their potential to enhance leaders' ability to navigate challenges, make informed decisions, and foster resilience in the face of adversity.

By examining the combined effects of innovative nonformal education and mindfulness practices, this research aims to provide valuable insights into the potential strategies and approaches that can contribute to the growth and effectiveness of leaders within civil society organizations. Ultimately, the findings will inform the design of evidence-based leadership development programs that empower leaders to create a lasting impact within their respective civil society groups.

Participants and Training Phases

The research study involved the participation of 30 leaders from various civil society organizations in Western and Central Macedonia. These leaders took part in two distinct phases of the training project.

The first phase of training and retreat took place in Velvento, Kozani, from August 26th to 28th, 2022. During this phase, the focus was on developing personal skills such as emotional intelligence, conflict resolution, and mental resilience. Participants engaged in various activities, including mindful meditation, mindful listening, the Transcendental Railroad exercise, the application of Belbin's team role theory, problem-solving activities, and SWOT analysis.

The second phase of training and retreat occurred in Aiani, Kozani, from December 2nd to 4th, 2022. This phase centred around the development of soft skills. Activities included a holistic and systemic approach, recognition and adaptation of attitudes and behavioural attitudes, utilization of Belbin's psychometric tool, exploration of team dynamics, effective feedback giving, and the relationship between personality and leadership.

Survey Methodology and Areas of Focus

To assess the impact of the ESC project "DoMiLeS" on the participants, surveys were conducted at the beginning and end of the two 3-day training and retreat sessions.

The questionnaire was divided into three areas. The first two parts were based on existing research conducted by Arendt F.W.J, Pircher Verdorfer, and Kugler K.G. (2019) that focused on the correlation between mindfulness and leadership, particularly in terms of awareness of communication between leaders and employees. The third part of the questionnaire addressed the management of the organizations represented by the participants. The questions in this section focused on the efficiency and sustainability of the organizations, directly related to their social impact. By comparing the responses of the same sample of participants before and after the intervention, the research aimed to evaluate the changes and improvements resulting from the training and retreat sessions, including changes in leadership competences, communication awareness, and organizational management practices.

Mindfulness and Leadership (Part 1)

In order to assess the relationship between mindfulness and leadership, several statements were used to gauge participants' self-perception in various leadership-related areas. The following statements were included:

> "I am aware of my thoughts and can describe my feelings."
> "I am focused on what is happening in the present."
> "I am good at identifying potential in others and helping them realize it."
> "I am so focused on the goal I want to achieve to the point that I lose touch with what I am doing in the moment to achieve it."
> "I try to improve myself personally and professionally."
> "I have the ability to influence team members without pushing them."
> "Concentration allows me to work without error or omission."
> "I work effectively with different types of people."

These statements aim to capture participants' self-perceived mindfulness, focus, awareness of others, goal orientation, self-improvement, influence, concentration, and ability to work with diverse individuals within a leadership context.

Mindfulness and Communication (Part 2)

Communication is a vital aspect of leadership, and mindfulness can have an impact on how leaders engage with others. The following statements were used to assess participants' self-perception in terms of communication:

> "I believe that listening is very important in communication."
> "It is easy for me to be direct and effective."

"I am good at making others heard and understood."

"I can easily express my thoughts and opinions."

These statements aim to capture participants' self-perceived mindfulness in communication, including the importance of listening, being direct and effective, making others feel heard and understood, and expressing thoughts and opinions clearly.

Operation and Management of the Organization (Part 3)

Effective operation and management are essential for the success and sustainability of civil society organizations. The following statements were used to assess participants' self-perception in relation to the operation and management of their organizations:

"I can identify what is important and essential to the work of the organization/group I am involved in."

"I often think about how my decisions may affect others."

"I capture and propose new ideas."

"I can keep conflicts that occur in my workplace to a minimum."

"I find it difficult to change the habits in which work is carried out."

"I often attend seminars/trainings to keep abreast of new practices."

"When I am working, I can maintain and focus my attention, and I am able to think creatively and clearly."

These statements aim to capture participants' self-perceived ability to identify priorities, consider the impact of decisions on others, generate new ideas, manage conflicts, adapt to change, seek ongoing learning, and maintain focus and creativity in their work.

Results:

Part 1: Mindfulness and Leadership

The survey responses were analysed to evaluate the impact of mindfulness on leadership competencies. The following results were obtained for two specific statements:

"Concentration allows me to work without error or omission."

- Average pre-intervention score: 3.6
- Average post-intervention score: 4.14
- Percentage increase: +15%

This indicates that participants experienced a 15% improvement in their ability to work without errors or omissions due to increased concentration after the intervention.

"I have the ability to influence team members without pushing them."

- Average pre-intervention score: 3.29
- Average post-intervention score: 3.82
- Percentage increase: +16.1%

Participants reported a 16.1% increase in their ability to influence team members without exerting force or pressure after the intervention, indicating improved leadership skills in fostering collaboration and engagement.

These findings suggest that mindfulness practices, as integrated within the training and retreat sessions, positively impacted participants' concentration abilities and their ability to influence others without coercion or pushing, enhancing their overall leadership competencies within civil society organizations.

Part 2: Mindfulness and Communication

Continuing the analysis of survey responses, the impact of mindfulness on communication skills and abilities was evaluated. The following results were obtained for two specific statements:

"I can easily express my thoughts and opinions."

- Average pre-intervention score: 3.57
- Average post-intervention score: 4.11
- Percentage increase: +15.1%

Participants reported a 15.1% increase in their ability to express their thoughts and opinions easily after the intervention, indicating improved communication skills in articulating their ideas effectively.

"I am good at making others heard and understood."

- Average pre-intervention score: 3.79
- Average post-intervention score: 4.21
- Percentage increase: +11%

Participants experienced an 11% increase in their ability to make others feel heard and understood after the intervention, highlighting enhanced communication skills in fostering active listening and empathy.

These findings suggest that mindfulness practices incorporated within the training and retreat sessions positively impacted participants' communication abilities, enabling them to express their thoughts and opinions more easily while creating an environment where others feel heard and understood. This demonstrates the potential of mindfulness to improve communication dynamics within civil society organizations.

Part 3: Operation and Management of the Organization

The survey responses were further analysed to assess the impact of mindfulness on the operation and management of civil society organizations. The following results were obtained for two specific statements:

"When I am working, I can maintain and focus my attention, and I am able to think creatively and clearly."

- Average pre-intervention score: 3.29
- Average post-intervention score: 3.79
- Percentage increase: +15.2%

Participants reported a 15.2% increase in their ability to maintain focused attention while thinking creatively and clearly during their work. This indicates that mindfulness interventions positively influenced participants' ability to remain attentive, enhance creative thinking, and make clear decisions within their organizational roles.

"I can keep conflicts that occur in my workplace to a minimum."

- Average pre-intervention score: 3.57
- Average post-intervention score: 4.11
- Percentage increase: +15.1%

Participants demonstrated a 15.1% increase in their ability to minimize conflicts that arise in the workplace. This suggests that mindfulness practices facilitated better conflict management and resolution skills among participants, contributing to a more harmonious and productive work environment within their organizations.

These findings indicate that mindfulness interventions positively influenced participants' ability to maintain focus, think creatively, minimize conflicts, and effectively manage their organizational responsibilities within civil society organizations.

Conclusion

By exploring the research conducted within the European Solidarity Corps project "DoMiLeS" and examining the results, we have gained valuable insights into the potential benefits of innovative approaches to leadership development. The integration of nonformal education and mindfulness practices has shown positive effects on leadership competencies, communication skills, conflict management, and cognitive performance within civil society organizations.

The research findings indicate that participants experienced an improvement in their ability to minimise conflicts within their workplace. This suggests that mindfulness interventions can positively impact conflict management and resolution skills, fostering a more harmonious work environment within civil society organizations.

Moreover, the results demonstrate an increase in participants' ability to make others feel heard and understood. This suggests that mindfulness practices can enhance communication skills, including active listening and empathy, enabling leaders to create an inclusive and supportive environment within their organizations.

There was also a decrease in errors and omissions in tasks that require concentration. This indicates that mindfulness interventions contribute to improved focus and attention, leading to greater accuracy and quality in task performance within civil society organizations. The research provides evidence that mindfulness practices positively influence cognitive performance, including the ability to think creatively, make clear decisions, and maintain attention. This highlights the value of incorporating mindfulness techniques into leadership development programs to enhance leaders' cognitive capabilities and effectiveness.

Last but not least, the study offers further support to educators, policymakers, and practitioners working in this area: The research findings contribute to the growing body of evidence supporting the benefits of mindfulness in leadership development within civil society organizations. Educators, policymakers, and practitioners in this field can draw upon these findings to inform the design and implementation of effective training and development programs for leaders, emphasising the integration of nonformal education and mindfulness practices.

By recognising the effectiveness of nonformal education and mindfulness, we can create tailored programs and initiatives that foster the growth and development of leaders within civil society organizations, ultimately enhancing their impact and contributing to positive social change.

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SESSION 4
(Internationalization and Interdisciplinary Education)

CONTINUING EDUCATION OF HEALTH PERSONNEL IN THE REGION OF KORCA

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Abstract

Continuing education of health personnel is an important component, which is receiving more and more attention nowadays. It is a process where the health professional learns throughout his professional life, develops knowledge, and improves performance by providing a better quality service to the patient. Primary Health Care Centers include the first level of health service with a multidisciplinary team, who are the point of contact first contact between the patient/client and health professionals.

The purpose of this work is to evaluate the effectiveness of health education through active learning with the ongoing activities in PHC, as it provides complete health care throughout life, starting from the promotion and prevention of the disease to its rehabilitation. The trainings are conducted based on the needs of health personnel with the aim of the most positive result in solving current problems.

The study was carried out in the city of Korça, specifically in the PHC and in the rural areas to make a comparison between them. All the staff in both health centers express interest in being part of these trainings. The population was suitable for the study, stable, and quite cooperative. The city of Korça has a higher participation rate compared to the rural area, related to the number of health personnel and the coverage area for the number of inhabitants. An evaluation form was used for data collection and through the analysis of the collected variables, it results that 93% of the staff say that the goal is achieved during the CEA and they are effective in the professional work. Regarding the distance CEA, it turns out that it does not have the same validity as the training in the auditorium.

Based on the study carried out, we will see that the ongoing education of health personnel is a necessity for the staff which is reflected in the professional work with a qualitative update of knowledge and technical skills.

Keywords: *health personnel, primary health center, continuing education activity, coaching*

Introduction

Health education is an active and continuous process aimed at improving and updating the health service.

For health professionals, the patient is the epicenter and as such, knowing that science and medicine are developing more and more every day, a continuous investment in improving the health of the population is needed.

Continuing education is part of what is known as "lifelong learning", closely linked to the professional career and more organized according to a regulatory framework of credits and qualifications *(QKEV, standardet e aktiviteteve të edukimit në vazhdim për profesionistët e shëndetësisë, nëntor 2009, fq 12, http://asck.gov.al/wp-content/uploads/2022/04/04-standardet-aktiviteteve-edukimit-vazhdim-1.pdf)*

The primary health service is the first point of contact between the patient and the professional health personnel. These centers provide a holistic service, counseling process, and continuous contact with the patient and other health services.

Continuing education of health professionals is a process that has occurred and continues to occur. This is due to the natural need for health professionals to raise the level of their knowledge and skills in fulfilling their mission to care for the health of patients and the public as a whole.

The demand for improvement, regulation, and institutionalization of this process, natural and necessary for health professionals, has also been reflected in the establishment of ongoing education centers *(QKEV,dokumenti i planifikimit individual të aktiviteteve të edukimit të vazhduar për profesionistët e shëndetësisë, fq 6, http://www.qkev.gov.al/images/stories/qkev/publikime/02-dokumenti-planifikimit-individual-te-ev.pdf)* to help health system professionals in this process.

Continuing education helps the health professional stay up-to-date with the latest information, diseases, techniques, and treatments while providing the most optimal service.

The health system in Albania is facing important challenges related to the quality of health care. The current reform of the health system depends a lot on the quality of the health personnel and specifically on the degree of territorial coverage of the health service, motivation, and professional competence. From the data, it is clear that the number, the professional skills, and the rate of remuneration, are directly related to the performance of the health system, as well as to the achievement of health indicators.

The National Center for Continuing Education (NCCE) *(Continuing Professional Development in Medicine and Health Care: Better Education, Better Patient Outcomes 1st Edition by Dr. William Rayburn MD MBA, Dr. David A. Davis MD, Mary G. Turco EdD) is* an institution subordinate to the Ministry of Health and aims to encourage and develop professionals of all categories of health personnel, to increase their knowledge and develop their skills, to improve the quality of health care services. One of the tasks of NCCE is to carry out the process of accreditation of continuing education programs and activities for health professionals. In this framework, during 2009, NCCE drafted the regulatory framework for the accreditation of continuing education activities, which was approved by the Ministry of Health in July 2009.

Project Objective

The purpose of this work is to evaluate the effectiveness *((World Federation of Medical Education (WFME). Continuing professional development (CPD) of medical doctors. WFME Global Standards for Quality Improvement Copenhagen: WFME; 2003)* of health education through active learning with the ongoing activities in PHC, as it provides complete health care throughout life, starting from the promotion and prevention of the disease to its rehabilitation. The trainings are conducted based on the needs of health personnel with the aim of the most positive result in solving current problems.

1. Knowing and studying the concepts and role of continuous educational activities.
2. Evaluation of ongoing activities, and the role of continuing education in the district of Korça, Albania.
3. The importance of Health Centers and the effectiveness of continuous education for health personnel.

4. Study of continuous training activities in the primary health service in the city of Korça and the rural area.

Methods

The study includes 36 health professionals employed in the city of Korca and the rural area, both sexes, with years of work experience from -5 to 40 years and age group from 22 years to +60 years. The population is cooperative.

Data collection instrument.

The instrument used for data collection is the questionnaire. All members of the health staff filled out the form, which consisted of closed and open questions with categories of socio-demographic data (gender, age, place of work, etc.), evaluation of ongoing educational activity, fulfillment of goals, understanding, information, evaluation of subjective data of health personnel (Presentation, Organization, Communication, Collaboration) about ongoing training activities and open questions where they had the opportunity to express their opinion on the developed topics and suggestions on the topics next.

Variables used in the study

- Gender: dichotomous/binary variable (female-male)
- Age: continuous quantitative variable
- Profession: nominal variable (general practitioner, nurse, midwife)
- Years of work: continuous quantitative variable
- Ordinal/classifiable variable (Never; Rarely; Often; Always)
- Ordinal/classifiable variable (poor, acceptable, good, very good)

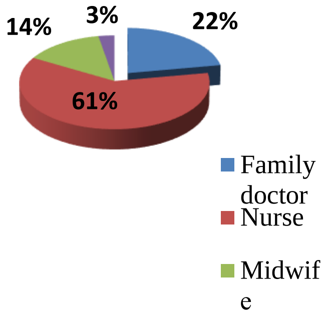
Results and interpretation of data

1. Socio-demographic category

The reference population results in 36 people who filled out the form. 61% are nurses who cover most of the medical staff included in the study, 22% are midwives, 14% are general practitioners and 3% are missing (did not fill out the form), as reflected in chart no.1.

Distribution of frequencies for health personnel	
Frequencies	
Family doctor	8
Nurse	22
Midwife	5
Missing	1
Total	36
Tab. 1	

Chart 1. Health personnel



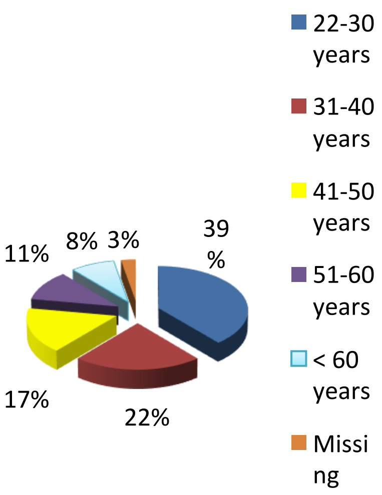
2. Distribution of subjects by age

The study was divided into five age groups categories: 22-30 years; 31-40 years; 41-50 years; 51-60 years and +60 years, which are reflected in Table No. 2. It turns out that the first category with the age of 22-30 years includes the highest number of individuals with a frequency of 14 or 39% and may be as a result of the demand of the labor market, the perspective and security of the future that it offers as a profession. The age group 31-40 years follows with 22%, the age group 41-50 years 17% the age group 51-60 years 11% and the rest occupies 8%.

Distribution of subjects by age	
Frequency	
22-30 years	14
31-40 years	8
41-50 years	6
51-60 years	4
+60 years	3
Missing	1
Total	36

Tab. 2

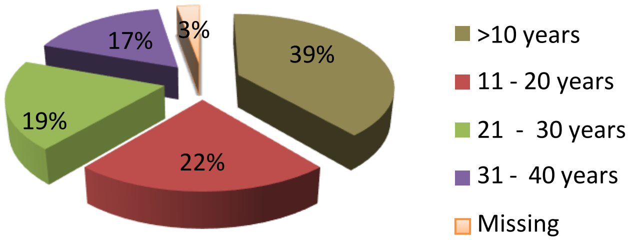
Chart 2. Age



3. Work experience

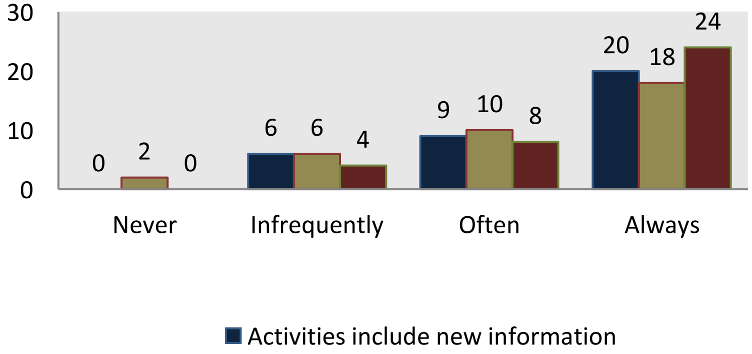
The table presented below shows the years of work of the medical staff included in the study. The category that has less than 10 years of experience includes 39% of the subject, people who have 11-20 years of work make up 22%, 21-30 years of work are 19% and the last category 31-40 years of work is 17%. This will be valuable to see that even with work experience, participation in training is necessary as a result of the evolution of medicine.

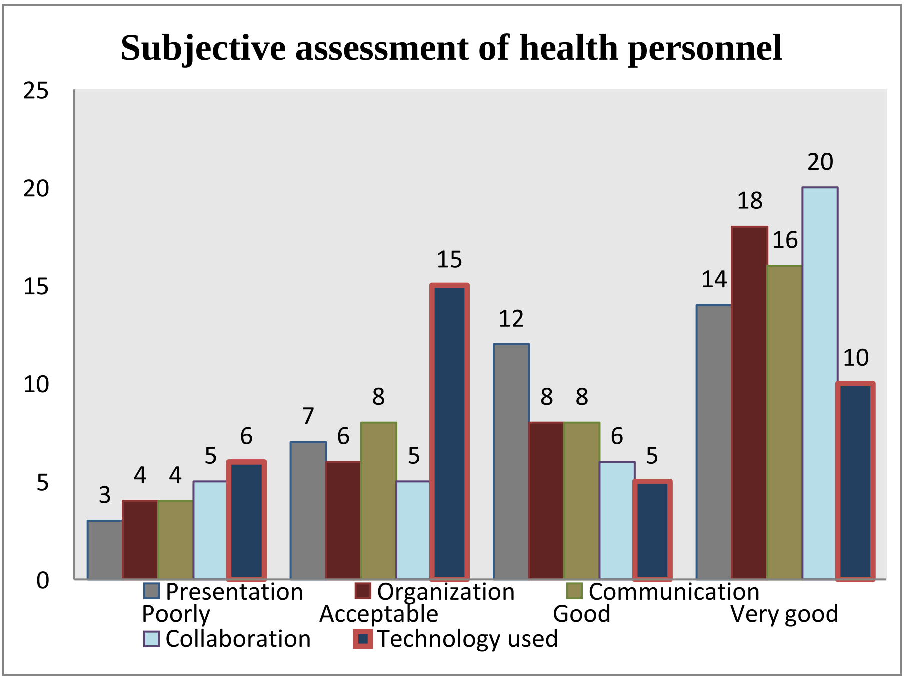
Chart 3. Experience in years



4. Evaluation of continuing activities

Chart 4. Evaluation of educational activities





This study aims to identify the role of continuing education activities, especially in primary health care. The study highlights the need and necessity of continuous education and the involvement of health personnel in a continuous process that adapts to the Albanian reality. The topics that have been developed more in the continuing education activities during the last 3 years 2019, 2020, and 2021 are:

☐ "COVID-19, a challenge for health personnel, especially for nursing personnel"
☐ "Palliative care as a holistic approach to total pain"
☐ "Prevention of medical errors through new concepts"
☐ "The impact of Covid 19 on mental health"
☐ "Emergency and Nursing Interactions"
☐ "Family medicine and the main role of the nurse in holistic care for patients with chronic diseases"
☐ "Preventing patients' suffering and improving their condition through therapeutic communication"
☐ "HTA in the elderly"
☐ "Sleep disorders, dementia and Parkinson's"
☐ "Covid 19 and cardiovascular diseases"

Based on the answers given, it appears that other topics they would like to develop are:

- Vaccination in children
- Breastfeeding
- Dermatological diseases
- Medical staff-patient communication
- Geriatrics, care for the elderly
- Care during pregnancy
- Check-up
- Covid 19 in children
- Family planning etc.

Conclusions

In this study, 36 subjects were included, 23 from the city of Korça, District no. 2 and 3, and 10 subjects from rural areas.

- The dominant gender was female, due to the larger number of nursing staff.
- Both the health personnel working in the city of Korça, as well as those working in rural areas, say that the topics are quite current and valuable in primary health care.
- The highest percentage with 39% was occupied by the age group of 22-30 years old, related to this and the market demand for work, the benefits it offers in the economic and professional future.
- Regardless of the years of work experience, it turns out that continuous training activities are necessary because of the advantages they offer in the profession, due to the updating of theoretical and technical knowledge as a form of active learning throughout life *(Chen, L., Human Resource for Health: Overcoming the Crisis, Lancet, Vol. 364, November 27, 2004, fq. 1984-1990)*
- In terms of the information that is presented, it is consistent with the topic and content.
- The presentation and organization of educational activities were at the appropriate levels, but there is room for improvement in communication and cooperation.
- The continuous education of health personnel affects the improvement of the quality of the health service provided *(QKEV, Edukimi në Vazhdim i Profesionistëve të Shëndetësisë 2015 – 2018,*

https://www.qkev.gov.al/images/RAPORTI_I_EDUKIMIT_NE_VAZHDIM_2015-2018.pdf)

 Technology is a key factor in the transmission of information and its meaning, but according to the assessment, it is still not at the right level and can be improved.

 Distance continuing education activities, used especially during the pandemic period, are not as effective compared to those in the classroom.

 Comprehensive coverage of medical topics by staff is required, noting the need to also offer topics from the fields of pediatrics, geriatrics, and mental health.

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SESSION 5
(Educational Sciences-Didactics and Methodology)

TEACHING, LEARNING, RESEARCHING WITH ACADEMIC INTEGRITY

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Abstract

The purpose of this article is to discuss in an analytical way the academic integrity. The lack of academic integrity is interweaved with ethical misconduct, beginning with the intentional negligence in acknowledgement of all the researchers who performed the work, through research plagiarism, until the different corrupt practices which encompass all segments of the academic life. The results of the student survey, which will be presented in this research, show that academic values of fairness and impartiality are declined a lot and that bias in grading, nepotism and misconduct of research are increasingly replacing transparency, meritocracy and academic dignity. The propensity to bribe is equally represented by both teachers and students. The values that modern society promotes are getting worse. Do we can something improve?

Keywords: *academic integrity, values, ethical misconduct, corruption*

Introduction

Knowledge without conscience is empathy
Francois Rabelais

The interest in improving the quality of work at universities is growing today, and educational standards are increasing and set at a higher level. The elements that guarantee quality in higher education are the following: transparent and clear goals in the functioning of universities, a coherent vision for their development and rules that value the actions of the entities involved in the educational system. In the context of the third element, regulatory frameworks for higher education should promote accountability and anti-corruption measures as part of quality standards.

Corruption in higher education is a global problem with serious implications for societies. Manifestations of corruption in this sphere can be diverse and complex, starting from plagiarism, nepotism, cronyism, all the way to abuse of official duty. Sometimes the forms of corruption are less dangerous and represent actions that are not criminal acts, but the way they are carried out is unethical. Therefore, it is necessary for universities to determine the risk areas that are or can be potential sources of corruption in their environment and to build a strategy for the prevention of corrupt actions. Also, higher education, as a source of skilled labor and leadership, can produce graduates who consider that "acquisitions" of the involvement in the corruption are bigger than "losses", under the illusion that "everyone's doing it." But higher education can also produce such personalities who will have integrity and the desire to change the current unethical and corrupt conditions in society. That is why higher education is one of the most important factors that can increase social trust between people and influence overcoming problems with collective action.

The fight against corruption in higher education is the responsibility of all entities involved in the higher education system. It is the responsibility of students, teachers, administrative officers, officials in the Ministry of Education and Science, regulatory agencies for higher education and professional regulatory bodies Considering that the university autonomy includes academic, financial and organizational independence, it means that universities are responsible for the ethical profile of their units oneself and that oneself should lead the fight against corruption. Transparency in the functioning of institutions is one of the most important conditions for a successful fight against corruption. Researches show that the index of the perception of corruption in the world is the highest in the public sector of social life. Hence, education as a segment of the public sector has direct impact on the deepening of social inequality in society. The acquisition of degrees and other qualifications based on bribery is a major problem facing higher education today. This reduces the quality of education and creates a favorable ground for the existence of self-preserving corruption.

The defining the term *academic integrity*, according to the experts, is "such a multifarious topic that authors around the globe report differing historical developments which have led to a variety of interpretations of academic integrity as a concept, and a broad range of approaches to promulgating it in their own environments" (Bretag, 2016, p.3). According to the European Network for Academic Integrity, it is the "compliance with ethical and professional principles, standards, practices and consistent system of values that serves as guidance for making decisions and taking actions in education, research and scholarship" (Khan et al., 2022, p. 4). Rettinger & Bertram Gallant (2022), argue that academic integrity intervention in the past 30 years seem to come in one of four principal forms: 1.implementation of honor codes designed to crystalize and shared understanding of acceptable behavior and influence students' attitudes regarding plagiarism and cheating. 2. educational modules (classes, tutorials, online activities) designed to educate students about academicintegrity and appropriate citation activities. 3. use of text-matching software, often accompanied by education to help students understand text-matching reports and interpret differences between matched text and plagiarism. 4. some combinations of the above. (Rettinger & Bertram Gallant, 2022: 28). Therefore, according to other expert (Eaton & Khan, 2022) teaching academic integrity must be age appropriate without being reductionist, it must be straightforward without being oversimplified.

There is an invisible pressure for researchers to increase the number and publication of scientific papers, the number of citations, and the H-index. This invisible pressure does not always result in productive scientific work since someone can look for an easy way, which results in ethical misconduct in research and a misleading result (Juyal et al., 2015). In that line, the university, in its operations, should be committed to the highest ethical standards: openness, honesty and humanity.

Methods

This research, the results of which are outlined in the subsequent pages, was conducted in order to gain insights into how students comprehend the academic integrity. Additionally, a broad-based analysis is made regarding the forms of academic misconduct. The methodology of the research rests upon the preparation and design of a standard questionnaire adapted to two broad categories in which, in our opinion, students should be involved in the life of academy: students can define academic integrity and students can identify some forms of academic misconduct. Also, some of the students were interviewed regarding treated issue. The representative sample comprises 281 students from University "St. Kliment Ohridski" - Bitola. Of the total number of interviewees students 31 % are male and 69 % are female. According to the year of study, we have the following situation:

YEAR OF STUDY	CENTAGE OF RESPONDENTS
First	2 %
SECOND	9 %
Third	9 %
Fourth	%

The research was conducted in accordance with the ethical standards for scientific research work. The population in this research consists of students from all University's units. According to the study affiliation of the respondents, we have the following situation:

FACULTY	ERCENTAGE OF RESPONDENTS
Faculty of Security	22.4 %
Faculty of Information and Communication Technologies	16.4 %
Faculty of Tourism and Hospitality	15.3 %
Higher medical school	10.7 %
Faculty of Law	10.7 %
Faculty of Economics	6.8 %
Technical Faculty	6 %
Faculty of Education	5.3 %
Faculty of Biotechnical Sciences	2.8 %
Veterinary Faculty	1.8 %
Technological-technical faculty	1.8 %

Questionnaires were handed out to all students of the University "St. Kliment Ohridski" by Iknow system as on-line survey, providing enough time for their completion. Once completed, the questionnaires were collected in a way that ensured anonymity. Data collection was worked on from January 10th, 2023, through February 10th, 2023.

Results

In this part of the paper we will present the results of the research with students. On the first statement of the survey: *I can define academic integrity*, data shows that 98.6 % of the students, participants in the research, know what the term *academic integrity* is, while 4% of the students have declared that they do not know what that term means. On the additional question: *What is academic integrity in your opinion?* (which was addressed those who answered yes to the previous statement), the students gave the following answers:

Answers of the students on the question: *What is academic integrity in your opinion?*
1. Be truthful and trust others
2. Keep promises
3. Apply rules and policies consistently
4. Take responsibility for your own actions
5. Practice active listening
6. Show empathy
7. Affirm others and accept differences
8. Endure discomfort for something you believe it
9. Know anf follow institutional rules and conduct codes
10. Be honest

On the second statement of the survey: *I can identify some forms of academic misconduct*, data shows that 60.7 % of the students, participants in the research, know what the term *academic misconduct* is, while 39.6% of the students have declared that they do not know what that term means. On the first additional question: *What forms of academic misconduct do you know?* (which addressed those who answered yes to the previous statement), the students gave the following answers:

<table>
<tr><th colspan="2">Answers of the students on the question:
What forms of academic misconduct do you know?</th></tr>
<tr><th>TEACHERS</th><th>STUDENTS</th></tr>
<tr><td>plagiarism</td><td>plagiarism</td></tr>
<tr><td>falsification of data</td><td>falsification of data</td></tr>
<tr><td>conspirasy</td><td>conspiracy</td></tr>
<tr><td>impersonation</td><td>collusion</td></tr>
<tr><td>intimidation</td><td>copying</td></tr>
<tr><td>bribery</td><td>cheating</td></tr>
</table>

On the second additional question: *What students cheat?* (which addressed those who answered that cheating is academic misconduct), the students gave the following answers:

Answers of the students on the question: *Whay students cheat?*
1. Poor time management
2. Stress
3. Overload
4. Wanting to help friends
5. Fear of failure
6. Everyone does it phenomenon
7. Different understanding of academic integrity policies
8. Lack of interest for knowledge

Discussion and Conclusion

Generally, the results of the students' survey show that academic values of fairness and impartiality, as well as, academic integrity are declined a lot. This is evident by students' perceptions regarding academic misconduct. For example, plagiarism is an ethical misconduct in research that threatens academy integrity and is unacceptable. Like other ethical misconduct, it must be detected and prosecuted effectively (Juyal et al., 2015). According to Eaton (2021), plagiarism has long been considered a particular type of academic misconduct but still remains a topic of deep concern in higher education and in society generally. Many universities have sophisticated procedures to deal with allegations of research misconduct while there are a lot of others accused of not doing enough. The important thing is that this is now an essential issue in science and is developing satisfyingly. Such as the situation, let's hope that the policies that will be created and applied will be a significant influencing factor in eradicating ethical misconduct in research.

The revolution of information technologies exerted a strong influence on the development of education overall. Nowadays, distant learning is one of the key benefits of higher education. Undoubtedly, being such a potent learning ‘tool’, distant learning is suitable for achieving a variety of goals set in the educational process. However, on the other hand, education experts are justly concerned about the lack of personal contact in distant teachers – students’ communication, as that leads to low motivation for studying in students and a failure to adopt the academic values (Bušíková & Melicheríková, 2013).

The academic values include freedom of opinion, freedom of teaching and freedom of learning. The teachers are not supposed to use any coercive measures to impose their own opinions on their students in the course of the teaching and research processes, nor to treat their like-minded students in any privileged manner. Moreover, the teachers should bear in mind the cognitive enhancement of students’ thinking process which is made possible by using advanced technology. Thus, they should develop friendly and ethical working atmosphere which fills the gap caused by the physical absence of the stakeholders involved in the distant learning processes (Fransson, 2017). On the other hand, using advanced technology enables easier manipulation of data and facts. There are some data available from the researcher (McCabe, 2016) that is revealed an increasing reluctance on the part of students to report cheaters for fear of being ostracized from the friendships. Because of that, they seem to have no intention of reporting any cheating they might see.

According to the experts (Morris, 2016), in the field of academic integrity, it is established that the design and implementation of academic integrity policy is vital in affecting organizational change.

In that line, "there is consensus that for sustainable change to occur within an institution (including the development of a culture of academic integrity) policy enhancement is one of a number of key elements of an effective institutional academic integrity strategy" (Morris, 2016, p. 409).

Finally, although this research did not aim to determine the quality of the transmission of academic values so that students can build academic integrity, it is clear that the successful gaining academic values improves not only student behavior and attendance in the faculty, but also positively affects their achievements. As well as, the teachers should be always encouragers or supporters of their students regarding gaining academic values. In this context, the content analysis on the survey answers shows that students have a positive opinion about gaining academic values during the studying.

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SESSION 5
(Educational Sciences-Didactics and Methodology)

TRANSPORTATION SEEN THROUGH THE TAXONOMIES OF EDUCATIONAL GOALS IN THE CURRICULA: CASE STUDY FOR NORTH MACEDONIA

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Abstract

The pedagogical and didactic settings of the transport are presented in the paper. The focus of the paper is on identification of the educational goals for the transport in the curricula and the usage of the taxonomies of goals in treating the transport. The paper is structured according IMRD methodology. At the beginning the authors made elaboration and explanation of the term transportation, transport and their positioning in the curricula in North Macedonia. Also, the focus is on the theoretical elaboration of that positioning from the perspective of didactics. The methodology of research is based on the subject of research: the setting of the educational objectives about transport and traffic in the primary and secondary school curriculum. The general hypothesis in the research is: Cognitive objectives about transport and traffic have not been sufficiently represented in the primary and secondary school curriculum although they are dominant in relation to the affective and psychomotor objectives of the curriculum. The sample consists of primary and secondary school curricula, and accepted, approved and published school books. The calculation , data collection and analyses have been done according to a qualitative paradigm. The results show that the transport and the traffic as terms and as essence *are not sufficiently represented in the official documents and the curricula of primary and secondary education in North Macedonia; there is no vertical continuity in the educational system which will develop permanent and intensive interest for students about the transport and traffic, etc.*

***Keywords:** Curricula, Didactics, Taxonomies of educational goals, Traffic education, Transport*

Introduction

The idea to engage in this topic arose from the numerous contacts with the transporters and their problems in providing professional drivers. In our opinion the answer to this problem can be found in the structure of the educational system of the Republic of North Macedonia. For that purpose we are focusing our research interest in the treatment of the educational goals in the curricula. Thus, we "… need critically to revisit both curriculum theory and curriculum practice in relation to radically altered circumstances in the wider socio-economic world as well as to ongoing changes in the way we understand ourselves as social, cultural, ethical beings in a world (I would argue) whose futureis increasingly uncertain and difficult to predict." *(In: Moore A. (2015). Understanding the School Curriculum, Theory, politics and principles, Routledge, p. 2).* Another important aspect of lighting of this problem isseen through the positioning of the educational goals into the curriculum. Namely "The central idea underlying goal-driven learningis that, because the value of learning depends on how well the learningcontributes to achieving the learner's goals, the learning process shouldbe guided by reasoning about the information that is needed to serve those goals. The effectiveness of goal driven learning depends on beingable to make good decisions about when and what to learn, on selectingappropriate strategies for achieving the desired learning, and on guiding the application of the chosen strategies." *(Ram A. and Leake D.B., Learning, Goals, and Learning Goals, In: Ram A. and Leake D.B. (1995). Goal-Driven Learning (Ed.), A Bradford Book, p. 1).* If we try to connect the taxonomic view of the curriculum with the previously pointed terms, we will come to the core aspect of the contemporary education. According to one of the authors of the taxonomy of educational objectives Bloom B., the three major parts of the taxonomyare: "…the cognitive, the affective, and the psychomotor domains. Thecognitive domain… includes those objectives which deal with the recall or recognition of knowledge and the development of intellectual abilities and skills. This is the domain which is most central to the work of much current test development" *(Bloom B. (1956). Taxonomy of Educational objectives- Classification of Educational goals(Ed.), p. 7).* Referring to Bloom, the affective domain "…includes objectives which describe changes in interest, attitudes, and values, and the development of appreciations and adequate adjustment" *(Bloom B. (1956). Taxonomy of Educational objectives- Classification of Educational goals(Ed.), p. 7).* The affective domain of educational objectives according to Devis-Rozental can be connected with the socio-emotional intelligence, which can be described as: "…the ability to integrate feeling, intuition and cognition to acknowledge, understand, manage, apply and express our emotions and social interactions at the right time, for the right purpose in the right context and with the right person. Its overall aim is to have a positive impact on our environment and engage ourselves and others to be present, authentic and open; in order to achieve a sense of well-being and build effective relationships in every aspect of our lives. (Devis-Rozental, 2017, p. 166)" *(In: Devis-Rozental C., (2018). Developing Socio-Emotional Intelligence in Higher Education Scholars, https://doi.org/10.1007/978-3-319-94036-6_1, p. 1)* For Bloom „A third domain is the manipulative or motor -skill area." *(Bloom B. (1956). Taxonomy of Educational objectives- Classification of Educational goals(Ed.), p. 7, 8)* This interrelated aspect of educational settings in our research will be connected with the transport as "…a complex activity involving numerous interactions between actors both those interested in their own movements but also those affected by the actions of other" *(Button K. (2010). A Dictionary of Transport Analysis (Ed.), Edward Elgar, p. xiii).*

Method

The methodology of research is based on the subject of research: Setting of the educational objectives about transport and traffic in the primary and secondary school curriculum. The general hypothesis in the research is: Cognitive objectives about transport and traffic have not been sufficiently represented in the primary and secondary school curriculum although they are dominant in relation to the affective and psychomotor objectives of the curriculum. The sample of the research is convenient. The sample consists of primary and secondary school curricula, and accepted, approved and published school books. The calculation , data collection and analyses have been done according to qualitative paradigm.

Results

The Macedonian curriculum consists of two parts: Curriculum and Subject programmes. The analyses of the **curriculum for primary schools** shows that there is no any compulsory subject which is on implicit and explicit way connected to the traffic and transport, driving means of transport, drivers and transport as profession. Furthermore, in the electoral subjects there is no any subject that would be chosen by the students, which would develop a positive attitude toward transport, driving profession, freight forwarding, and transport in general. On behalf of that, student can choose subjects which develop their language competences, music interests, religion, ethics and creativity *(https://www.bro.gov.mk/wp-content/uploads/2019/08/Nastaven_plan-devetgodishno_2019-2020.pdf).*

The analyses of subject programmes of nine years primary education shows that only in the subject named Society which is planned to be realized in the first three years of primary school can be found some trace related to our focus. There is the objective defined as: “to encourage pupil to acquire basic traffic culture” *(https://www.bro.gov.mk/wp-content/uploads/2018/02/Nastavna-programa-Opshtestvo-I_odd-mkd.pdf, cmp. 4).* This objective is simplified in the first, second and the third grade of primary school. In the first *grade* the educational goal is: “to acquire basic rules about traffic behavior” which has been précised in the aims: “to get acquainted with the traffic from home to school”; “to know the rules for safe walking on the sidewalk, crossing the street”; “to meet the places marked and allowed for playing”; “to know and to describe the traffic means”, etc *(https://www.bro.gov.mk/wp-content/uploads/2018/02/Nastavna-programa-Opshtestvo-I_odd-mkd.pdf, cmp. 4, p.10).*

In the subject programme for the *second grade*, the educational goal is: “to expand the knowledge about the traffic rules and to develop the culture of behavior in the traffic” *(https://www.bro.gov.mk/wp-content/uploads/2018/02/Nastavna_programa-Opshtestvo-II_odd-mkd.pdf cmp. 3).* This goal is concretized through the following aims: “to know to move properly and safety”; “to recognize and respect the traffic signs in the real life”; “to identify the crossroad and know to cross it”; “to deepen the knowledge about the types of traffic means”; and “to see the similarities and the differences among the traffic means" (*https://www.bro.gov.mk/wp-content/uploads/2018/02/Nastavna_programa-Opshtestvo-II_odd-mkd.pdf стр. 3*).

The educational goal in the third grade predict that the student have to "widen the knowledge and traffic means and to acquire knowledge about safety behavior during moving on the street and road" (*https://www.bro.gov.mk/wp-content/uploads/2018/02/Nastavna_programa-Opshtestvo-III_odd-mkd.pdf, стр. 8, 9*). Furthermore, this goal is concretized in the following aims: "to make deeper the knowledge about the traffic in the environment"; "safe and unsafe situations in the traffic"; "to wider the knowledge for the traffic signs and respect them"; "to know the places for crossing the crossroad"; "to know to assess the traffic situation and cross safety the street"; "to meet the different types of traffic and recognizes the similarities and differences among them"; "to meet the traffic means for the types of traffic and some professions"; "to develop habits for proposed and culturally crossing the street, pedestrian crossing, the vehicles for public traffic" (*https://www.bro.gov.mk/wp-content/uploads/2018/02/Nastavna_programa-Opshtestvo-III_odd-mkd.pdf стр. 8*). There is no any education goal in the subject programme of the subject Society for the fourth and fifth grade connected or related to the traffic or transport (*In:https://www.bro.gov.mk/wp-content/uploads/2018/09/Nastavna_programa-Opshtestvo-IV_oddelenie.pdf).* It is the same with the treatment of those disciplines with the all subject programmes from the grade four to the grade nine in the primary school. The only possible way for students to meet the terms and their essence is the subject Geography in which the teacher, following the sense of thematic correlation, can use some of the topics (the state, regions and landmarks) for touching some aspect of the transport and the traffic.

In the **secondary education curriculum** it can be seen that the situation with the transport and traffic education is as follows. (See Table 1 and Table 2)

Table 1. Traffic and the transportation in the secondary vocational curricula

	Four years secondary vocational education
Representation of the subjects within the	The educational profile Traffic/ Traffic, transport and storage consists of four compulsory modules and one optional module:

different vocation	- Technician for transport and freight forwarding with the modules: Foundation of the traffic, transport and storage, Organization of the work of warehouses, Organization of the transport, freight forwarding work (*https://www.bro.gov.mk/wp-content/uploads/2018/02/Nastaven_plan-Trigodishno-1.pdf).* - Technician for train transport with the modules: Foundation of the traffic, transport and logistics, Organization of the railway traffic, Exploitation of the railway vehicles - Technician for logistics in the transport with the modules: Foundation of the traffic, transport and logistics, Organization of the traffic of the transport and Organization of freight forwarding work - Technician for road traffic with the modules: : Foundation of the traffic, transport and storage, Organization of the transport and Security factors in the road traffic. The optional subjects for the module Contemporary technologies in the traffic are the same for all of the educational profiles.
Representation of the subjects by hours of lessons within the vocation	- Compulsory modules: up to two hours per week as lectures or theoretically, or up to two hours per week as practice. - Optional module: up to two hours per week, per subject, per year.

Table 2. Traffic and the transportation in other secondary state curricula

	Three years secondary vocational education
Representation of the subjects within the different vocation	- The vocation Auto mechanic consists of the following subjects: motor vehicles; Internal combustion vehicles; Vehicle equipment (https://www.bro.gov.mk/wp-

	content/uploads/2018/02/Nastaven_plan-Trigodishno-1.pdf). The vocation machine operator for transmission of materials consists of the following subjects: Traffic and transport.
Representation of the subjects by hours of lessons within the vocation	- Within the second and third class every subject is represented up to two hours per week. - Within the first class the subject Traffic and transport is represented up to three hours per week.

referring to the transport and the traffic, the representation of the **educational goals in the secondary school subject programs** is as follows:

-The educational goals related to the transport and the traffic can be only found in the vocational subject in the frame of the educational profile Traffic/ Traffic, transport and storage

-The cognitive goals are defined on a taxonomic way.

-The cognitive goals are dominantly defined on the level of categories of goal: knowledge, comprehension and application. The analysis, synthesis and evaluation as categories of goals are very rare.

-The dominant educational goals in the mentioned subject programme are as follows: “to make difference among traffic, transportation and the transport” (*http://arhiva.csoo.edu.mk/images/stories/programi2010/Soobrakajna%20struka/Programi%20zaednicko%20strucni/Osnovi%20na%20soobrakajot%20i%20transportot.pdf)*, “students to get acquainted with the menas of integral and intermodal transport” (*http://arhiva.csoo.edu.mk/images/stories/programi2010/Soobrakajna%20struka/Programi%20zaednicko%20strucni/Prevozni%20sretstva.pdf*), “to explain the foundational terms in the technology of the road transport”, “to know the processes of transport in the freight traffic” (*http://arhiva.csoo.edu.mk/images/stories/programi2010/Soobrakajna%20struka/tehnicar%20za%20transport%20i%20spedicija/programi%20II%20godina/Tehnologija_na_paten_transport.pdf)*, “ to know the placement of the combined transport in the traffic system”, “to know the technologies of the combined transport” (*http://arhiva.csoo.edu.mk/images/stories/programi2010/Soobrakajna%*

20struka/tehnicar%20za%20transport%20i%20spedicija/TTS3/3%20-%20kombiniran.pdf).

-There is one educational goal in the teaching book on the level of category evaluation:" to evaluate the effect of the usage of pallets and containers in the transport and the distribution of goods" (*http://arhiva.csoo.edu.mk/images/stories/programi2010/Soobrakajna%20struka/tehnicar%20za%20transport%20i%20spedicija/TTS3/3%20-%20kombiniran.pdf)*.

considering the traffic educational profile in the **secondary school books,** only the cognitive educational goals are listed , what means that the contents of the school books are primarily focused on realization of the cognitive goals. The things which should be learned by students are defined on taxonomic way, by using the verbs: to know, to define, to make differentiation, to classify *(Постолов Љ. и Димовски С. (2011). Технологија на патен транспорт- за втора година сообраќајна струка, МОН, стр. 2, http://www.e-ucebnici.mon.gov.mk/pdf/18_Tehnologija%20na%20paten%20transport%20za%20II_MAK_PRINT.pdf).*

The educational goals in some books are not implicit, but according to the didactic parts used in the books it could be seen that the contents of the books are focused on realization of the cognitive goals *(Кожуваровска Г. (2014). Безбедност и регулирање на патниот сообраќај- за трета година сообраќајна струка, МОН, http://www.e-ucebnici.mon.gov.mk/pdf/Bezbednost%20i%20reguliranje%20na%20patniot%20soobrakaj_III_Mak_PRINT.pdf).* In some school books it is implicit what the student should learn, but it is done without using the taxonomy. (Example: "About the types of payment systems and their characteristics) *(Постолов Љ. (2014). Организација на патниот сообраќај- за трета година сообраќајна струка, МОН, стр. 74, http://www.e-ucebnici.mon.gov.mk/pdf/Organizacija%20na%20patniot%20soobrakaj_III_redoven_izboren_MK_PRINT.pdf).* In some other school books, under the topic "questions for reminding" *(Ристиќ Ц. и Ристиќ М. (2010). Технологија на патен транспорт- за трета година сообраќајна струка, МОН, http://www.e-ucebnici.mon.gov.mk/pdf/31_Tehnologija%20na%20paten%20transport_III_MAK_PRINT_WEB.pdf)*, "questions for checking the knowledge" *(Стојиќ Г. и Диманоски К. (2010). Комбиниран транспорт- за трета година сообраќајна струка, МОН, http://www.e-ucebnici.mon.gov.mk/pdf/Kombiniran%20transport-3-MK-PRINT_web.pdf)* there are listed the questions primarily focused on the cognitive aspect of the student learning. In some other school books, the authors cited the educational objectives of the curriculum. It can be seen there is one affective educational objective “To develop the sense and achieve habits for neat, fast and exact realization of the task”, a goal which is not taken into account in the school book *(Каракачанов А., Шопов Т. и Стојиќ Г. (2010). Комбиниран транспорт- за четврта година сообраќајна струка, МОН, [http://www.e-ucebnici.mon.gov.mk/pdf/Kombiniran%20transport-4-MK-PRINT_web.pdf).](http://www.e-ucebnici.mon.gov.mk/pdf/Kombiniran%20transport-4-MK-PRINT_web.pdf)*

Didactic-methodological apparatus in the school books are dominantly defined, as it is previously mentioned, as: “questions for reminding”, “questions for checking the knowledge”, “questions for repeating” etc. There are pictures and schemes in the school books which are not properly followed with the didactic-methodological apparatus. This shows that in the analyzed school books it is necessary to improve the quality of the realization of the proposed educational goals, and to facilitate teachers’ work achieving the proposed and missing affective and psychomotor goals. This will allow teachers to connect the cognitive educational goals with those connected with emotions, feelings, the life and the social development of students.

In the official document **Occupational standards** *([http://csoo.edu.mk/pocetna/standardi/standardi-na-zanimanja/soobrakaj-transport-skladiranje/)](http://csoo.edu.mk/pocetna/standardi/standardi-na-zanimanja/soobrakaj-transport-skladiranje/)* it can be found occupation such as operator for transport logistics, operator for transport, driver-instructor, crane operator, etc. In the description of the mentioned occupations there is nothing related to the occupations: driver of the vehicle, assistant of the driver, assistant of the professional driver etc.

Discussion

The *analyses of the primary school official documents* in which the educational objectives are elaborated lead us to the following perceptions: The Society as a subject in the primary education curriculum includes objectives connected to the transport and the traffic; only in the first three grades of the nine years primary education curriculum it can be found the educational objectives related to some traffic and transport competences of students; The dominant educational objectives in these grades are about traffic means and their characteristics; Cognitive educational objectives are dominant in the curriculum; The affective and psychomotor are “forgotten” during the conceptualization of the curricula; The term “transport” is not mentioned on any level of educational objectives, goals and aims; According to the educational objectives for the subject Geography we can only suppose that students will develop their needs for traveling; There are no cross-curricular educational objectives related to the transport and the traffic which can be used by teachers ; There is no “horizontal” and “vertical” continuity in adoption of the objectives related to the transport and the traffic- after the 4th grade the transport and traffic are missing in the curriculum. There is no possibility for students to attend and choos a profession related to transport and traffic.

The *analyses of the secondary school official documents* in which the educational objectives are elaborated lead us to the following perceptions: There is vocational three years secondary education in which doesn’t exist the driver profile or some other profiles related to the transport and the traffic in general. Subjects which are in the focus of our research are only in the curriculum for the educational profile Auto mechanic and Machine operator for transmission of materials. For the realization of the education goals the number of hours of classes per week is very modest as it is the number of school years for teaching and learning of those subjects; The four years secondary vocational school closely connected with the transport and the traffic is the educational profile Traffic/ Traffic; transport and storage consists of four compulsory modules and one optional module. The terms of that modules and the their essence are only “games of words” without making the professional diversification of the profiles; Optional modules within all of the profiles are the same, which is in opposite with the idea for election of the subjects according to the specific profile or the specific needs or interest of each of the students; The modules in the educational profile Traffic/ Traffic, transport and storage provide opportunitites to each student to continue the appropriate higher education study programmes. There is no specific and concrete educational program or module which lead to the profession “professional driver” or similar; There is no module or subject in the general secondary education curriculum related to the transport and the traffic; It is allowed according to the roles for studying the students who finished general secondary education to transfer to the university study programmes, even though they didn`t pass the curriculum related to transport and the traffic.

Referring to the *analyses of the subject programmes in the secondary education curriculum,* the educational goals are defined according taxonomy, but they are defined as classroom activities which should be realized during school classes. The analyses shows that: the cognitive aims are dominant; a small number of aims contain the term transport; teaching about and for the traffic and the transport depends on the teacher; it is not regulated by law or the character of the curricula. The affective and psychomotor aims about the transport and the traffic are not included in the subject curricula. The goals about the transport and the traffic are placed only in the curricula of the educational profile Traffic/ Traffic transport and storage.

Conclusion

The results from the research give us arguments to conclude that: the transport and the traffic as terms and as essence are not sufficiently represented in the official documents and curriculum of primary and secondary education in the Republic of North Macedonia; there is no vertical continuity in the educational system which will develop permanent and intensive interest of students about the transport and traffic; when the educational objectives are mentioned, they are defined as cognitive; school books are structured, and designed focusing on development of the cognitive aspect of students; the educational system and the society don`t recognize formal learning and teaching which lead or prepare students to become “professional driver”, etc.

The unique and coordinate action of the experts in the traffic and transport, experts of related disciplines, educational experts in the field of pedagogy and didactics, as well as practitioners and teacher can create students positive attitudes, knowledge and behavior for transport and the traffic. It will create different foundation for learning and teaching traffic and transport, the foundation in which cognitive, affective and psychomotor objectives will be treated and realized equally. The research result confirms the general hypothesis: Cognitive objectives about transport and traffic have not been sufficiently represented in the primary and secondary school curriculum although they dominant in relation to the affective and psychomotor objectives of the curriculum.

According to the results, our experience and expertise, we are free **to propose**: that we should think how to enhance continuity of the secondary school as form of post-secondary formal education which lead to the profile “professional driver”; to implement some optional subjects in the general secondary education curriculum related to the transport and traffic; whereas in the primary education curriculum, to create vertical road for maturation of the ideas, attitudes and knowledge about transport and traffic (goal, subject or content oriented connection); to create and improve the processes of professional and career orientation which leads to the driver profession; to create the educational profile of a professional driver; to create the educational profile of an assistant driver which will diversify the educational offer and create a step forward to the professional driver; the educational objectives, goals and aims related to transport and traffic should be established equally for the student’s cognitive, affective and psychomotor development ; the didactic-methodological apparatus in school books should be enriched with other relevant, modern and appropriate exercises, examples, tasks etc.; the transport companies can be involved in realization of school practice and the exercises planned within the curriculum. The educational activities should be supported with the possibilities for financing, supporting and scholarship for students on educational profiles connected with the transport and the traffic. Some module should be found for releasing transport companies which support traffic and transport students from taxes.

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SESSION 5
(Educational Sciences-Didactics and Methodology)

LEISURE TIME RESEARCH AND PEDAGOGY OF LEISURE TIME

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Abstract

The definition of leisure as a counterpart to labor was expanded as a window into the time used to renew the workforce. In the meantime, leisure time has expanded enormously and with its multifaceted occupation opportunities it takes on a self-evident position in the life of modern man. Free time is no longer exclusively associated with renewal and relaxation, but with concepts such as alternation, experience, liberation and self-development. Positive definitions of leisure time strive to respond to these developments by defining the content of leisure as an autonomous social system of action that is oriented beyond the narrow perspective of time. Thus, leisure time becomes an area of action, which is no longer restricted only negatively by work, but has its own creative characteristics. The concept of leisure time science to date has not been established either internationally or in the German-speaking world. However, experts consider such an establishment necessary and think that it has already been delayed. Instead of a term, synonyms such as leisure time research, leisure time theory, leisure time studies, etc. are commonly used. Leisure time research, as a part of leisure time science, has its place in partnering commercial institutes with ministries, associations, authorities and other public services as a socio-technical field of work. Nevertheless, in the context of university research, the science of leisure time appears both in the Federal Republic of Germany and in many other European countries only as a sub-discipline and generally falls under the areas of Pedagogy of Leisure time, Sociology, Economics Science, Geography or Psychology.

Keywords: *Pedagogy of Leisure time, Leisure time research, Science of Leisure time.*

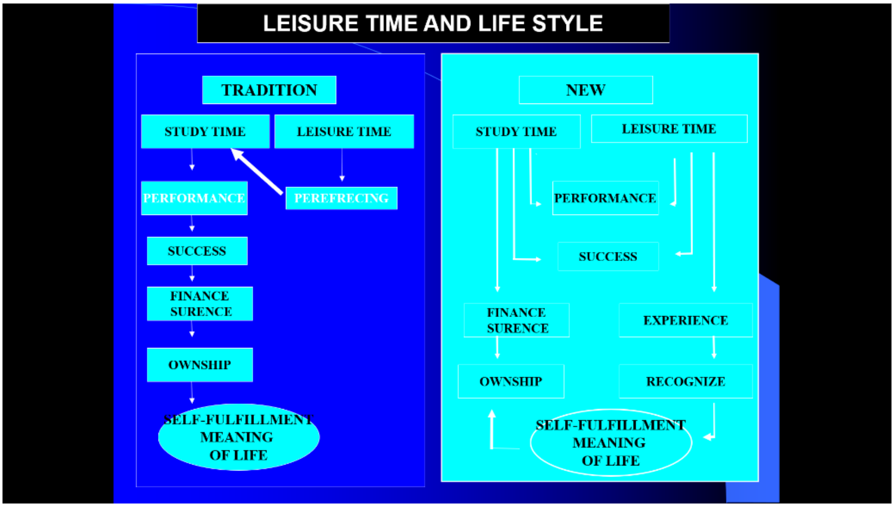
Leisure Science

The definition of leisure as a counterpart to labor was expanded as a window into the time used to renew the workforce. In the meantime, leisure time has expanded enormously and with its multifaceted occupation opportunities it takes on a self-evident position in the life of modern man. Free time is no longer exclusively associated with renewal and relaxation, but with concepts such as alternation, experience, liberation and self-development. Positive definitions of leisure time strive to respond to these developments by defining the content of leisure as an autonomous social system of action that is oriented beyond the narrow perspective of time. Thus, leisure time becomes an area of action, which is no longer restricted only negatively by work, but has its own creative characteristics. The Leisure Science coming from: 1. Pedagogic, Education Science and 2. Leisure studies (Opaschowski 1996, 14).

The pedagogic of Leisure time is a bridge between school education and social pedagogic and social medicine, health Education (body, emotional and mental health, recreation, rehabilitation etc..,). Today leisure Pedagogy is seen as a bridge between social Pedagogy and school Pedagogy. The school appears to be unable to offer a total systematic knowledge - teaching for efficient behavior in leisure time. Leisure pedagogy must therefore act as a bridge between social and school pedagogy and as a supporter of the creation of communicative, sporting, social, ant consumer and cultural knowledge. The pedagogy of leisure begins from the principle of self-determination: 1. with this student can learn that one can relatively fearlessly and without the feeling of competition communicate and play, 2. with it students feel free from pressure to perform and produce, 3. With it, students know their student and personal situation and organize their own interests.

Along with the change of values, which is noted in society, there is also a new perception of free time and life in general (Picture 1). ¨Thus the individual finds self-realization and the meaning of life from free time, his experiences in it and the recognition he finds from its use (Thoidis, 2000: 13). In our time it is now widely argued that human action and communication take place less in the domain of work and more in the domain of leisure (longer vacations, delayed starting of work, early retirement, reduced working time, five-day, limitation of school time). The job is subject to a new visa. It is not only intended to cover the vital needs but also to satisfy the needs of free time. The center of existence of life is not only work, as in the past, but also free time ("reversal of social times" (Koroneou, 1996: 46).

Areas of student leisure time are: tourism, sport-play, culture, media, voluntary, religious work and political engagement, consume, entertainment (Opaschowski, 1980: 27).

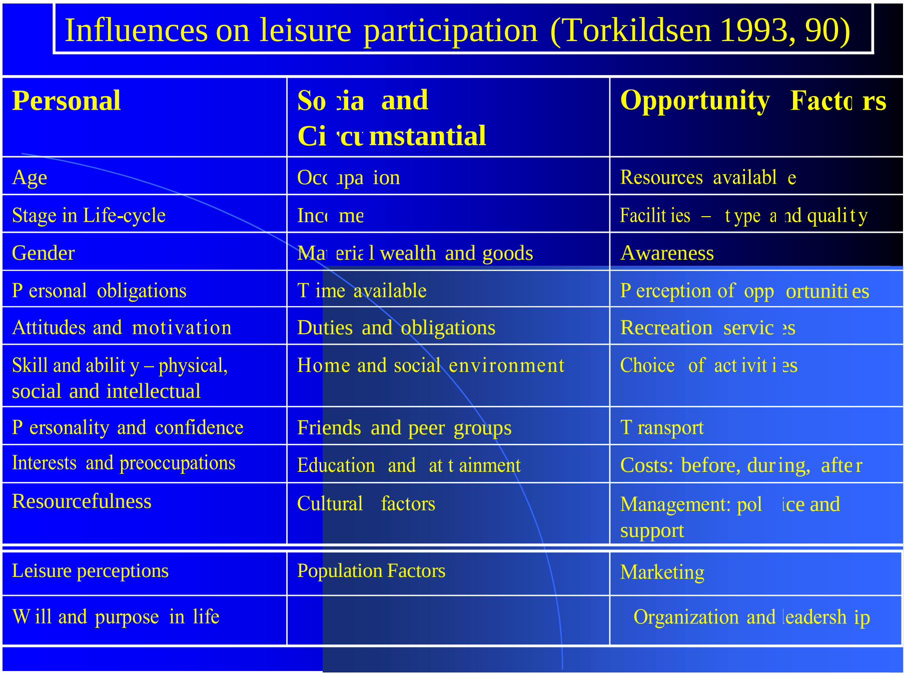

LEISURE TIME AND LIFE STYLE
TRADITION
STUDY TIME
LEISURE TIME
PERFORMANCE
PEREFRECING
SUCCESS
FINANCE SURENCE
OWNSHIP
SELF-FULFILLMENT MEANING OF LIFE
NEW
STUDY TIME
LEISURE TIME
PERFORMANCE
SUCCESS
FINANCE SURENCE
EXPERIENCE
OWNSHIP
RECOGNIZE
SELF-FULFILLMENT MEANING OF LIFE

Picture 1: Tradition and new lifestyle (McCann/Erickson 1982, 35).

Whereas in the past it was the occupation that characterized social status in society, today certain leisure activities are becoming status symbols. Today, leisure time increasingly presents itself as a characteristic of quality of life. Leisure time includes not only pleasure, entertainment and switching off and recovering from work, but also education, political and social engagement and health-oriented behavior. The concept of leisure in relevance to the people's understanding of what leisure means and is for them - has changed significantly in recent years. Today, leisure is what the individual understands it to be and this can be very different from each other and very complex (Tokarski, 2000). This subjective appreciation of leisure time and the large investments by the people in their leisure time have increased enormously. This time has changed from predominantly pure recreation and consumption to a time focused on experiences and enjoyment, with ever increasing spending on leisure activities and goods, searching for unique stimuli, and challenges and demands. Today, leisure is the space in which people develop lifestyles as well as new dimensions of order for everyday life and seek self-fulfillment (Tokarski, 2000). This does not always happen without stress. At first glance, more free time seems to increase individual satisfaction and reduce stress. But recent studies from the USA and Germany show that people feel happy to certain - subjectively defined - amount of free time; however, if people perceive their free time as too much free time, they become unhappier and more stressed again (Die Welt, 2019).

Another interesting example comes from the portal for winter sports in schools of the Institute of Winter Sports and Ecology of the German Sports University of Cologne. Institut fuer Europaesche Sportentwicklung und Freizeitforschung knowledge transfer https://www.dshs-koeln.de/institut-fuer-outdoor-sport-und-umweltforschung/wissenstransfer/.

The online platform "Wintersport SCHOOL" is a source of inspiration, guidance and collection of material for a seasonal cross-border education of children and adolescents in winter sports at school. The portal is aimed at teachers and students who wish to participate fully in the teaching materials for winter sports lessons and organizational assistance for the preparation and implementation of winter sports days, material supplies, and legal advice and safety measures. The overall objective of the project is to generate enthusiasm for active winter sports, facilitate the work of teachers in schools and motivate students to engage in long-term sports activities in the snow. Therefore, with the help of the platform, a uniform national theme of winter sports at school is sought. In our online portal, you will find in a comprehensive catalogue of exercise collections and training programs both practical and interdisciplinary cross-curricular teaching content. Thanks to the responsive design, this content can be retrieved at any time via various mobile devices, such as smartphones, tablets and PCs. This ensures a comfortable and user-friendly application of the web portal (https://www.wintersport-schule.de/) (Roth et al., 2016). The needs of the students for leisure time are: 1. recreation, relax, wellness 2. balance, enjoy 3. knowledge, education 4. know the self, select experience 5. communication, social contacts 6. adaptation, 7. participation, 8. productivity, creativity.



Influences on leisure participation (Torkildsen 1993, 90)

Personal	**Social and Circumstantial**	**Opportunity Factors**
Age	Occupation	Resources available
Stage in Life-cycle	Income	Facilities – type and quality
Gender	Material wealth and goods	Awareness
Personal obligations	Time available	Perception of opportunities
Attitudes and motivation	Duties and obligations	Recreation services
Skill and ability – physical, social and intellectual	Home and social environment	Choice of activities
Personality and confidence	Friends and peer groups	Transport
Interests and preoccupations	Education and attainment	Costs: before, during, after
Resourcefulness	Cultural factors	Management: pol ice and support
Leisure perceptions	Population Factors	Marketing
Will and purpose in life		Organization and leadership

Picture 2: Influences on leisure participation (Torkilden, 1993: 90).

At the social research there is the term of theory “the long Arm of the Job”. Today there is “the long arm of the leisure”. The limits between work time and leisure time are going more and more flexible. The leisure time is subjective in the mind of person (Opaschowski 1980, 27). It is interesting in the forms of leisure time of students: daily (5.5 hours), weekly (weekend from 8 hours to 10 hours), annual (vacation, holidays), block of leisure time (united phases of free time) (12 hours), Free time in the life phase (free semester, educational leave), Free time of age (resignation time, retirement time), Free time by imposition (underemployment, disability, pandemic).

Basic principles of pedagogic of leisure time are the following: 1. terms of participants, 2. conditions of participation, and 3. possibilities of participants.

Leisure research from aspect of Education (research-oriented) **Erziehungswissenschaftliche FF**	**Pedagogy of free time (application-oriented)** **Paedagogik der freien Lebenzeit**
Research in Tourism (Theory: criticism of mass tourism, knowledge of transport, analysis of travel and holidays)	**Education of leisure time** • for the family • for kindergarten • for school, for University
Media research (Theory: life with media: TV, Video, Written press, PC multimedia: Analysis and forecasting)	**Leisure education** • for the pupils, • for teenager, • for the adult, • for the old people.
Research of culture (Theory: Research of culture and life styles, classical cultural institutions, culture in cities, conferences)	**Knowledge of leisure - Leisure studies** • Learning areas Education, • Studies Further training
Sport research (Theory: Motivation, leisure sport - mass sport, sport as a sense of life, sport trends, future of sport)	**Didactics of leisure** • Animation of leisure, • Leisure counseling, • Leisure scheduling
In-game research (Theory: Motivation for play, possibilities, space, play instruments, games, etc.)	**Leisure time employment** • Cultural employment, • Employment in the media, • Social employment
Consumption survey (theory: Economy of leisure, consumer roles, consumption of supply and experiences, consumption priorities)	**Organization and Management within the fields of leisure pedagogy** • Management / Project • Development Advertising/ PR • Market Research

Changing values survey
(Theory: Change of values, change of society, interaction of work and leisure, social and pedagogical evaluation technique, international research of trends and future, research of quality of life)

Picture 3: Systematization of the Pedagogical Science of Leisure time (Opaschowski, 1996: 15).

The characters of motivation are: 1. Social ecological animation 2. Material animation (Infrastructure, equipment) 3. Animation media (advertising, posters) 4. Personnel animation, motivation (discussion with the interested participants and the uninterested participants).

The forms of Opportunities of participants are:

- Possibility of choice: between various possibilities and possibility change of activities.
- Possibility of decision: Possibility participation in decision, (paralysis of analysis for decision); Possibility of undertaking initiations; Supply of students' self needs and wishes; Strategy for development of initiatives.

The methodic of pedagogic of leisure time are: 1. Consultancy – information, - Information and consultancy in relation to offered activities; 2. Communicative animation: - Planning animated programs, - Animation and support activities Leisure time for target groups; 3. Participative planning: - Support of initiatives (Support parties), - Support of cooperation with authorities, federation, Clubs, - Co-ordination with other authorities, Organizations etc. common offers services.

In the future, no leisure occupation will do without pedagogical qualifications. The Federal Association of Pedagogical Leisure Professions and the Commission for Leisure Pedagogy of the German Society for Educational Science agree in this assessment. The reasoning is obvious: In the future, increased demands will have to be made on all those who work in the leisure sector in terms of professional ethics and professional competence. Also, no leisure occupation will be able to do without a basic knowledge of pedagogy and didactics, psychology and sociology. The expanding services in the leisure sector go hand in hand with a growing need for qualified specialists, especially in the areas of tourism and mobility, cure and rehabilitation, sport and culture, but also in problem areas such as unemployment, early retirement or environmental protection. A growing commercialization and marketing of leisure time is directly linked to the expansive development of leisure time, from which, on the one hand, financially weak groups are largely excluded and, on the other hand, socially oriented leisure content including cultural work, further education and political education threatens to fall by the wayside World Leisure Organization (WLO) and European Leisure and Recreation Association (ELRA).

Leisure time research as a spectrum science:

Thus, leisure time becomes an area of action, which is no longer restricted only negatively by work, but has its own creative characteristics. The concept of leisure time science to date has not been established either internationally or in the German-speaking world. However, experts consider such an establishment necessary and think that it has already been delayed. Instead of a term, synonyms such as leisure time research, leisure time theory, leisure time studies, etc. are commonly used. Leisure time research, as a part of leisure time science, has its place in partnering commercial institutes with ministries, associations, authorities and other public services as a socio-technical field of work. Nevertheless, in the context of university research, the science of leisure time appears both in the Federal Republic of Germany and in many other European countries only as a sub-discipline and generally falls under the areas of Pedagogy of Leisure time, Sociology, Economics Science, Geography or Psychology (Picture 3). The concept of leisure time science to date has not been established either internationally or in the German-speaking areas. However, experts consider such an establishment necessary and think that it has already been delayed. Instead of a term, synonyms such as leisure time research, leisure time theory, leisure time studies, etc. are commonly used. This is in particular due to the difficulty of unambiguously and precisely defining the subject of the research. Thus, in the German-speaking world different concepts are confused with one another, such as leisure time, recreation, rest, entertainment, education, sports, culture, media, tourism, etc. In view of current social developments, as well as in relation to the European market and the widespread changes in eastern and middle Europe, and in view of the expected developments in the field of leisure time, until now, the possibilities for predicting or estimating trends in the field of scientific methodology have not been sufficiently developed. Similar techniques, e.g., in the form of special analysis procedures (time series analyses) or scenario techniques, so far have been used in exceptional cases.

The development of appropriate specialized tools or the unbiased acceptance and adaptation of appropriate methods by neighboring disciplines is still essentially at a prime stage as regards leisure time science and is a specific task for the coming years. Due to the special nature of leisure time science as a spectrum science or an inter-temporal science, many methodical applications have been applied in the past that have their origins in the fields of Pedagogy, Social Sciences, Social Psychology, Science of Culture, Media Science, Sports Science, etc. (Zarotis et al., 2011). At this point, time budget research is - especially internationally - a particularly important part of empirical leisure time research. Thus, in previous years it has been possible to gain basic knowledge about time expenditure (extent) and time consumption (use) in comparable industrial companies (Opaschowski, 2008).

Time budget studies on the one hand have the advantage of providing a useful empirical basis in the field of leisure time, but at the same time they have a relatively multifaceted character. In view of this theoretical and methodical lack of classical time budget searches, in recent years a new theoretical proposal has emerged, which by constructing 'time templates' (i.e., the time combination and the individual evaluation of certain activities and successive activities) complements the objectively found ways of behavior with a subjective and individual evaluation of these activities. Thus, as opposed to what was common so far, activities are not just registered for a certain period of time, but rather formative constructs are developed, which codetermine as ideal or real logical, cognitive representations, innate, time-socially acquired or motivated manifestations of the actions of people, organizations, and legal entities in all aspects of temporal structure (Dollase, 1995; Dollase et al., 2013).

Stronger scientific cooperation by European leisure time researchers would help improve this situation. Various efforts, such as e.g., proposals to set up European or international research networks

(European Leisure and Recreation Association-ELRA or World Leisure and Recreation Association-WLRA) contribute to the reduction ofthese shortcomings. Communication and co-operation between European leisure scientists can be greatly improved by special meetings of a suitable form. In the last 50 years or so, since leisure timehas been established as a field of scientific practice, it has processed agreat deal of data on many different aspects of leisure, in particular leisure time behavior. There is significantly less knowledge available as regards leisure time motivation, interests during leisure time and theexperience of leisure. Since the early 1980s, the focus was mainly on quantitative and representative studies, over the last 15 years, more andmore new areas of knowledge have been opened which are being examined qualitatively: such as for specific target groups, the areas of unemployment, leisure time for the elderly, young people etc., or for specific topics, such as the environment, new media, tourism, sports, culture and leisure. Leisure time science is not yet a sector of a Faculty in any of the Universities of the Federal Republic of Germany and in the academic field it has not yet been recognized as an independent discipline. Leisure time research, as a part of leisure time science, has its place in partnering commercial institutes with ministries, associations, authorities and other public services as a socio-technical field of work. Nevertheless, in the context of university research, the science of leisure time appears both in the Federal Republic of Germany and in many other European countries only as a sub-discipline and generally falls under the areas of Pedagogy of Leisure, Sociology, Economics Science, Geography or Psychology (Zarotis et al., 2011).

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SESSION 5
(Educational Sciences-Didactics and Methodology)

DIDACTICS FOR PARENTS- STUDENT PERCEPTION ON PARENTAL NEEDS FOR DIDACTICAL KNOWLEDGE

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Abstract

The paper is focused on theoretical and empirical elaboration of the term didactics for parents. The theoretical part consists of the analyses of the contemporarymeaning and attitudes of the experts over didactical knowledge of the parents, the need of having and achieving didactical knowledge and the possible ways of practicing the achieved knowledge into processes of teaching and learning inside and outside classrooms. The empirical part starts with the methodology which is based on the research question: What is the student perception of the parental needs for didactical knowledge? Related to this question the main hypothesis is: The students believe and understand that parents need to have didactical knowledge for enlarging and improving their influence on the teaching and learning process. The sample is random, and consists of 123 students of the Faculty of Education- Bitola, North Macedonia. Calculation of the data is based on frequencies, arithmetic mean, standard deviation and the percentage. The results of the empirical research show that the students have positive perceptions, that the students believe that didactical knowledge of the parents is crucial and very important for improvement of the *processes of teaching and learning, and that the parents need to have such knowledge.*

Keywords: *Curriculum, Didactical knowledge, Life-long learning of parents, Student evaluation, Teaching Strategies*

Introduction

It is well known fact that pupils learn at school, and that the school they attend is their primary place of knowledge. Some of the parents, at least, believe that their main responsibility as far as the education of the children is concerned is that the parents should help their children get dressed and send them to school where they are expected to acquirenew knowledge. However, the schooling system around the world disagrees with this believe and supports the notion that parents shouldbe more involved in the education of their children by choosing a school and helping with the homework (Helen Proctor, 2020), as well as other kind of parent involvement which differs from system to system. To support this statement about the parents' involvement in theeducation of their children is the fact that the number of countries around the world who support homeschooling is growing. This is something that is seen in many countries like France, Italy, the Netherlands, the United Kingdom, the Czech Republic, to name few, where home education is allowed since 2005, (Pohnětalová, 2017) (European Education and Culture Executive Agency, 2018), and "compulsory education is not a synonym of compulsory school attendance". (European Education and Culture Executive Agency, 2018) Even though the process of learning is approved and monitored, in many countries it is required for the parents to guarantee that their children will receive proper instruction. (European Education andCulture Executive Agency, 2018) However, the didactical knowledge of parents to be able to get involved in the education of the children isnot defined. (Pohnětalová, 2017)

The number of children around the World who are not reaching their development potential reaches around 250 million, and that around 36.8% of 3- and 4-year-old children do not have the basic cognitive and socio-emotional skills. (Maureen Black, 2017)

Whether or not parent homeschool their child doesn't mean that parents should not acquire any didactical knowledge in order to participate in the child's development. Research conducted around the world based on the development of children proves that there is an urgency for the parent’s involvement and support for the development of the children, which also improve the child’s development and outcome when they start going to school, (Maureen Black, 2017) and even when they reach adolescence. (Butterfield, 2020)

The school teachers and the parents are the educators for the children, and they can not focus on the development of the children isolated and without constant collaboration and mutual understanding.(Domínguez-Medina, Morán-Morán, & Silva, 2022)

Parents around the world agree that they should not only send their children to school, but they should also work and learn how to support their development and success, and that they should take this responsibility seriously. (Helen Proctor, 2020) However, another study suggests that even though parents might agree on the importance of their inclusion in the education of their children, around 1/3 of the invited parents agreed to participate in some activities for parental involvement (educational sessions for example), and most of them dropped out later on. (Anke H. Verhees, 2020) So, the pedagogical knowledge of the parents, the little communication between parents and teachers, and the lack of responsibility and commitment distracts children from their school tasks (Espinoza, Quiñonez, & Zambrano, 2023) and that decreases their chance for development and acquiring knowledge.

Iliev D. in his book “Didactics for parents” provides a wealth of ideas and approaches related to the concepts of parent as didactic. According Iliev, the Didactic is necessary for parents to enable "...increasing and improving parents' participation in the teaching and learning process...", “"...ensures that every parent can get, find and find answers to didactic questions about the functioning of the educational system, the functioning of the school, the professional actions of the teacher, the teacher's learning, the student's learning, etc." (Iliev, 2021, pp. 13, 14).

Method

The empirical part starts with the methodology which is based on the research question: What is the student perception of the parental needs for didactical knowledge? Related to this question the main hypothesis is: The students believe and understand that parents need to have didactical knowledge for enlarging and improving their influence on the teaching and learning process. The sample is random, and consists of 123 students of the Faculty of Education- Bitola, North Macedonia. Calculation of the data is based on frequencies, arithmetic mean, standard deviation and the percentage.

Results and analyses

By selection of one of the given answers related to believe that parents should have didactical knowledge, the student teachers expressed their attitude. According to calculation of the frequency and percentage, we can see that: (See Table 1)

Table 1. Agreement of the students teachers on the need for didactical knowledge among parents

	f	%
I completely disagree	13	10.569
I mostly disagree	11	8.943
I mostly agree	7	5.691
I completely agree	92	74.797

Around 75% of the students completely agree with the statement that parents should have didactical knowledge. In addition, the percentage of students who disagree with the statement is around 11%. In conclusion, around 81% of the students believe that parents should possess didactical knowledge.

By selection of one of the given answers (*I completely disagree*, *I mostly disagree*, *I mostly agree* and *I completely agree*) the students presents their opinion for the necessity of parental didacticalknowledge for a successful implementation on the parental role at home. According to calculation of the frequency and percentage, we can see that: (See Table 2)

Table 2. Didactical knowledge is crucial for the role of a parent at home

	f	%
I completely disagree	67	54.472
I mostly disagree	15	12.195
I mostly agree	35	28.455
I completely agree	6	4.878

Contrary to the results from the previous question, around 66% of the students completely or mostly disagree with the statement. Around 33% of the students mostly or completely agree that it is necessary for a parent to possess some didactical knowledge in order to successfully implementation of the role as a parent.

The students were asked about their opinion for the necessity of parental didactical knowledge for the implementation of the parental role at school. According to calculation of the frequency and percentage, we can see the results in the Table 3,

Table 3. Didactical knowledge is crucial for the role of a parent at school

	f	~~%~~
I completely disagree	22	17.886
I mostly disagree	6	4.878
I mostly agree	16	13.008
I completely agree	79	64.228

It can be seen that around 23% of the students disagree with the statement that parent's didactical knowledge is necessary for the implementation of the parental role at school. On the other hand, around 77% agree with the statement, whether completely 64% or mostly 13%.

It was important for us to provoke the students about their opinion for the quantum of didactical knowledge for both parents. The student answers to the sentence: *I believe that fathers should possess more didactical knowledge in comparison to mothers*. (See Table 4)

Table 4. Fathers should possess more didactical knowledge

	f	%
I completely disagree	111	90.244
I mostly disagree	5	4.065
I mostly agree	3	2.439
I completely agree	4	3.252

The result of this statement is almost unanimous with around 94% of the students completely or mostly disagreeing to the statement. They do not believe that the father should possess more didactical knowledge than the mother. Only around 6% of the students agree with the statement, which is 7 students contrary to the 116 who disagree with the statement.

It was also interesting for us to know what kind of didactical knowledge needed for the parents for development of different aspect of their children, according the opinion of the students. They have been asked to mark one of the three possibilities (It is not necessary, It is sometimes necessary, It is necessary/ needed) for each statement. The results are given in a Table 5.

Table 5. The need of didactical knowledge of parents needed for the development of their child

	It is not necessary	It is sometimes necessary	It is necessary/ needed	χ	N	σ
Cognitive aspect of the development of their children	4	8	111	2.870	123	0.422
Affective aspect of the development of their children	19	68	36	2.138	123	0.654
Psychomotor aspect of the development of their children	92	15	16	1.382	123	0.704

Most of the students agree that the didactical knowledge the parents possess is necessary and even needed for the cognitive aspect of development of their children. As for the affective aspect this knowledge is sometimes necessary, according to most of the students. On the other hand, students do not consider the didactical knowledge of the parents to be necessary for the psychomotor development of their children.

By selection of one of the given numbers from 1 to 5 which means selecting the value for each, the students express their opinion for the sentence: *I believe that the didactical knowledge which is necessary for a successful parenting is related to.* The results are in a Table 6.

Table 6. Didactical knowledge necessary for a successful parenting

	1	2	3	4	5	χ	N	σ
The objectives of teaching	15	15	6	11	76	3.959	123	1.500
The curriculum	7	6	11	78	21	3.813	123	0.966
Teaching plan	7	10	6	87	13	3.724	123	0.957
Lesson preparation	6	24	46	32	15	3.211	123	1.046
Teaching methods	16	4	24	56	23	3.537	123	1.212
Forms of teaching	6	31	45	23	18	3.130	123	1.097
Teaching media	3	4	21	59	36	3.984	123	0.902
The organization and articulation of the lesson	56	23	23	14	7	2.130	123	1.262
Didactic principles	4	4	21	80	14	3.780	123	0.812
Teaching and learning strategies	9	21	0	3	90	4.171	123	1.430
Students' homework		5		7	111	4.821	123	0.625
The forms of cooperation of the teacher and the parent	4	16	2	23	78	4.260	123	1.181
Role of the student in teaching	49	43	0	15	16	2.236	123	1.415
Characteristics of the modern teacher	6	49	4	49	15	3.146	123	1.208
Assessment of student learning outcomes	1	11	0	25	86	4.496	123	0.940
Feedback from the teacher	14	17	4	77	11	3.439	123	1.177
Forms of cooperation between parents	2	0	0	0	121	4.935	123	0.506

Legend: 1- I completely disagree; 2- I mostly disagree; 3- I can't decide; 4- I mostly agree; 5- I completely agree

The results shows that in general, students agree that the didactical knowledge which is necessary for a successful parenting is related to all aspects of teaching, but mostly to the Forms of cooperation between parents (121 students), Students' homework (111 students), Teaching and learning strategies (90 students) and Assessment of student learning outcomes (86 students). On the other hand, they disagree on the necessity for a didactical knowledge related to the aspects of the organization and articulation of the lesson (56 students) and the role of the student in teaching (49 students). Around 46 i.e. 45 students are not sure about the importance of the didactical knowledge to the aspect of lesson preparation i.e. the forms of teaching.

Discussion

According to the results of the research, students believe that parents should possess didactical knowledge, but they disagree that the father should possess more didactical knowledge than the mother. In addition, they agree that the didactical knowledge is necessary for the parents to fulfill their role as parents at school, but they disagree that didactical knowledge is crucial for the role of a parent at home.

They agree that the didactical knowledge is fully necessary for the cognitive development of the children, and not so much on the affective development. However, they believe that the possession of the didactical knowledge is not necessary for the psychomotor development of the children.

The didactical knowledge parents should possess would also be needed in the process of the teaching of the child, especially when it is concerned with the homework and with the collaboration between parents and teachers. Also, according to the students this knowledge is beneficial in relation to the teaching and learning strategies and the assessment of the learning outcomes. On the other hand, this knowledge would have no connection to the organization and articulation of the lesson, and to the other aspects for which the teacher is responsible.

Conclusion

Throughout the world, parents and teachers accept the fact that a collaboration and mutual understanding and respect is crucial for the development of the children. However, this is far of being achieved. Parents still play some minor role in the children's education, and they let teachers be responsible for the knowledge the children acquire.

In addition, there is a lot of research done in the past decade which indicates the importance of parental involvement in the education. And this research has proven the same, because the students who took part in the research believe that the parents' involvement matters a lot in every aspect of the child's development. However, they all agree that there are some issues such as the didactical knowledge the parents possess. If the parents don't know how to help the child with the homework, or how the educational system actually works, this will manifest in the child's interest to attend school and to learn new things. According to some of the research mentioned above, parents understand that they should be more involved in the education of the child, but they also need to know how. Therefore, a didactical knowledge is crucial for the parental involvement in the educational process of the child.

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SESSION 6
(Psychology and Sociology)

INTERCULTURALITY AND DEMOCRACY: COEXISTENCE OF FORMALLY EDUCATED STUDENTS WITH STUDENTS FROM MIGRANT BACKGROUND, THROUGH OPERATIONS AND PROJECTS OF NONFORMAL EDUCATION

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Abstract

The present study deals with the presentation of educational actions aimed at strengthening empathy, respect, acceptance, tolerance, awareness of diversity as well as the multicultural modern school, through original activities of nonformal and informal education for democracy and human rights. Looking for ways to exploit creative actions and programs beyond the framework of formal education for democracy, as well as ways to manage otherness (distinctiveness) in the modern school, we propose educational actions for cooperation and communication of students with different cultural backgrounds. The action took place at the Nikiforos Lower High School with Senior High School Classes (Nikiforos High Scholl from now on), in Drama, Greece. Seventeen (17) students with a refugee background from the Reception Classes operating in two (2) Lower High Schools at the town of Drama visited and interacted in educational activities with the students of the Nikiforos High School. The research methods used for data collection were informal participant observation and interviews with participants. The results of the action showed that there was a change in the attitude of several students of the Nikiforos High School regarding the perception they had of the "foreigner", the refugee and his role in Greek society. Accordingly, the students with a refugee background felt accepted andequal through the actions they carried out together with the students of Nikiforos High School.

Keywords: *democratic school, informal education in democracy, intercultural education*

Introduction

The reason for the planning of the action was the realization that the multicultural societies of the modern world are now a reality to which the school must adapt and incorporate modern education methods. Students with different cultural backgrounds are invited to coexist in a common school environment and develop social skills and attitudes through education for democracy and otherness. As the phenomenon is global, organization, information and infrastructures for the reception of immigrants and refugees are required from the states. For the integration and inclusion process to be successful, mutual respect for the laws of states and recognition of human rights is also required (UNESCO, 2009). Through the teaching of the qualities of the citizen and the investigation of different identities (race, gender, class, sexual orientation) the students will be led to understand the otherness but also the common nature of the human being. Through the field of education in modern democratic states it is necessary to understand the concepts: tolerance, justice, equality, respect, democracy, inclusion, human rights, patriotism, cosmopolitanism and security (Banks et.al., 2005).

Education is a gradual process which brings positive changes in human life and behavior. Education can also define as "a process of acquiring knowledge through study or imparting the knowledge by way of instructions or some other practical procedure" (Passion In Education, 2019). Education goes beyond what takes places within the four walls of the classroom. A child gets the education from his experiences outside the school as well as from those within on the basis of these factors. There are three main types of education, namely, Formal, Informal and Nonformal, which are complementary and mutually reinforcing elements of a lifelong learning process. Here is going to deal with the formal and nonformal education.

Formal education or formal learning usually takes place in the premises of the school, where a person may learn basic, academic, or trade skills. Small children often attend a nursery, but often formal education begins in elementary school and continues with secondary school. The formal education is given by specially qualified teachers they are supposed to be efficient in the art of instruction. It also observes strict discipline. The student and the teacher both are aware of the facts and engage themselves in the process of education (Passion In Education, 2019).

Nonformal education includes adult basic education, adult literacy education or school equivalency preparation. In nonformal education, someone (who is not in school) can learn literacy, other basic skills or job skills. Home education, individualized instruction (such as programmed learning), distance learning and computer-assisted instruction are other possibilities. Nonformal education is imparted consciously and deliberately and systematically implemented. It should be organized for a homogeneous group. Nonformal, education should be programmed to serve the needs of the identified group. This will necessitate flexibility in the design of the curriculum and the scheme of evaluation (Passion In Education, 2019).

Theoretical framework

The assumptions we relied on to implement the action are based on the principles of the following theories.

Interculturality

In today's postmodern era, modern societies are pluralistic and multicultural. This evolution of societies can be considered a blessing and an opportunity to remove cultural differences. An opening of the new generations to the world without prejudices with the vehicle of intercultural education which should aim at education for empathy, solidarity, intercultural respect and against the nationalistic way of thinking (Mihalopoulou, 2010).

Modern pedagogy recognizes the importance of the coexistence of different cultures and alternative interpretations within a classroom in which difference is not understood as a disadvantage, but as something positive and where the different is equal to the familiar (Naku, 2008). There is a need to be sensitive to the role that education and the teacher are called to play in imparting values and standards of behavior. A double goal is needed: on the one hand, to develop the ability to understand the "different", the "foreign", and to cultivate tolerance for people with different ideologies, other religion, different racial and sexual identification, and on the other hand, the development in the new generation of orientation rules and selection criteria with some basic elements of national and cultural identity as a reference point (Xochellis, 2001).

Interculturality is understood as a process where different cultures meet, interact and cooperate mutually (Markou, 1997a, in Alkistis, 2008). In the context of the school, it is a process of interaction between people from different cultural backgrounds with the aim of transforming the school and society itself, so that all its members can express their individual and/or collective personalities while maintaining their cultural identity but at the same time enrich it with elements from the identity of the "other" (Liakopoulou, 2006).

The intercultural model perceives education as mediating the understanding of different cultures on equal terms and highlighting common points as a starting point for all cultures. The equal treatment of cultures strengthens students' perception of multicultural societies, creating transcultural identities through interaction and understanding of the different (Mihalopoulou, 2010). The recognition of the cultural specificities of immigrants strengthens social cohesion by encouraging the preservation of cultural traditions and by ethnic groups and the creation of social frameworks (Tsioumis & Tsiami, 2017).

Modern education systems must create citizens equipped with knowledge and skills that address a global labor market and multicultural environments. Acceptance and understanding of the diversity of every human being enhances humanity and noble rivalry, leads to fruitful interaction and improves the school performance of students, giving equal opportunities to all. Additionally, rapid technological development and the internet require citizens with critical thinking and maturity to avoid submission to ideologies, racist and xenophobic phenomena (Papagrigoriou, 2008).

Transformational pedagogy is a tool of intercultural education. According to Cummins, Freire, and Mezirow, students acquire knowledge through action and critical thinking through experience. A prerequisite for this is that the school should create environments of collaboration, creativity and imagination beyond the traditional approaches of the curriculum (Tsioumis & Tsiami, 2017).

Status of the Citizen

By citizenship we mean the individual's capacity to live and act responsibly in an organized social body. Citizenship can be exercised from the neighborhood, the state, to the global community. It concerns the identities that a citizen carries in a society and has two dimensions:

the legal and the psychological. The first arises from the Constitution and laws of each state, while the second covers the knowledge, perceptions, attitudes, values and behavior of the individual towards political groups, as well as the rights and duties in relation to the state formations (Argyrou, 2007; Filiadou, 2014).

The status of a citizen beyond the Greek state also extends to the status of a European citizen and the opportunity given by the European Union from a young age to participate in decision-making, in the formulation of new proposals for the future of Europe and in getting to know the administrative bodies and decision making of the Union. This is achieved through the education of students in democratic values, strategies for developing active citizenship and the various educational programs for mobility, languages and new technologies (Grundig, Comenius, now Erasmus+, etc.). Therefore, organized civil society is necessary and lends transparency to the European Union. We should not overlook global citizenship, which goes beyond national identity, without rejecting it, and transcends geographical borders. This quality refers to issues of interculturality, cultural heritage, environmental protection and humanitarianism (Sotiropoulou, 2019).

The school through the Curriculum, but mainly through its culture and various practices, can cultivate political virtues and social values. The multiple roles of the school socializes and, at the same time, educates and cultivates respect for the values of democracy, freedom, equality, acceptance of otherness, peaceful coexistence and human rights. The coexistence of students from different cultural backgrounds emphasizes the Greek identity and complements it with the European and global identity. Within this environment, the same cultural concepts are given different meanings and an intercultural dialogue opens between the students, which leads to fruitful conclusions and the acceptance of the "other" (Tsioumis & Tsiami, 2017).

Active citizenship refers to expression of opinion, decision making and social action. The citizen perceives himself/herself as a person with rights and obligations, who acts and participates in the political life of the place. At the same time, however, he/she is a member of a wider social group, for which he/she cares and contributes with solidarity for the common good (Sotiropoulou, 2019). Education can enhance citizenship through programs that develop critical thinking, enable cross-cultural discussions and human rights education for the purpose of political responsibility (Filiadou, 2014).

Political socialization is part of education and the general socialization of the person. It is a developmental process for the acquisition of political orientation, behavior patterns and political culture of students (Sotiropoulou, 2019).

Inclusion

Inclusive education ensures the equal participation of everyone in the general/typical school, adapting the environment and the Curricula to the special needs of the students (Koutselini, 2008; Papastergiou,2017). As the essence of human relationships rests on the tripartite safety-acceptance-cooperation, children's safety results from acceptance and leads to cooperation and development. The school should be a place in which everyone will belong, regardless of disability, cultural diversity, color, religion and sexual orientation. Inclusive education involves not only the meaningful interaction of teachers with students but also with their families and social environment. Additionally, within the framework of inclusive education, the school could collaborate with nonformal learning environments, in order to provide more opportunities for students to interact with society and the opening of the school itself to society through innovative actions (Kassidis, 2016). Inclusion does not make everyone the same but cultivates and embraces diversity so that students can analyze their actions through multiple perspectives and understand that their choices affect not only themselves but the lives of others. According to Dewey, the cultivation of democracy passes through the public school and is based on the utilization of the variety of possibilities and the creation of organic relationships and meaningful learning (Cammarota, 2011).

Likewise, Freire believed in students' collaboration with teachers and the co-construction and discovery of knowledge. He considered the method of problem solving as the most suitable for acquiring knowledge through questioning all existing beliefs, values and knowledge. Also, this method strengthens the collective participation and everyone becomes both student and expert at the same time. This approach is described by the term "critical pedagogy" (critical approach) and aims to develop the critical capacity and to provide students with tools, with which they can disagree with oppressive and hegemonic traditions, freely define their identity and their power for change. It encourages the creation of active citizens who will participate in democratic society and contribute to general health and progress. This method is consistent with multicultural education as it demonstrates that our world and its history are made up of multiple stories and experiences. Gaining a point of view and a voice in the educational process activates the interest of young people and intellectual work acquires meaning and value (Cammarota, 2011).

Democracy in the classroom changes from simple compliance to rules to an environment that directly involves students, who propose ideas, collaborate, share responsibilities, disagree and reach conclusions. Critical pedagogy provides the opportunity to hear students' voices and understand that their opinion has weight and can potentially change the world and overturn social injustice.

Collaborative Learning

Collaborative learning is a system of learning methods, according to which students work together in small heterogeneous groups, having a learning task-problem to solve, to achieve common goals. Through interaction and interdependence students develop collaborative skills, equal opportunities for success, personal and collective responsibility, which are components of collaborative learning. The difference with other methods lies in the fact that the completion of tasks requires the contribution of each team member and interdependence is achieved through common goals, common pay and the allocation of roles for the division of tasks (Charalambous, 2000).

For the implementation of a cooperative action the teacher should organize the preparatory stage. To begin with, it is important to cultivate a cooperative climate in the classroom and to set up the space appropriately. Next, the teacher should define the composition of the groups and the role of each member. He/she will then define the subject and the learning objectives and will give the students the appropriate tools for their tasks (worksheet, evaluation sheet, sources, etc.). The second stage is the implementation of cooperative learning, during which the teacher must act supportively, guide when necessary and animate the groups. The third stage is the evaluation, the tasks are presented, there is a discussion in the plenary of the class, the quality of the tasks is evaluated and ways of improvement are discussed for future tasks (Charalambous, 2000).

Therefore, cooperative learning provides methods that promote the goals of intercultural education through member interaction, active listening, exchange of ideas, and contact with different cultures and ideologies. In addition, it contributes to the socialization of all students and the increase of self-esteem, through the assumption of roles and responsibilities and the development of skills related to the organization. A friendly atmosphere is created that encourages learning and gives the opportunity to weak and introverted students to be actively involved and express their opinions. Finally, it is a dynamic form of learning that can be applied with appropriate planning in the teaching of all cognitive subjects at all ages, in order to achieve social skills, intercultural and democratic awareness (Magcotsiu & Goudas, 2007).

Experiential Learning

Learning based on the experiential method (experiential learning) departs from the traditional educational model by directly involving students in the learning process and forms an environment that provides the possibility of experiences that will facilitate "the intrapsychic processes of appropriation and formation of the mental world, of personality and desires, needs, motivations and interests" (Bakirtzis, 2000). In addition, the processes and methods used in experiential learning contribute to the process of self-understanding and the development of the personality as a whole. Students work in groups, communicate their experiences, work through their reactions together, set their personal or group goals, express themselves and create. Finally, children learn to reflect and ask questions about their experience and thus develop the capacity for critical reflection. Experiential learning proposes and applies some specialized techniques, such as: production and use of audio-visual media, experiential representations and games, discourse techniques (journaling, story-telling, creative writing), visual creation activities, role-playing and theatre (Dedouli, 2002).

Theatrical play and role-play in the educational activity can determine the cognitive, social and emotional development of young students. Through participative theater they acquire knowledge and skills, reinforcing the concept of collective responsibility and the ability to effectively intervene. Creativity and spontaneity are also enhanced and the aesthetic and artistic criterion is developed. At the same time, bodily expression develops the discovery of non-verbal ways of communication, which leads to the perception of "body image". The association of sight with touch, hearing and kinesthetic response provides a multisensory knowledge, which awakens the emotional world and mobilizes the students' bodies for action (Papakosta, 2014).

Method

Research process

The present study took place during the "One Topic Week" of 2019, in the section "Democracy and respect for human rights". It was implemented in the Nikiforos High School, Drama, Greece

The sample

It concerns the visit of seventeen (17) students with a refugee background (R1-17) from the two Reception Classes that operate in two (2) High Schools in the town of Drama, Greece, and the interaction of twenty-four (24) students (1.1-1.10) and (2.1-2.14) of Nikiforos High School. The action is harmonized, on the one hand, with the educational models of nonformal education in democracy and human rights, within a formal educational context, and, on the other hand, of intercultural education. It concerns joint actions of students with and without refugee background around the axes of confectionery, sports and team games.

Methodological design

Both during the data collection and during the data processing and analysis no challenge was faced in terms of national, religious, racial perceptions, and were conducted based on objectivity and impartiality. The method of data collection during the action was informal participant observation. This method was chosen because it provides researchers with ways to control nonverbal expressions of emotion, determine who interacts with whom, understand how participants communicate with each other, and control how much time is spent on various activities (Schmuck, 1997). Participant observation allows researchers to check the meanings of the terms used by interviewees in their interviews, to observe events that participants may be unable or unwilling to share, or that when they do, they may become indecent, rude or show lack of sensitivity. It also allows the observation of incidents that the interviewees have described in their interviews, and therefore enables the researcher to control for any distortions or inaccuracies of the participants (Marshall & Rossman, 1995).

DeWalt and DeWalt (2002) believe that "the purpose of designing participant observation research is to develop a global understanding of the phenomena under study that is as objective and accurate as possible, given the limitations of the method". They even suggest that participant observation can be used as a way to increase the credibilityof the study, as observations may help the researcher gain a better understanding of the context and phenomena, he/she is studying. Reliability is made greater by the use of additional methods used alongside observation, such as interviews, verbal data analysis orsurveys, questionnaires or other more quantitative methods. Participantobservation can be used to help answer descriptive research questions, to build a theory, or to generate or test a hypothesis.

Informal interviews were also conducted with the Refugee Education Counselor (R.O) and the teacher (R.T.) who accompanied the children on their visit to Nikiforos High School.

Research questions

The action described here tries to answer the research questions concerning:

1. Ways in which –in addition to the formal education in democracy offered by the school– informal education, through actions and programs, can prove to be equally or even more effective, leaving room for the initiative of students and teachers.
2. Ways in which the school can successfully foster the management of otherness and cultural pluralism.

Action Description

The action described took place in May 2019 during the "One Topic Week", in the thematic section "Democracy and respect for human rights". It was decided by the teachers of the Nikiforos High School that the specific unit should be done in an experiential way in the Third Class, as throughout the year an empathy program was implemented through the theatrical game. After all, it was in the teachers’ intentions since the previous year, to have a joint action with the students who studied in the Reception Classes of our prefecture.

In consultation with the responsible for School Education for Refugees in the prefecture, the date was set and the necessary actions were taken for the movement of the students with a refugee background. The students of Nikiforos High School were notified that on that particular day they would receive a visit from other students and they would all work together with pastry-making (an activity that occurs systematically in the French class).

When the visiting students arrived at the school, the first activity was an introduction game well known from the theatrical games. The students were divided into two circles and while throwing the ball to each other they said their names to introduce themselves through the game. When the atmosphere warmed up and the students and the participating teachers felt more comfortable, we moved on to another team game with mixed teams, where we had to coordinate movement, speed and teamwork. This game literally ignited teamwork, enthusiasm, mutual support. Students from other classes of the High School also participated, as well as teachers who went out into the courtyard during the break.

There were some apprehensions as this particular game requires participants to hold hands (which is probably not allowed in the culture of the visiting students), but there were no problems and no complaints or refusals from any student from either school.

Afterwards, the students and the teachers entered the room of the Third Class of the High School, which had been properly configured so that the students of the two schools could prepare truffles together. Cooking and baking are a tactic that intercultural education uses with great success to bring together people from different cultures. So, it was decided to use children’s love for chocolate. The dough was already prepared by the students of the Third Class and what had to be done was to execute the recipe. The consultation took place in all the known languages (Greek, English, French and Turkish) and mostly with lots of laughter and body language. The students put on gloves, prepared the truffles, sprinkled them, decorated them, placed them on the trays and finally treated the whole school, students and teachers. The enthusiasm of the Nikiforos High School students was very great, so much that students from other classes also got involved in the pastry making activity (Second Class of Lower High School and mainly Second Class of Senior High School).

The rest of the visit was devoted to the most enjoyable activity for the students, team sports: volleyball and basketball teams were immediately formed. Students in mixed groups (in all respects: age, gender, nation) played, cooperated, interacted with each other.

At the time of the departure of the visitors, the joy and excitement were intense. Both for the visiting students and their chaperones as well as for the hosts. The students of the Second Class of Nikiforos High School asked if the "refugee" students will ever come back to school, while the refugee students expressed their desire to visit again the Nikiforos High School, while they can, before they -as they hope- leave with their families for another country.

Results

This action changed the perception of several students of Nikiforos High School regarding the "foreigner", the refugee and his role in Greek society. A girl of the Second Class of the Nikiforos High School (2.3) said: “what good children they are, sir, they are just like us”, while another student (boy) (2.7) asked: “why don’t they come to our school, let us be classmates”. A student (1.12) who during the school year expressed extreme and nationalistic attitudes, changed his behavior after the students’ visit and suggested that the Nikiforos High School would have acquired an air of cosmopolitanism if it had students from other countries as well. A student (boy) (1.9) with an immigrant background, stated at the beginning of the 2019-2020 school year that he met a visiting student in Drama during the summer and they went out for a walk.

As for the visiting students (R3, R5, R9, R11), they said they were very happy to have visited the Nikiforos High School. They thanked everyone personally and some even in Greek. They talked (R3, R4, R7, R11) about their future plans, which involved continuing their trip to another European country (Germany, Switzerland, where they have relatives). They felt completely accepted and happy to have such an experience in a Greek school, even if it is not the school they attend regularly.

Based on subsequent discussions with the head of Refugee School Education (R.O.) and the teacher (R.T.) accompanying them, this experience of the refugee students left a very good impression on them. They discussed it in the following days, but also mentioned their experience to the older refugee high school students, who asked why they were not taken with them on this visit.

Conclusions

Through this experiential activity, the attitude of the students of both schools towards the “other” changed (transformational learning). The education in respect for diversity and democracy had an intensely personal element, the “other” ceased to be something distant, foreign and phobic. He/she became the classmate, the teammate, the collaborator, who through personal contact acquires substance, ceases to be a stranger or even “dangerous” (intercultural education). Through the game (theatrical and sports) and confectionery, teamwork and cooperation, respect and acceptance of the “other”, the feeling that the common goal can be achieved when all together as a whole (citizens in the future) strive for the common good (education in democracy), were cultivated.

Such educational actions (nonformal education) strengthen empathy, respect, acceptance, tolerance and the realization that what unites students is much more important than what they thought separates them˙ qualities that today's students need to demonstrate at their tomorrow's adult lives as citizens of a democratic European country.

The importance of the present paper stands on the enrichment of the bibliography for democracy and interculturality in education. This concrete case study gives remarkable results and suggestions for Greece, a country, that is a main destination of many refugees and immigrants. The conclusions of this case study about formal and nonformal education, can be applied in general, or/and in Greece particularly.

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SESSION 6
(Psychology and Sociology)

ADOLESCENTS' EMOTIONAL EXPERIENCE AFTER CAREER COUNSELLING

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Abstract

During adolescence, emotions are constantly changing. Choosing a career often causes anxiety, stress, fear, and uncertainty. The purpose of this qualitative research is to investigate the emotions experienced by adolescents before and after their participation in the process of vocational guidance counselling and the application of Mr. Christos Tasiopoulos' model, which consists of self-descriptive techniques regarding the personal and professional development of the participants. With the support of the career guidance counsellor, teenagers, aiming at exploring their professional profile, discover personal values, abilities, skills and the acceptable, according to them, future working conditions, while in the meanwhile, they develop positive feelings about the process and their future working life. The research was implemented using semi-structured interviews and the participation of ten secondary school adolescents. Upon completion of the counselling intervention, the adolescents stated that they felt relief, assuredness, self-confidence, joy, calmness, satisfaction, while their initial negative feelings were gradually changing through the process, thus highlighting the contribution of the counselling intervention to their positive psychology. The emotional development of adolescents through the process of the specific vocational orientation model may lead to additional positive emotions in future research within the educational - school context.

Keywords: *adolescents, career guidance counselling, emotional development, emotions, positive psychology*

Introduction

Positive emotions are a very important part of people's functionality and adaptability in their daily lives as they pursue happiness to be physically, as well as mentally healthy (Tugade, Fredrickson, & Barrett, 2004). By experiencing positive emotions, even for a short period of time, individuals retain in their memory the feeling they had for them and in subsequent repetition of the same emotions they become more receptive to new stimuli, creating reserves of positive moments, thoughts, and feelings. These positive mental energy reserves are protective factors to avoid future psychopathology (Hefferon, & Boniwell, 2019).

Moreover, research has shown that people who have a higher level of positive emotions enjoy their lives more and are happier and feel a higher level of satisfaction from the activities they perform (Pezirkianidis, Stalikas, Efstathiou, & Karakasidou, 2016). According to Kyriazos, Galanakis, Katerelos, & Stalikas, (2021) the existence of positive emotions is correlated and associated with the presence of meaning in the lives of the people who experience them. Although negative emotions help and trigger people to try to survive in difficult circumstances in their lives (Aknin, Van de Vondervoort, & Hamlin, 2018), positive emotions contribute to a faster return to the initial emotional state, using techniques to adapt and cope with unpredictable situations while seeking meaning in life again with greater ease (Stalikas, & Mitskidou, 2011).

The Career Guidance Counselling Model (C.G.G.C.) of Tasiopoulos (2015) consists of atypical self-descriptive techniques concerning personal and professional development. The experiential exercisesused by the counsellor are specific but are adapted according to the personality of each counselee and the way they develop (Dolgira, 2016). Through the process of the sessions, the children gradually form their own individual profile, which consists of their interests, professional values, abilities and skills, personal characteristics, and acceptable working conditions, which differ from person to person, making each individual unique. The creation of the personal profile of the counselee is the basis for the "appropriate" professional choice, but also the core for strengthening their self-perception, autonomy, self-awareness, and self-confidence (Tasiopoulos, 2015).

According to this program, the participants, with the support of the career guidance counsellor, aim to explore their professional profile by gradually identifying their personal interests, their professional values, their competences and skills, their personal characteristics, and their acceptable future working conditions (Tasiopoulos, 2015). In order to reach the completion of their profile and the making of their career choice, they go through five stages, those of exploration, analysis, clarification, classification and evaluation of the elements of each category, which are discussed below (Dolgira, 2016). More specifically, the elements that are gradually completed in the individual profile are interests, professional values, competences and skills, personal characteristics, and acceptable working conditions (Tasiopoulos, 2015).

According to Sung, Cheng and Hsueh (2016), occupational interests are the personalized choices people make to engage in things they enjoy and feel pleasure through. Professional values take a global approach to the content of each profession, contributing to the formation of the individual's professional identity, since the individualhas first realized that each person has his/her own unique value system(Dolgyra, 2019; Papouli, 2014; Banks, 2012). Competences refer to theinnate callings, talents, and hereditary predispositions of eachindividual, and include personal characteristics, motivation, knowledge and skills (Hartle, 1995), while skills include our well-learned abilities. The personal characteristics of an individual are those that structure his/her personality and characterize his/her ways of thinking, expression, and behavior (Tasiopoulos, 2015). According to Brown and Brooks (1991), people with different personal characteristics can cope in the professional field of most professions. This is evidenced by the application of Holland's 6 types of occupational personality theory (R.I.A.S.E.C.), in which, depending on the dominant type of occupational personality, which implies corresponding personal characteristics, people choose occupations based on their personality, interests and values, while maintaining their own unique version of personality (Holland, 1973, 1997). Finally, acceptable working conditions vary according to the profile of each adolescent, as working conditions vary by occupation, from working hours, workplace to type of work.

Once the profile has been completed and all the points recorded at the above levels have been prioritized, the person, given that he has got to know himself, can choose a job, taking advantage of his individual compass and strive to achieve his goal. By defining a mental map of career choices that interest him/her and based on his/her interests or occupations he/she is curious to learn more about. seeks details about each, through two more of the latest discovery techniques. This mental map becomes more specific and eventually the counselee ends up hierarchically in the career choices he/she wants, with the dominant choice being the one that he/she considers to be closer to his/her individual profile (Tasiopoulos, 2015).

Methodology

Ten high school students, aged between 15 and 18 years old, 70% of whom were girls, participated in the present study. They had previously participated in a Career Guidance Counselling (CGC) program of the Tasiopoulos method (2015), which includes informal self-descriptive techniques related to the personal and professional development of students. Specifically, participants had held meetings with career guidance counsellors, who used this CGC model. The time frame for its completion is not fixed from the beginning but is adapted to the needs and time of each consultant. Using semi-structured interviews, lasting approximately fifteen minutes, the variable of emotions stemming from the research question was examined: "What is the relationship between the professional counselling intervention and the emotions experienced by the participants?", since the aim of the study was to explore concepts of positive psychology, such as the emotions of participants who have previously completed the process of finding and completing their individual profile through professional counselling, in order to highlight the relationship between them.

The semi-structured interview questions were adapted to the needs of the research, having as their source the positive psychology scale "Positive and Negative Affect Scales (PANAS)" (Watson, Clark, & Tellegen, 1988). Also, the questions were piloted with two high school students, who had not participated in a similar program before, in order to clarify the accuracy and clarity of the questions. Afterwards, parents' consent for their children's participation in the research by phone and in writing in a specially prepared document and then began the online meetings with the students via Skype. After the interviews were completed, the interviews were transcribed and analyzed with the method of Thematic Content Analysis, through the creation of themes focused on the research question of the study (Tsiolis, 2018).

Results

Through the analysis of the data on emotions before and after the vocational counselling intervention, it was found that before participation and the completion of the process, adolescents generally felt negative emotions, while at the end of the sessions and the end of the program, these emotions changed to positive ones. The intense anxiety (4/10), confusion (3/10), uncertainty (2/10), fear (2/10), insecurity and curiosity about the future (1/10), turned into confidence, certainty, self-confidence (5/10), joy (4/10) and relief (3/10).

Indicatively, some of the adolescents' words about their feelings before participating in the vocational counselling program are:

"There was a stress that I basically didn't know where I'd be in a year. I was feeling stressed, mostly stressed“

"I was just lost, I had no motivation to read, I didn't read anything“

"I think I was in a confusion, because I had too many interests and I didn't know what to start, I wanted to put my thoughts in order“

"I was totally confused, unsure, scared"

Indicatively, some of the adolescents' words about their feelings after participating in the vocational counselling program are:

“Today I am happy because this process has helped me a lot and I believe it even more as time goes by and I am happy about it"

"I feel more certainty than uncertainty..."

"Well sure, then I was more relieved, there was a motivation to start reading well. Today I feel relief"

"I have more confidence and it helped me to believe in myself more as well”

Conclusion

The main and most important finding is that the Tasiopoulos (2015) process cultivates the positive feelings of those who attend and complete the program, while it reverses the negative feelings that were prevalent before their participation in it. The dominant emotions they project are confidence, certainty, self-confidence, joy and relief, so that the presence of meaning in their lives is cultivated (Kyriazos, Galanakis, Katerelos, & Stalikas, 2021). With the development of these positive emotions, and their repeated experience, they begin to acquire energy reserves, resulting in their physical and mental satisfaction and enjoyment of life (Hefferon, & Boniwell, 2019; Pezirkianidis, Stalikas, Efstathiou, & Karakasidou, 2016). On the contrary, before their participation in the Tasiopoulos program (2015), they felt uncertainty, anxiety and fear about the future and a possible failure to perform. According to Vignoli (2015) uncertainty, anxiety and fear of academic failure is a factor in fostering career indecision and a source of other negative emotions. Thus, adolescents and young people with indecision often turn to career counsellors to resolve their difficulty and make a more confident and appropriate choice for them.

Therefore, we believe that it will be interesting to carry out the corresponding research in a school context, after the project has been carried out in groups in some classrooms, to see the change in children's emotions and motivation in a school context.

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SESSION 6
(Psychology and Sociology)

INVESTIGATING ELEMENTARY CHILDREN'S METACOGNITIVE AWARENESS OF THEIR EFFICACY IN EVERYDAY COGNITIVE TASKS

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Abstract

This study aimed to assess the metacognitive knowledge of elementary school children (grades 4 to 6) with concerning to fundamental cognitive functions such as attention, memory, and language, which play a pivotal role in their daily school activities. To achieve this objective, we developed the Children's Metacognitive Knowledge Questionnaire (CMKQ), a Likert-scale self-report questionnaire ranging from 1 (I completely disagree) to 7 (I completely agree). The CMKQ was administered to a sample of 70 Greek-speaking elementary school children of both *genders, with a mean age of 10.12 years (SD = 1.56 years), to assess its psychometric properties. Principal Component Analysis revealed two distinct factors with satisfactory internal reliability: an Attention/Memory factor and a Language Comprehension factor. These results suggest that older elementary school children can differentiate their self-efficacy in attention from that in comprehension, which contradicts previous research findings. Furthermore, the challenge of distinguishing self-efficacy between attention and memory appears to be consistent across various studies. A 3 (age group) x 2 (gender) MANOVA analysis was conducted to investigate the impact of age and gender on children's self-reports in the CMKQ. Only age demonstrated significant between-group differences, with older children (aged 11-12 years) reporting higher self-efficacy in language comprehension tasks but not in attention/memory tasks. This finding implies that while attention and memory functions tend to stabilize developmentally around the age of 10, mastery of language comprehension is achieved in later elementary school grades, and children may become aware of this distinction. However, it is essential to note that the generalizability of these research findings is limited by the relatively small sample size and the narrow age range of participants. Future studies should expand upon these findings to gain a more comprehensive understanding of metacognitive knowledge assessment in children.*

Key-words: *metacognitive awareness, cognitive functions, assessment, self-efficacy, elementary school*

Introduction

Children's cognitive development encompasses a crucial milestone—namely, the ability to engage in metacognition, as defined by Flavell (1979). This concept encompasses an individual's awareness of their cognitive processes and the strategies employed during various tasks. Flavell (1979) further differentiated metacognition into two facets: metacognitive knowledge and metacognitive experiences. Metacognitive knowledge refers to one's understanding and beliefs about themselves and others as cognitive processors, along with knowledge concerning their learning processes, including objectives, strategies, and related experiences (Kostaridou-Efklides, 2011; Lund & Russell, 2022). In contrast, metacognitive experiences pertain to an individual's internal cognitive and emotional feedback during task execution (Teng & Yang, 2022), with metacognitive knowledge typically stemming from long-term memory while metacognitive experiences manifesting in short-term memory (Efklides, 2001). Essential components of metacognition include an individual's cognitive functions of attention (meta-attention, Malegiannaki, 2015), memory (meta-memory, Lund & Russell, 2022), and comprehension (meta-comprehension, Amin & Sukestiyarno, 2015). For instance, meta-attention encompasses an individual's knowledge regarding the cognitive function of attention, the factors influencing it, and their effectiveness in everyday attention-related tasks (Malegiannaki, 2015).

Metacognitive knowledge in children undergoes gradual development, predominantly within the school environment, where children encounter learning projects for the first time (Roebers, 2017).

According to Efklides (2001), metacognitive knowledge matures progressively and typically reaches its zenith shortly after the age of 12, coinciding with Piaget's formal operational stage. Gender and school grade differences have been identified in children's metacognitive awareness of their abilities (Oğuz & Kutlu-Kalender, 2018). Metacognitive skills empower children to recognize what they know and how to build upon their knowledge, influencing their perceived self-efficacy in tackling tasks or solving problems (Bozgün & Pekdoğan, 2018). Consequently, children who exhibit higher levels of metacognitive awareness and self-regulation tend to perceive themselves as capable of successfully completing even challenging tasks (Ventura, 2022), with perceived self-efficacy serving as a pivotal predictor of children's metacognitive skills (Bozgün & Pekdoğan, 2018). It is essential to clarify that self-efficacy does not mirror an individual's objective abilities but, their capabilities within specific situations (Bandura, 1997).

To date, studies examining self-efficacy in cognitive functions as a facet of metacognitive knowledge remain limited (Toura et al., 2022; Malegiannaki & Metallidou, 2011), with scarce research focusing on children (Malegiannaki, 2015). For instance, a recent study by Toura and colleagues (2022) evaluated the perceived self-efficacy of undergraduate Psychology students in daily academic tasks involving attention, memory, and comprehension functions, using a self-report questionnaire. However, research involving young participants is limited to a single study (Malegiannaki, 2015), which assessed the metacognitive awareness of 172 typically developing children aged 6-12 years concerning their attentional functions in everyday tasks. The findings underscored the substantial impact of age on children's beliefs regarding their abilities, with significant differentiation between the self-reports of younger (6-8 years) and middle-aged (8-10 years) groups based on selective attention questions from the Metacognitive Knowledge for Attention Questionnaire (MKAQ, Malegiannaki, 2015). No significant gender effects were observed.

In conclusion, existing research highlights a notable gap in the literature concerning the examination of elementary school children's self-efficacy in fundamental functions that underpin their daily school experiences. While data on attention function efficiency are available, to our knowledge, no study has explored memory and language comprehension functions in this context. Consequently, the primary aim of the present study was twofold: first, to develop and psychometrically evaluate a tool for measuring school-age children's perceived efficacy in everyday projects related to the three core cognitive functions of attention, memory, and language comprehension; second, to investigate the effects of age and gender on children's self-reported metacognitive beliefs.

Methods

Participants

A total of one hundred and twenty Greek-speaking children (65 girls) with ages ranging from 9 to 12 years (mean age = 10.52 years, *SD* = 0.89 years) participated in this study. The participants were categorized into three distinct age groups based on their elementary school grades, corresponding to the Greek education system: 4th grade (9-10 years old), 5th grade (10-11 years old), and 6th grade (11-12 years old). The composition of the sample is detailed in Table 1. The selection of children from the last three grades of elementary school was justified by the expectation that children in these age groups would possess more developed comprehension skills, particularly evident in tasks such as memorization of historical texts.

Table 1. Sample's description: Gender frequency, mean age, and *SD* of each age group

Age groups	**Boys**	**Girls**	**Total**	**Mean age (years)**	***S.D.* (years)**
9-10 years	19	20	39	9.55	0.39
10-11 years	16	22	38	10.42	0.41

11-12 years	20	23	43	11.48	0.33
Total	55	65	120	10.52	0.89

Participants in this study were free from diagnosed neurodevelopmental disorders or learning disabilities. Individuals with medical conditions that could potentially affect brain function or sensory impairments were excluded. The sample was drawn using simple random sampling from primary schools located in the prefectures of Western Macedonia. Notably, 13.3% of the participants hailed from rural areas, while 86.7% resided in urban settings.

Children's Metacognitive Questionnaire

To meet the objectives of this study, we developed a self-report instrument known as the *Children's Metacognitive Knowledge Questionnaire* (CMKQ). The CMKQ comprises 16 items designed to assess children's self-efficacy in everyday tasks related to attention, memory, and language. Participants were instructed to express their opinions regarding their performance over the past three months during various everyday study situations, both at school and at home. For instance, an illustrative question assessing attention was framed as follows: *"I can maintain focus during a lesson without getting distracted, even when the content appears uninteresting or I am fatigued (e.g., during the last period)"*. Similarly, for memory assessment, a sample item inquired: *"I can easily memorize a history lesson, commit it to memory, and recite it verbatim from the textbook"*. In the context of language comprehension, a representative question item was formulated as follows: *"When I read instructions for an exercise, I can readily comprehend them without needing further clarification"*.

Children's self-efficacy responses were recorded on a 7-point Likert-type scale, ranging from 1 (I completely disagree) to 7 (I completely agree). Consequently, the responses allowed children to clearly articulate the extent to which each item applied to them. It is noteworthy that certain questions (items 5, 9, 11, 12, and 15) were reverse-scored, such that a higher score denoted a stronger sense of self-efficacy.

2.3 Procedure

This study obtained ethical approval from the Research Ethics Committee at the University of Western Macedonia. Before data collection, informed consent was sought from both school principals and parents or legal guardians. Only children for whom written parental consent was provided were eligible to participate. Researchers provided comprehensive explanations regarding the study's purpose, methods, and duration. Furthermore, they emphasized the confidentiality and anonymity of the participants' data. Children's participation was entirely voluntary, and they retained the right to withdraw from the study at any point they wished. Questionnaires were administered in a quiet and familiar setting chosen for the participants, taking into consideration their convenience, after coordinating with school authorities and parents or guardians. Assessments were conducted individually in sessions lasting approximately 15 minutes.

Results

Construct validity and internal reliability of CMKQ

To assess the construct validity and internal reliability of the Children's Metacognitive Knowledge Questionnaire (CMKQ), we employed exploratory factor analysis. This analytical approach was utilized to determine whether the theoretical dimensions upon which the questionnaire was designed align with the actual data. Additionally, we applied Varimax orthogonal rotation to the factor analysis method to clarify the underlying structure of the questionnaire.

Initially, the CMKQ consisted of 21 questions; however, after preliminary analyses, 16 questions were subjected to factor analysis. The initial set of 21 questions was refined due to five items demonstrating poor performance, characterized by low factor loadings and cross-loading on multiple factors. In the exploratory factor analysis, we identified two distinct factors using Principal Component Analysis, instead of the originally hypothesized three factors, as summarized in Table 2. Each factor was assessed for its internal reliability. Specifically, the first factor, encompassing 11 questions related to self-efficacy in Attention and Memory (Cronbach's $\alpha = .80$), accounted for 26.82% of the total variance. This factor aimed to capture children's efficiency in selectively focusing on specific stimuli and their memory abilities. The second factor consisted of 5 questions concerning self-efficacy in Linguistic Comprehension (Cronbach's $\alpha =$

.70) and explained 12.25% of the total variance. The cumulative variance explained by these two factors amounted to 39.07%, signifying an adequate level of construct validity. Moreover, the overall questionnaire demonstrated a moderate level of internal consistency, with Cronbach's $\alpha = .75$. Most items loaded satisfactorily or moderately on their respective factors, with minimal cross-loading observed on other factors.

Table 2. Factor loadings of the CMQ

MKCFQ-C Question items	**Factor 1 Attention/Memory**	**Factor 2 Language Comprehension**
Question 8.	.77	
Question 3.	.68	
Question 6.	.66	
Question 1.	.62	
Question 7.	.59	
Question 4.	.59	
Question 10.	.51	
Question 16.	.49	
Question 13.	.49	
Question 2.	.41	
Question 14.	.39	
Question 11.		.69
Question 9.		.67
Question 5.		.62
Question 15.		.58
Question 12.		.56
	Cronbach's $a = .80$	Cronbach's $a = .70$

Descriptive Statistics

In the Children's Metacognitive Knowledge Questionnaire (CMKQ), children reported relatively high levels of self-efficacy in their daily tasks for both attention and memory (mean = 52.21) and language comprehension (mean = 24.21). As presented in Table 3, the mean scores for all questionnaire items, including the reverse-scored questions, exhibited a consistent pattern of being notably elevated, ranging from 4.28 to 6.05. These scores are indicative of high levels of perceived self-efficacy among the participants about the assessed tasks.

Table 3. Descriptive statistics of children's self-reports on CMQ items and factors

Question items	**mean**	***SD***	**Minimum**	**Maximum**
1	4.76	1.18	2	7
2	5.09	1.37	1	7
3	4.82	1.81	1	7
4	4.28	1.92	1	7
5	5.07	1.80	1	7
6	4.74	1.66	1	7
7	5.02	1.37	1	7
8	4.89	1.52	1	7
9	4.90	1.70	1	7
10	4.37	1.76	1	7
11	4.77	1.64	1	7
12	4.98	1.50	1	7
13	4.65	1.67	1	7
14	6.05	1.42	1	7
15	4.50	1.77	1	7
16	4.54	2.28	1	7
Factor 1: Attention/Memory	53.21	10.52	25.00	74.00
Factor 2: Language Comprehension	24.21	5.50	11.00	35.00

Gender and age effects

To examine the primary effects of age and gender, we conducted a 2 (gender) x 3 (grades) Multivariate Analysis of Variance (MANOVA) using children's self-reports of self-efficacy in the Attention/Memory and Language Comprehension factors as dependent variables. The results indicated that the main effect of age was statistically significant, exhibiting a moderate effect size (F (2, 120) = 3.46, p = .035, η^2 = .056). Multiple post-hoc comparisons for age, employing Bonferroni correction, revealed differentiation in children's reports. Specifically, a significant difference was observed between the 2nd and 3rd age groups, where the latter reported notably higher self-efficacy in the language comprehension factor (mean = 25.79, *SD* = 5.27) compared to the reports of the 2nd group (mean = 22.66, *SD* = 5.23). Consequently, the results demonstrated a significant main effect of age on CMKQ factor scores, specifically for the Language Comprehension factor. In contrast, age did not appear to differentiate children's self-reports in the Attention-Memory factor. Furthermore, no significant gender differences were detected in children's reports within any of the aforementioned factors. Additionally, no interactions were observed between the independent variables.

Discussion

The primary objectives of this study were twofold: first, to evaluate the validity and reliability of the Children’s Metacognitive Knowledge Questionnaire (CMKQ) designed to assess children's metacognitive awareness of their perceived self-efficacy in everyday tasks related to attention, memory, and language comprehension; second, to investigate whether demographic factors, namely age, and gender, influence children's perceived self-efficacy.

In terms of the first objective, the results of the factor analysis conducted on the CMKQ indicated satisfactory validity and reliability indices. These findings align with previous psychometric studies that have employed self-report questionnaires to assess self-efficacy in various cognitive functions (e.g., attention, memory, and language comprehension) (Malegiannaki & Metallidou, 2011; Toura et al., 2022). Descriptive statistics for the CMKQ revealed that children consistently reported high levels of self-efficacy, with scores ranging from 4.28 to 6.05 across all questionnaire items, including the reverse-scored ones. These elevated scores suggest that children may tend to overestimate their abilities, which is congruent with the idea that accurate monitoring of cognitive abilities is not fully developed until around the age of 12 (Efklides, 2001).

Additionally, the factor analysis of the CMKQ shed light on children's awareness of distinct cognitive demands in attention, memory, and language comprehension tasks. Notably, children seemed to differentiate the demands between language comprehension tasks from those of attention and memory tasks. However, they did not appear to make the same distinction between the demands of attention and memory tasks. This finding is consistent with previous research that has highlighted the challenge of dissociating self-efficacy between attention and memory, suggesting that memory tasks are heavily reliant on attentional functioning (Malegiannaki, 2015). Essentially, if individuals do not allocate sufficient attention during learning or work, it becomes challenging for them to acquire and subsequently recall information from memory.

Concerning the second objective, the examination of age and gender effects revealed that older children (aged 11-12 years) exhibited higher self-efficacy in everyday tasks related to language comprehension. This outcome aligns with a study by de Bruin et al. (2011), which found that children around the age of 12 possess more accurate knowledge about their comprehension abilities. Furthermore, language development is influenced by age, with mastery of comprehension of increasingly complex texts occurring in the later grades of elementary school (Hoff, 2013). In contrast, no significant differences were observed in the self-reports of children of different ages in the Attention-Memory factor. This can be attributed to the rapid development of these functions between the ages of 8 and 10, followed by a developmental plateau with minimal improvement after the age of 10 (Malegiannaki & Metallidou, 2016). Consequently, the children in this study, aged 9 to 12, fell within the developmental stabilization range, leading to no discernible differences in their self-efficacy reports. Additionally, evidence suggests that metacognitive awareness follows a parallel growth trajectory with these specific cognitive functions (e.g., Malegiannaki, 2015).

Finally, the absence of gender effects in this study's findings is consistent with previous research, further contributing to the existing body of literature that has consistently demonstrated no significant gender-related differences in metacognitive awareness and self-efficacy in cognitive functions (Toura et al., 2022; Malegiannaki & Metallidou, 2011).

Conclusions, Limitations, and Implications for Future Research

To summarize, this study offers valuable insights into children's metacognitive awareness of their self-efficacy in fundamental cognitive functions and the impact of age and gender on these perceptions. The results of this study support the utility of the CMKQ as a suitable tool for assessing metacognitive knowledge in school-age children. Moreover, the findings highlight the nuances of children's self-efficacy in different cognitive domains and offer implications for understanding the developmental aspects of metacognitive awareness.

However, it is essential to acknowledge the limitations of this research. The generalizability of the specific findings is constrained by the small sample size and its distinctive characteristics. The participants in this study were primarily urban-dwelling students in the last three grades of elementary school, resulting in a limited age range. Consequently, future research endeavors should consider implementing the CMKQ in a larger and more diverse sample encompassing a broader age range and representing various regions within the country. Such an approach would facilitate a more comprehensive evaluation of the psychometric properties of the CMKQ and confirm its underlying structure.

Additionally, future investigations could explore the convergence of children's self-reported efficacy in everyday cognitive tasks with their actual performance in objective cognitive assessments. This could be complemented by examining parents' perceptions of their children's self-efficacy. Such multifaceted analyses would provide a more holistic understanding of metacognitive functioning in children.

In conclusion, the findings from this research bear practical implications, particularly in the field of education, where it can be instrumental in assessing metacognitive functioning, especially in students with lower academic performance. This approach may pave the way for the development of targeted intervention programs designed to support children with lower performance levels in specific tasks, ultimately contributing to their overall academic competence enhancement.

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SESSION 6
(Psychology and Sociology)

FLIPPED CLASSROOM: A TEACHER'S TOOL FOR STUDENT ENGAGEMENT

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Abstract
The rapid expansion of the Internet has significantly increased the feasibility of implementing the flipped classroom approach in teaching. The Internet has introduced many useful and free tools that streamline the process of creating different teaching materials.

When properly implemented, the flipped classroom actively involves all students, enhances the quality of the learning materials, and emphasizes the importance of obtaining knowledge in both their lives now and in the future. And every teacher strives to reap these benefits.

This paper aims to outline all the key elements that must be taken into account when considering the implementation of the flipped classroom. It will also highlight why the flipped classroom serves as an ally for teachers in fostering student engagement.

Keywords: *flipped classroom, student engagement, teacher*

Introduction

It is becoming increasingly evident that in the schools of today, the traditional classroom approach, with the teacher standing in front of the board and the students facing the teacher, does not suffice and does not reap the full benefits of the innovative pedagogical processes. One noticeable shift is the increasing integration of information and communication technology in the classroom. Students are now incorporating their personal devices both inside and outside of school, prompting teachers to acknowledge the necessity of continual tech use. The potential of these new technologies is particularly evident in the personalized learning area. When delivering a lesson in the classroom, it's challenging to gauge the optimal teaching pace to ensure all students comprehend the material and grasp the essential concepts and methods. Fast learners may find traditional lectures monotonous, while slower learners may struggle to retain or document everything. By using the new technologies, however, students can listen and follow the teacher's presentation according to their own abilities. By thoughtfully implementing these technologies and leveraging various tools, we can enhance the quality of teaching. This involves moving away from some traditional teaching methods, like the conventional lecture format, and embracing innovative approaches such as the flipped classroom, e-learning, and collaborative learning.

What is a Flipped Classroom?

In recent years, the so-called “flipped classrooms” have become one of the most popular teaching methods. This method, rooted in a closely related approach to education: active learning, has been getting well-deserved attention. Active learning is an instructional method in which students engage in various activities in order to learn their study material. This includes reading, writing, speaking, listening, and reflecting. This is a group-based, interactive learning style that centers around problem-solving and learning by doing.

According to The Flipped Learning Network, a flipped classroom is a “pedagogical approach in which direct instruction moves from the group learning space to the individual learning space, and the resulting group space is transformed into a dynamic, interactive learning environment where the educator guides students as they apply concepts and engage creatively in the subject matter” (The Flipped Learning Network, 2014, p.1).

While definitions may vary slightly, the flipped classroom represents a fundamentally student-centered approach to learning. In this innovative model, students receive lecture materials before class, typically in a digital format, and utilize the actual class time for more dynamic and collaborative activities. Essentially, in this model, homework becomes classwork. This approach allows students to learn about the topics outside of class, at their own pace, and come to class informed and more prepared to engage in discussions and apply their knowledge through active learning. This active learning approach aims to develop higher-level skills, such as creating, analyzing, and evaluating.

In this context, the flipped classroom fits the revised Bloom’s Taxonomy. In conventional settings, lower-level learning tasks like remembering and understanding take place in class, while activities involving higher-level learning are typically assigned outside the classroom. However, the flipped classroom flips this dynamic. As depicted in the pyramid, students can tackle the foundational cognitive work before class, enabling them to engage in higher cognitive levels of learning alongside their peers and teachers during class. This shift is particularly beneficial when the challenge lies in task assistance rather than the introduction of new thinking into the tasks. The flipped classroom addresses this by essentially "flipping" the learning model.

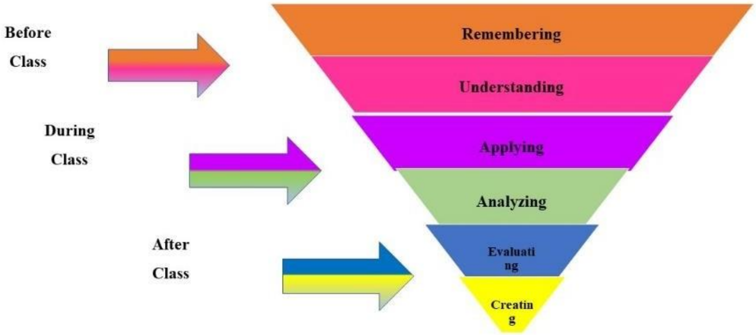

Figure 1: Bloom's Taxonomy, Revised Edition (By Lorin Anderson)

What does the Research Say?

A flipped classroom approach is, undoubtedly, getting increasingly popular, but does research substantiate the notion that this innovation, as sensible as it sounds, genuinely enhances learning?

While the body of research on the effectiveness of the Flipped Classroom approach is not exhaustive, some preliminary findings suggest that it can indeed yield some substantial benefits. A recent qualitative study, synthesizing the results of 114 other studies about the effects of the flipped classrooms approach on learning outcomes and student satisfaction, showed that students who learn using this approach do achieve significantly higher learning outcomes, compared to students learning in traditional classrooms. Moreover, they are just as satisfied with the learning environment (Van Alten, Phielix, Janssen & Kester, 2019).

Similar results were obtained in an experimental study conducted in Boston by Day. He compared two groups of students: one learning the traditional way, and one, experimental, which used the flipped classroom approach. The results showed that the experimental group performed better and got better final grades than the other group (Day, 2018). The benefits of this approach were also emphasized in the comprehensive review of studies conducted by Awidi and Paynter. According to their findings, the flipped classroom proves to be a transformative model, enhancing student engagement, elevating the overall learning experience, and ultimately improving learning outcomes. In a similar line, other researchers have suggested that flipped classrooms offer a viable option for enhancing student motivation, managing cognitive load, and improving overall learning outcomes (Awidi & Paynter, 2019), while some state that the flipped classroom approach can help students attaining higher levels of knowledge according to Bloom’s taxonomy (Gilboy, Heinerichs, & Pazzaglia, 2015).

On the flip side, some findings have emphasized the challenges when trying to effectively implement the flipped classroom approach. These challenges include students with limited IT skills, teachers with constrained pedagogical skills, and technical glitches that can negatively impact students’ learning. This approach, unfortunately, introduces an additional burden and anxiety for students, who express uncertainties about their success and workload. Furthermore, students encounter challenges in evaluating and assessing problem-solving and critical skills within the flipped classroom context (Asad, Ali, Churi & Moreno-Guerrero, 2022).

Additionally, some studies caution that simply flipping activities before and during classroom sessions might not suffice. The considerable variation in the effect seen in these studies emphasizes the importance of the way flipped classrooms are designed and implemented. Thus, certain studies offer valuable insights into effective flipped classroom design, highlighting the importance of maintaining face-to-face interactions and incorporating quizzzes as key elements for successful implementation (Van Alten, Phielix, Janssen & Kester, 2019).

Ultimately, though certain challenges and nuances exist, it's important to recognize that when thoughtfully implemented, the flipped classrooms approach can yield numerous benefits.

Flipped Classroom Advantages and Disadvantages

The flipped classroom model boasts several advantages.

Flipped learning speaks the language of today's students. In a world where being online, YouTube, Facebook, MySpace, and other digital media are second nature, such flipped learning aligns seamlessly with the lifestyle of the learners od today (Bergmann & Sams, 2012, p. 20). Students now complete their homework while listening to music and they interact with friends on various online platforms. Ironically, teachers often instruct students to turn off their cell phones, tablets, and digital devices upon entering the classroom, unaware that these personal devices often surpass the technological capabilities of the school's equipment (Bergman & Sams, 2012).

Flipped learning doesn't just cater to the digitally immersed; it also proves beneficial for students who may struggle in traditional learning environments. In conventional classrooms, attention and praise tend to gravitate toward high-achieving students who actively participate and excel academically. Meanwhile, less vocal students may find themselves relegated to passive observation, growing bored in the process. The flipped teaching model disrupts this dynamic, transforming the teacher's role. Teachers now spend a significant portion of their time assisting students who face challenges in mastering the material, while the more independent learners can progress at their own pace. This shift ensures that all students, including those facing difficulties, can thrive in the flipped classroom. The model not only prevents the neglect of high-performing students but also directs attention to those who need it most, fostering an environment where every student can thrive.

A flipped classroom also helps students who want to revisit the taught material. By placing lectures online, students gain the autonomy to tailor their learning to their individual needs. Each teacher follows a specific curriculum and hopes students will comprehend the material. Even the most skilled educators encounter students who require additional time to grasp concepts fully. The flipped classroom addresses this challenge by empowering students to take control of their learning. This approach is revolutionary as it allows students to pause and replay the teacher's presentation until they grasp the content they need (Bergman & Sams, 2012).

However, like any instructional method, flipped classrooms come with their share of disadvantages. One such notable disadvantage is the reliance on technology to disseminate knowledge to students. While an increasing number of students own computers, smartphones, tablets, or other devices, there remain some students who do not have access to such technologies. This discrepancy can widen the technology gap among students. Additionally, in rural areas, where internet access might be limited or the speed of the internet is slow, being reliant on technology could become a significant challenge. Many teachers who have implemented the flipped classroom model identify the lack of broadband internet access for students as a primary concern. Acknowledging these challenges is crucial for educators who contemplate the implementation of the flipped classroom approach.

The flipped classroom, as a novel teaching method, relies on students’ diligence to review and learn the provided content at home. However, this idea is met with resistance as most students harbor an aversion to homework. Many argue that the time spent at school should suffice for obtaining the needed knowledge, while the time at home should be used for socializing with family and friends, as well as engaging in various extracurricular activities like sports, music, or specific personal pursuits.

Another concern regarding the flipped classroom approach is the challenge of assessing whether students have indeed viewed the assigned video content. Bergman and Aaron (2012) addressed this issue in their book "Flip Your Classroom: Reach Every Student in Every Class Every Day." While initially exploring complex programming solutions, they stumbled upon a simple yet effective approach. They instructed students to share their notes from the video during class. Initially verifying understanding in this manner, they later encouraged each student to pose intriguing questions that they had thought of while watching the video. This method proved beneficial as it compelled all students to engage during classes, and not only the most talkative students, as is the case in a traditional classroom setting. So, not only was the challenge of monitoring student engagement addressed but as a result, there was an improved, dynamic interaction between students and teachers.

Using the flipped classroom means that students may need to spend a lot of time in front of computers. While this might not pose a significant issue if only a few teachers use this method, the scenario changes if the majority or all teachers decide to implement the flipped classroom approach. In such cases, students could find themselves spending several hours each day in front of computer screens, raising concerns about excessive screen time.

Unlike traditional teaching, the flipped classroom would require teachers to develop some additional skills, which might result in them spending more time and effort. In fact, teachers who choose the flipped classroom approach must, for the most part, learn on their own about the ways to provide instructional content to students.

Despite its challenges, the flipped classroom approach is an effective way to engage students. When implemented correctly, it has the potential to foster more active and engaged learning, leading to improved student outcomes and heightened motivation.

How the Flipped Classroom Can be Implemented?

The numerous observed benefits from the flipped classroom approach led to the next question: how to apply this approach in our own teaching practice? Before starting to flip the classroom, teachers should carefully consider whether it would be a suitable teaching tool for the desired educational learning outcomes. Thus, upon concluding that the flipped classroom would give the desired result, teachers can proceed with the flipping. However, if the flipped classroom is deemed unsuitable and cannot help students reach their goals, then the classroom should not be flipped. For technology should only be used if it is an appropriate teaching tool.

Once the decision is made regarding the age group and topic for the flipped lesson, educators can explore online resources and leverage materials prepared by their peers. Ready-made video content created by experienced teachers is readily available for various subjects of instruction. Thanks to the evolution of the Internet and video-sharing platforms such as YouTube and Vimeo, an abundance of educational videos is accessible. The key is to select a video that aligns with the teacher's criteria, as emphasized by Bergman and Sams (2012). Educators can also use custom-made materials that they make on their own since, nowadays there are an infinite number of applications that educators can use to create digital learning materials.

Once the content for our lesson has been assembled or created, the next imperative is to make it easily accessible for students. A common query among educators is, "Where should we place the video materials to ensure universal student access?" The response to this inquiry varies, depending on teachers' preferences and institutional policies. In the modern era, where numerous Internet services facilitate data storage, including videos, the best approach for disseminating video content is through uploading said videos onto platforms such as YouTube, Vimeo, Dailymotion, Twitch, and others. Furthermore, if certain students do not have access to the Internet, teachers can also record all the video content on the devices available on the school premises – devices that students use to learn. Teachers can also transfer their recordings to portable drives or DVDs, so students can take the class material at home, and access it even if they don't have internet access there. (Bergman, J. & Sams, 2012).

One crucial consideration that needs to be mentioned involves ensuring that the materials used do not infringe author's copyrights. This holds true even when teachers themselves are the authors – they have to include a copyright notice when publishing their content.

While it may initially seem unconventional to think about the end at the very beginning, planning the classroom activities while editing the videos is essential. Thus, the video's explanations must follow the activities planned. Additionally, when planning classroom activities, it is paramount for educators to recognize the opportunity to target higher cognitive categories so that students go beyond the mechanical practice of theory and engage in activities that foster the development of various competencies, including ICT, self-regulation, knowledge building, collaboration, and problem-solving skills. One of the main goals of the flipped classroom lessons is the development of these competencies within the framework of the contact lessons. To achieve this goal, educators can break extensive learning content, into, for example, 4 shorter videos. These videos can then be given to students so that each student is assigned one video. After this, during class, students can be divided into groups so that each member of the group has seen a different video. Then, students can proceed and "teach" each other about the video that they have watched, individually. Then, as a follow-up, this activity can be followed by a collaborative problem-solving task. Using this approach will not only enhance students' collaborative and problem-solving skills but will also elevate their cognitive utilization levels.

Conclusion

The flipped classroom is a relatively new pedagogical method in education. The flipped classroom may not be suitable for every teacher because a lot of time needs to be spent in preparing materials for each student, but if it is decided to implement the flipped classroom, the results of working with the students will be much better than traditional teaching. When used, correctly, flipped classrooms can lead to more engaged and active learning, improved student outcomes and increased motivation. With careful planning and preparation, it can be created flipped classroom content that is engaging and effective for students. Also, with the expansion of the Internet, the possibility of using the flipped classroom in teaching has also increased. The Internet has brought many useful and free tools that facilitate the creation of teaching materials for learning. These materials are available to students through all possible technological devices (computers, tablets, cell phones). As the Internet continues to grow, so will the flipped classroom.

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SESSION 7
(Educational Sciences-Didactics of Natural Sciences)

THINK-ALOUD PROTOCOLS IN MATHEMATICS PROBLEM SOLVING

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Abstract
Metacognition is an indispensable process competence that is strongly related to mathematics problem solving, as it enables students to think and act in flexible and reflective ways and become successful problem solvers. More specifically, students who behave metacognitively become able to identify important information, set the goal/goals of the problem, make a solution plan and choose appropriate strategies with flexibility. In addition, they are able to make use of the heuristics needed as well as problem representations, evaluate their effectiveness and recognize errors. Researchers have used a variety of procedures and methods in order to evaluate students' thinking and metacognitive functions in mathematics problem solving. According to the literature, there are two broad categories of assessing metacognition; off-line methods, which include self-report questionnaires and interviews and are used either before or after problem solving, and on-line methods that take place during the problem-solving process. The most common on-line measure of metacognition is Think-Aloud Protocols (TAPs), in which students are asked to verbalize their thoughts and actions throughout their engagement with the problem. The present theoretical paper aims to present the role of TAPs in the development of metacognition when solving mathematical problems. Their use as well as the advantages and disadvantages of their implementation are described, especially with regard to issues of validity and reliability. Educational implications for the use of TAPs in both mathematical problem solving and mathematics teaching and learning are discussed.

Keywords: *Assessment, mathematics problem solving, metacognition, think-aloud protocol*

Introduction

Metacognition refers to how people learn, know and apply their knowledge. “Meta”, a Greek word for after, behind or beyond (Zechmeister, & Nyberg, 1982), has been used for the main distinction between “cognition” and “metacognition”: cognition is a constant flow of information and metacognition is the knowledge, monitoring and controlling of one’s own cognitive system. However, the concept of metacognition still remains obscure and complex, mainly due to the fact that it consists of many facets and has been adapted across many research fields. Despite its fuzzy boundaries, it is widely accepted as a term consisting of three key dimensions that have a strong relation to reflection and critical thinking: metacognitive knowledge, metacognitive skills and metacognitive experiences (e.g., Radmehr, & Drake, 2018).

Metacognitive knowledge is connected to people’s beliefs and interpretation of cognitive activity and draws from the interaction between knowledge and person, task and strategy variables. It includes declarative knowledge (knowledge of oneself and others as cognitive beings), procedural knowledge (strategic knowledge of processes and actions) and conditional knowledge (knowledge of the conditions which affect learning). Metacognitive skills involve processes that facilitate the evaluation and control of the learning process (e.g., prediction, planning, monitoring, evaluation, etc.). They are also called “executive functioning” or “self-management” skills. Metacognitive experiences refer mainly to judgements, reactions and feelings during cognitive tasks and are considered as “online metacognition”. The interaction between the aforementioned dimensions is fundamental to the development of metacognition (Tarricone, 2011).

Prior work over the last decades indicates that metacognition is of great importance in determining readiness for mathematical achievementand serves as a strong predictor of later problem solving (Desoete, & De Craene, 2019). Students who learn to work metacognitively are ableto clarify goals, represent problems into mathematical models, make solution plans, choose and implement appropriate strategies and interpret the results in accordance with the context of the initial problem. In addition, they identify important information, predict outcomes and reflect on the effectiveness of strategies. Thus, they have good awareness, monitoring and evaluation skills of their thoughts and actions throughout the problem-solving stages (Erbas, & Okur, 2012). Globally, there has been an increased focus on developing students' metacognition, beginning as early as the middle years of primary school.

Of central concerns for researchers are the different procedures and methods that have been used to assess mathematical metacognition. A systematic review of methods for assessing metacognition with 4-16 year old children identified 84 measures across 149 relevant papers (Gascoine, Higgins, & Wall, 2017). Measures of metacognition are commonly categorized as online and off-line. Off-line methods include self-report questionnaires and interviews and are used either before or after problem solving, while online measures take place during the problem-solving process (Ozturk, 2017). The most common online measure of metacognition is Think-Aloud Protocols (TAPs), in which students are asked to verbalize their thoughts and actions throughout their engagement with the problem (Ericsson, & Simon, 1993, 1998). The current theoretical paper aims to present the role of TAPs in the development of metacognition when solving mathematical problems. Their use as well as the advantages and disadvantages of their implementation are described, especially with regard to issues of validity and reliability. More over, the paper aims to draw light on e ducational implications for the use of TAPs in both mathematical problem solving and mathematics learning.

Think-Aloud Protocols (TAPs)

"Thinking-aloud" or "Think-Aloud Protocols" (TAPs) are described in the literature as an online method, which was initially introduced by John Watson (1920) and Karl Duncker (1945). Students are taught to verbalize their thoughts and cognitive activities while engaging in a task completion (e.g., during problem solving). Sometimes students are videotaped and receive prompting during verbalization in the case they fall silent (e.g., "What are you thinking now?", "Keep on thinking aloud, please"). Data is then transcribed and coded or judged by means of systematic observation, in order for its analysis to provide accessto students' short-term memory abilities as well as to their metacognitive skills and strategies.

Ericcson and Simon (1993, 1998) studied systematically TAPs and claimed that verbal reports or protocols can be seen as a sequence of internal states successively transformed by a series of information processes. Such protocols provide detailed evidence on the sequences of thoughts in a wide range of tasks and can be obtained parallel or retrospectively to the performance on the task. When the data is collected directly once an action is executed, the externalized information is less vulnerable to students' memory distortions and, thus, the externalized information has high reliability (Veenman, 2011).

Regarding the validity of verbal reports, researchers check if the task analysis matches the verbal expressions or whether there are inconsistencies, given that the analysis of the cognitive task shows the type of verbalizations. Thus, the highest validity is observed for concurrent think-aloud verbalizations, unlike retrospective requests to "explain", which implies that participants should verbalize a justification of what they were thinking (Ericsson, & Simon, 1993). In order to achieve the highest validity and reliability , researchers should minimize both the distraction from social influences and the diversion of the participants' attention. Last, they should combine TAPs with alternative instruments and take into account the fact that participants tend to stop speaking or express themselves incompletely when under high cognitive load

Think-Aloud Protocols (TAPs) and metacognition in problem solving

Researchers have considered think-aloud protocols as an important category of tools that provide substantive information about students' cognitive and metacognitive behavior (Vissariou, & Desli, 2022). For example, Ericsson and Simon (1993) argued that asking participants to verbalize thoughts during a task reflects thinking processes more directly. In particular, when considering metacognition, think-aloud analyses are useful in understanding the way that students think and work on a problem, given that successful problem solving involves multiple mental processes that may not be fully evident by examining student solutions. Furthermore, TAPs and metacognition, when applied in a problem-solving process, have been attributed to increased student engagement and success. For example, Schoenfeld (1985) analyzed verbal protocols into five types of episodes: "reading", "analysis", "exploration", "planning/implementation" and "verification". These episodes correspond to students' observed cognitive and metacognitive problem-solving behaviors and lead to problem-solving success. Montague and Applegate (1993) proposed a think-aloud model involving seven cognitive processes and three metacognitive activities as essential for successful mathematical problem solving (MPS) during students' think-aloud verbalizations (Figure 1). In this model, cognitive verbalizations included reading, paraphrasing, visualizing, hypothesizing, estimating, computing and checking. Metacognitive verbalizations refer to self-instruction, self-questioning and self-monitoring, which lead to successful problem-solving efforts, whereas comment and affect (negative self-talk about ability, knowledge and emotional state) can hinder the progress of successful problem solving. Similarly, Jacobse and Harskamp (2012) developed a framework of systematical observation of think-aloud protocols in problem solving with three episodes: orientation, systematical orderliness and evaluation-reflection (Table 1). Each episode consists of cognitive and metacognitive activities which are characteristic for mathematical problem solving. More specifically, in the first episode students can read carefully the statement of the problem, select the relevant information given, represent the problem, etc. In the second episode students can make a solution plan, execute the plan, implement the arithmetic operations needed, etc. Last, in the verification episode students reflect on the whole solution process, check their answers, evaluate their experiences, etc. Thus, this model implies thatindividuals apply different metacognitive strategies and processes in different episodes fostering, at the same time, their metacognitive knowledge, metacognitive skills and metacognitive experiences.

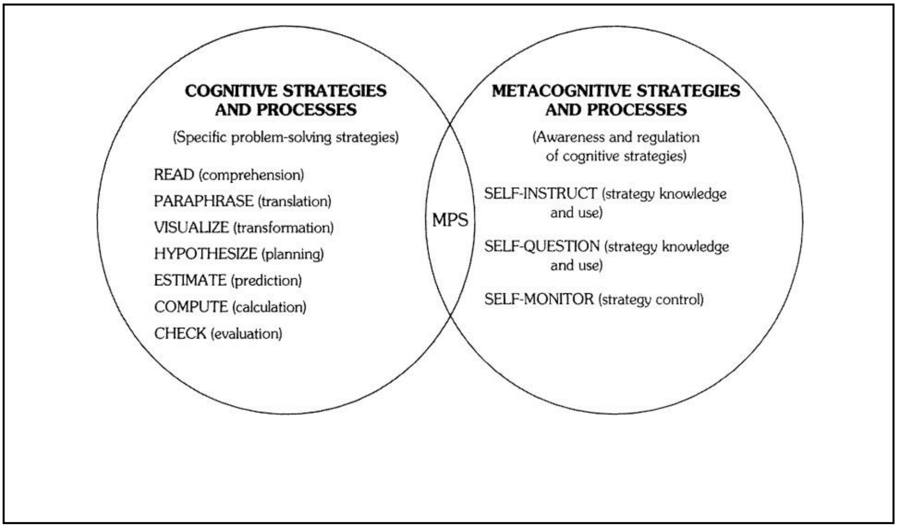
COGNITIVE STRATEGIES AND PROCESSES
(Specific problem-solving strategies)
READ (comprehension)
PARAPHRASE (translation)
VISUALIZE (transformation)
HYPOTHESIZE (planning)
ESTIMATE (prediction)
COMPUTE (calculation)
CHECK (evaluation)
MPS
METACOGNITIVE STRATEGIES AND PROCESSES
(Awareness and regulation of cognitive strategies)
SELF-INSTRUCT (strategy knowledge and use)
SELF-QUESTION (strategy knowledge and use)
SELF-MONITOR (strategy control)

Figure 1: Cognitive-metacognitive model of mathematical problem solving (Montague, & Applegate, 1993, p. 20)

Although verbal reports are considered as one indicator of the thought processes that occur during problem solving, other indicators can also be vital for fostering children's thinking processes. For example, as Ericsson and Simon (1993) noted, when children show longer reaction times, longer sequences of intermediate reported thoughts are also observed. Other indicators may include error rates, patterns of brain activation and sequence of eye fixations (Ericsson, 2006).

Moreover, thinking aloud can be used by teachers when they model their own metacognition for students as they solve a problem. Such think-aloud instruction in which teachers verbalize their cognitive and metacognitive processes in real time, especially using self-questions and statements of self-monitoring and self-evaluation, can improve students' metacognition and problem-solving performance (Huff, & Nietfeld, 2009). Last, thinking aloud can be used in paired problem solving activities, with one student solving the problem and reporting aloud what he or she was thinking. Thus, the use of TAPs coupled with group participation extends problem solving to more than just an individual thinking process.

Table 1: Episodes of think-aloud protocols in problem solving (Adapted from Jacobse, & Harskamp, 2012, p. 139)

Episode	Activity
Read, analyze/explore (orientation)	1. Reading carefully 2. Selection of relevant information/numbers 3. Paraphrasing the question 4. Making a visualization or taking notes to orient on the task 5. Estimating a possible outcome
Plan and implement (systematical orderliness)	6. Making a calculation plan 7. Systematically executing the plan 8. Being alert for correctness/sloppiness (monitoring the calculation) 9. Writing down calculations neatly
Verify (evaluation and reflection)	10. Monitoring the process 11. Checking calculations and answers 12. Drawing a conclusion 13. Reflecting on the answer 14. Reflecting on the learning experience

Think-aloud protocols: Strengths and drawbacks

Thinking aloud has gained acceptance as an indispensable method for studying thinking, as "*a very direct method to gain insight into the knowledge and methods of human problem solving*" (Someren, Barnard, & Sandberg, 1994, p.1) and a way of accessing rich information that is unattainable through other means. It provides an opportunity to make students' reasoning more coherent and reflective. Participants monitor their speech to ensure that it is understood, correct further and clarify their thinking, whenever necessary. According to Vygotsky (1962), "*Thinking aloud is a complex, dynamic process involving the idiomatic structure of speech into syntactically articulated speech intelligible to others*" (p. 148). Under these circumstances, in order to ensure participants' understandable speech, further explanations have to be given, when needed. Therefore, think-alouds rely on students' expressive language abilities. Moreover, the type of the problem used can affect the quantity and the quality of students' verbal reports. For example, research has shown that as problem complexity is increased, students make fewer cognitive and metacognitive verbalizations, in comparison to a less complex problem. Furthermore, successful problem solvers generate more self-explanations and monitor their learning better (Montague & Applegate, 1993). According to Faddar, Vanhoof and De Maeyer (2017), the think-aloud technique is valuable, not only because of its open-ended format, but also because little interviewer bias is imposed and the respondent can provide answers that may not have surfaced in other formats. Its use improves students' thinking and is considered a strongpredictor of mathematics achievement in general and problem-solvingin particular. Last, by using students' think-alouds, teachers are able toidentify their students' difficulties in problem solving and design appropriate instruction for individual students' needs (e.g., Fuchs et al.,2019).

The major drawbacks of TAPs are related to both data gathering and data scoring. Since both processes are complex and time consuming, TAPs are often considered unsuitable for teachers with little or no experience using it or when larger student samples are examined (Schellings, & Broekkamp, 2011). In addition, students with limited language abilities are not always able to fully communicate their cognitive and metacognitive processes during problem solving or are found to have difficulties expressing their thoughts. In this case, it is easier for the respondents to withdraw from the task. Especially with younger children, the uncertainty of their metacognitive abilities and the lack of an adequate level of verbal fluency are likely to lead to working memory overload, resulting in either incomplete protocols or interference and distortion of their performance on the task (Whitebread et al., 2009).

Moreover, think-aloud techniques do not capture implicit cognitive processes and students may not be aware of their cognitive knowledge and monitoring. Consequently, think-aloud methods may underestimate an individuals' metacognitive capacity, especially in young children. These difficulties indicate that a combination of think-aloud assessment methods with other techniques (e.g., stimulated recall, visual cueing cards) would be more effective as these increase young children's ability to articulate their thought processes. For example, observational approaches enable non verbal behaviors to be taken into account and can record learners' actual behaviors, including social processes that are important for the development of metacognitive skills, given the social nature of metacognition. These approaches may have more validity than others, because they are more independent of the students' verbal ability and working memory capacity (Lai, 2011).

Discussion

The purpose of this paper is to reveal how think-aloud protocolsprovide rich information on the cognitive and metacognitive processesduring a learning task. Researchers emphasized on their importance because these highlight the higher order thinking skills behind complexacademic tasks and are proven to be effective in developing students' thinking and abilities in mathematics. The major strength of their use is that information about students' behavior is collected at the time it appears, thus, memory distortions are avoided. Their correct use does not affect students' learning performance; furthermore, participants donot have to judge the appropriateness of their learning process themselves. Besides their positive characteristics already mentioned, this technique has some drawbacks, with the most major one being the practical constraints of time and effort. Their use is inappropriate for researchers or teachers who lack experience and for use in larger samples. In order to assess metacognition and problem-solving performance more successfully, it is important to explore the use or thecombination of think-aloud protocols with other instruments (e.g., off-line methods).

In addition, despite the fact that think-alouds have been used in many studies regarding mathematics problem solving (e.g., Desoete, 2007;

Jacobse, & Harskamp, 2012; Erbas, & Okur, 2012), they may not be suitable for measuring processes mechanically. However, when collecting the protocols using tasks of an appropriate level of complexity, rich information can be provided about metacognitive processes used during problem solving. For example, research findings have shown that children who can describe thinking and explain their ideas are more mathematically competent compared to those who are less articulate (Erbas, & Okur, 2012; Pappas, Ginsburg, & Jiang, 2003). Finally, their use in schools is promising. Since students learn to talk about their thinking and express their thoughts and ideas, TAPs should be encouraged in schools, thus metacognitive thoughts and actions are revealed by problem solvers. TAPs may also contribute to the development of students' metacognitive behavior during all stages of problem solving. Verbalizations cultivate verbal fluency and good comprehension of verbal instructions. For this purpose, video modeling could be an instructional method that enables students to learn how to respond during a think-aloud protocol, thereby strengthening the value of the think-alouds in improving students' outcomes during problem solving. Also, post hoc analyses of specific language students used in verbalizations would provide deeper understanding about cognitive and metacognitive behaviors on more individualized levels(Deshpande et al., 2021).

The present study suggests that teachers and teacher educators should integrate TAPs instructional practices in mathematics classrooms as these may enable students to keep their focuses on mathematics tasks rather than continuously solving only problems. Future research can be conducted with the different uses of TAPs that can provide more conclusive results.

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SESSION 7
(Educational Sciences-Didactics of Natural Sciences)

THE ROLE OF METACOGNITIVE INSTRUCTION ON CHILDREN'S CONDITIONAL KNOWLEDGE DURING MATHEMATICS PROBLEM SOLVING

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Abstract
Metacognition, which has been acknowledged to play a crucial role in mathematical problem-solving ability, includes three main facets: knowledge of cognition, regulation of cognition, and metacognitive experiences. Conditional knowledge is part of cognition knowledge and refers to knowledge and awareness of the conditions that affect learning, such as knowing when and why to use declarative and procedural knowledge. Given that students' metacognitive levels can be developed, the present study aims to examine the impact of metacognitive instruction on children's conditional knowledge when solving non-routine problems. For this purpose, 38 Greek Year 3 children were equally distributed into two groups, one of which received metacognitive instruction (experimental group) for four months, while the second group did not (control group). Before instruction, children in both groups completed, among other measures, a self-report questionnaire on knowledge of cognition. The questionnaire consisted of 30 statements, five of which referred to conditional knowledge. The same instrument was also used after the instruction in both groups. Results indicated that, although there were no differences in conditional knowledge between the two groups before the intervention, children exposed to metacognitive instruction significantly developed conditional knowledge, compared to their counterparts in the control group who did not. Findings are discussed in light of the importance of metacognitive instruction in mathematics education and problem-solving.

Keywords*: Conditional knowledge, mathematics problem solving, metacognitive instruction*

Introduction

Mathematics problem solving has come to be considered an essential skill that may and should be enhanced in all students. Indeed, the development of mathematical knowledge and the application of this knowledge in specific problem-solving circumstances, proposing solutions by employing and organizing strategies, are considered to be important elements for success in mathematics. In this view, metacognition, known in the literature as "thinking about thinking" (e.g., Mahdavi, 2014), is closely related to mathematics learning and problem solving, since it demands high-order thinking skills. However, the concept of metacognition is still ambiguous, mainly because it has been raised as a topic of research in different domains, with different definitions, aims and origins. For example, the terms "metacognition" and "metamemory" have been used interchangeably in the literature, as metacognitive theories were based on metamemory theory (Cheng, 1999). Furthermore, the term of metacognition is often used synonymously with the term of self-regulated learning, although they both derive from different conceptual and theoretical perspectives (Hofer, & Sinatra, 2010). Nowadays, self-regulation is usually considered a part of metacognition (Vorhölter, Krüger, & Wendt, 2019).

Despite the fuzzy boundaries of metacognition, there is a clear consensus that metacognition includes the following three main facets: knowledge of cognition, regulation of cognition and metacognitive experiences (Radmehr, & Drake, 2018). Knowledge of cognition or metacognitive knowledge refers to someone's stored world knowledge and includes declarative knowledge, procedural knowledge and conditional knowledge. In particular, declarative knowledge refers to knowledge about one's cognitive processes as well as strategies that influence performance, and motivate students to form problem-solving orientation. Procedural knowledge describes the procedures and behaviors employed to regulate cognitive activities. When considering problem-solving, procedural knowledge includes knowledge about students' skills in planning solutions, setting goals, selecting strategies, monitoring accuracy, etc.

Conditional knowledge refers to when and why to use declarative and procedural knowledge. It helps students become aware of the conditions that affect learning such as *why* a particular strategy is effective, *when* it should be applied and is appropriate for the solution of a problem (Schraw, 1998), and adapt their attitudes to the changing mathematical problem-solving demands. Therefore, its development and manifestation rely upon declarative and procedural knowledge. Conditional knowledge, similarly to the other facets of metacognition, draws from the interaction between knowledge and person, task and strategy variables. For example, a complex problem with a high level of difficulty will probably affect students' use of conditional knowledge and metacognitive actions in general (Vissariou, & Desli, 2019). However, this knowledge can be inhibited by weak cognitive monitoring, inadequate domain knowledge, ineffective strategies and lack of awareness of task demands.

Regulation of cognition refers to metacognitive regulatory processes that facilitate and support the control and evaluation of the learning process. These processes also referred to as "executive control or functioning", consist of three broad categories of skills, namely planning, monitoring and evaluation. Metacognitive experiences are defined as any conscious cognitive and affective experience emerging in any kind of task processing (Efkides, 2001). They are also referred as "online metacognition" or "online awareness", since they occur during a cognitive task. They monitor the interaction of metacognitive knowledge, task and person variables (e.g., beliefs, self-awareness, self-concept, etc.). They take the form of metacognitive feelings, for example, feeling of familiarity, satisfaction, difficulty and judgments or estimates (e.g., estimate of effort and predicted solution correctness) (Efklides, 2006). Both regulation of cognition and metacognitive experiences will not be examined as they go beyond the purpose of the present paper.

Metacognition is a key predictor of performance in mathematics learning and metacognitive processes are critical in the process of mathematical problem-solving (e.g., Alibali, Brown, & Menendez, 2019). Prior research has shown that participation in metacognitive activities was positively associated with the use of all relevant strategies. The findings that successful problem solvers self-regulate and self-monitor more compared to less successful solvers as well as that students with higher levels of metacognitive knowledge perform better in math (Nelson, & Fyfe, 2019) stress the importance of metacognitive processes in problem solving. Other researchers (e.g., (Desoete, & De Craene, 2019) have argued that metacognitive interventions help students to recall, process and integrate information, as well as to make connections between different mathematical concepts and types of information, thus, metacognitive interventions improve students' cognitive and metacognitive level. For example, in a recent study of third graders Vissariou and Desli (2023) investigated the contribution of metacognitive instruction to the development of procedural metacognitive knowledge and mathematical problem solving. Overall, their results showed that, regardless of children's mathematical performance, the group that served as experimental showed more advanced procedural knowledge compared to control group, and this knowledge resulted to more effective use of strategies (e.g., drawing tables, visual representations of the given information, etc.) as well as to problem-solving success. In the present study the focus is narrowed down to children's conditional knowledge after attending a program on enhancing metacognition when problem solving.

Relying on metacognition to familiarize students with problem solving equips them with a set of intellectual skills and enables them to control what they are thinking. In particular, students who learn to work metacognitively organize their thoughts when approaching the problems, plan the steps of the solving process, monitor and regulate their actions, choose the appropriate strategies and become aware of the process. Furthermore, students are able to represent problems into mathematical models, adjust strategies when necessary and interpret their results taking into account the context of the problem (Santoso, Napitupulu, & Amry, 2019). Verschaffel (1999) also pointed out the importance of metacognition in the sense of evaluation in the final stage of mathematical problem solving when computational results need to be verified.

Researchers who emphasized the development of metacognition also highlighted the importance of solving non-routine problems, that is, problems that do not require a specific algorithm and cannot be solved by a known method or formula. Indeed, metacognitive functions are more likely to be revealed during challenging tasks, such as non-routine problems, as they require a flexible and strategic way of thinking (Vissariou, & Desli, 2019).

We assume that there is a strong relationship between metacognition and problem solving especially when it comes to conditional metacognitive knowledge. In this view, deep conditional knowledge in a mathematics domain is a prerequisite for successful problem solving, since if an individual knows which methods are available, he/she can move forward. Based on this discussion, the present study, as part of a larger research project, aims to examine the impact of metacognitive instruction on children's conditional knowledge when solving non-routine problems. The following research questions guided the current study: a) to what extend does metacognitive instruction improve the conditional metacognitive knowledge of third graders? b) does school performance after instruction affect conditional metacognitive knowledge?

Method

Participants

Thirty-eight Year 3 children (20 boys and 18 girls) coming evenly from two state primary schools in Thessaloniki, Greece, participated in the study. Their socioeconomic status as well as their academic status ranged from low to high, whereas their average age was 8 years and 3 months at the beginning of the study. Students from the one participating school were exposed to metacognitive instruction for four months and served as the experimental group, whereas students from the other school were not and served as the control group. All participants were also classified by their mathematics teachers into three sub-groups, those with low, average and high performance, after taking into consideration their mathematics performance.

Before data collection, parents and participants gave their written consent to participate in the study. The study was approved by the ethics subcommittee for students involving human participants at Aristotle University of Thessaloniki (Greece).

Research design and data collection tool

For this study, a questionnaire-based quasi-experiment design was chosen. All participants were presented with a self-reportquestionnaire, on the basis of the inventories used by Sperling, Howard, Miller and Murphy (2002) and Yildiz, Akpinar, Tatar and Ergin (2009). The particular instruments were studied as they are considered to be valid for research and useful for assessment and interventions in classrooms (Gascoine, Higgins, & Wall, 2017). The questionnaire was designed to examine children's level of metacognitive conditional knowledge and consisted of five statements covering a range of possible metacognitive behaviors related to conditional knowledge before and after the problem-solving process. Children were asked to respond to these statements using a five-point Likert scale (ranging from "1=never" to "5=always"), choosing the answer that best describes how they work when solving mathematics problems. The questionnaire was finally formed after some modifications to the original versions to make the statements more suitable for younger children as well as after checking the validity and reliability of the statements in the pilot study (Figure 1).

1. I know when to use a particular problem-solving method.
2. I know why a problem is easy or difficult for me.
3. I know why I use a particular problem-solving method.
4. I know why a problem-solving method is not appropriate.
5. I know when I need to change the way I work on a problem.

Figure 1: The statements for conditional knowledge

Procedure

The study took place two times. At the beginning of the school year, all participants were asked to complete the questionnaire individually (the pretest) in their classroom during one teaching hour (45 minutes). As the focus of the study was to evaluate the application of conditional knowledge after metacognitive instruction, the experimental group was presented for four months with a new "multifunctional" model of metacognitive instruction, which is an extension of the metacognitive teaching scheme called STARtUP, which was initially proposed by Lee, Yeo and Hong (2014). This model focuses on the first stages of problem-solving process (Understand and Planning) and is appropriate for rich mathematical tasks, like non-routine problems. A lesson based on this scheme draws attention to mathematical tasks accompanied by metacognitive questions answered in writing (e.g., “What do I have to find on this problem?”, “Which strategy might be needed to solve the problem?”, “Was there any other way to work on the problem?”, “Why is this problem difficult for me?”, “How much time do I need to solve the problem?”, etc.). During the intervention, experimental group students were presented with a total of 32 non-routine problems and generic feedback on their solutions was given. The control group received traditional instruction, using the official Greek mathematics textbooks. After the intervention was completed, a post-test followed. This test was identical to pretest and was administered to both experimental and control group children.

RESULTS

Conditional knowledge

In order to examine whether experimental group children differed in their responses from control group children regarding the statements of conditional knowledge before the instruction, an independent samples t-test was conducted. The analysis revealed no statistically significant differences [$t(36)=1.96$, $p=.074$)]: students of both groups responded similarly (experimental group: $M=2.60$, $df=36$, control group: $M=2.49$, $df=36$), and most of their responses were “rarely” and “sometimes”. Interestingly, the same lower mean level was reported by students of both groups in statement 3: the majority of students stated that they rarely *know why they use a particular problem-solving method* ($M=1.95$). This finding indicates that students have great difficulty understanding the reason for using a particular problem-solving method or strategy.

On the contrary, in the second measurement (after the instruction), the same analysis revealed statistically significant differences [$t(36)=6.34$, $p<.001$)]: experimental group students responded more positively ($M=3.33$, $df=36$) compared to control group students ($M=1.84$, $df=36$), with most of their responses being between “sometimes” and “often”. In particular, the highest mean level was reported in statements 2, 3, 4 and 5: the majority of students stated that they often *know why a problem is easy or difficult for them* and *why they use a certain problem-solving method* ($M=3.58$ and $M=3.32$, respectively). In addition, they sometimes *know why they use a particular problem-*

solving method and *when they need to change the way they work on a problem* (*M*=3.16 and *M*=3.21, respectively). These findings indicate that understanding the difficulty of a problem and the exact time and reason for using a particular problem-solving method are issues of great importance to the participants in the experimental group. For children in the control group, the lowest mean level observed was in statements 1, 3, 4 and 5: most students stated that they rarely *know when and why they use a particular problem-solving method* (*M*=1.74 and *M*=1.79, respectively). Furthermore, they rarely *know why a problem-solving method is not appropriate* (*M*=1.53) and do not *know when to change the way they work on a problem* (*M*=1.89). Table 1 shows these findings.

Table 1: Mean scores (and standard deviations) for conditional knowledge items before and after the instruction

	Experimental group		**Control group**	
Statements	**Mean (Before)**	**Mean (after)**	**Mean (before)**	**Mean (after)**
1	2.37 (1.116)	2.37^{***} (1.065)	2.18 (.671)	1.74 (.733)
2	3.58 (1.216)	3.58^{**} (1.346)	3.08 (.943)	2.26 (.993)
3	1.95 (.970)	3.32^{***} (1.157)	1.95 (.705)	1.79 (.631)
4	2.37 (1.012)	3.16^{***} (1.214)	1.93 (.612)	1.53 (.612)
5	2.74 (.991)	3.21^{***} (1.084)	2.32 (.582)	1.89 (.567)

**Significant correlation at the p<.05 level,* ***Significant correlation at the p<.01 level, and* ****Significant correlation at the p<.001 level*

In order to examine the effectiveness of the teaching method, children's responses were subjected to a mixed model ANOVA in which instruction (2: experimental and control group) was the between subjects factor and time of testing (2: before and after the instruction) was the within subjects factor. The interaction instruction by time of testing was significant ($F_{(1,36)}=15.908$, $p<.001$, $\eta_p{}^2=.306$), indicating that the difference between children's responses before and after instruction was not the same for experimental and control group. More specifically, metacognitive instruction improved the conditional knowledge of children in the experimental group, whereas traditional instruction did not lead to any improvement in the conditional knowledge of children in the control group. This interaction is presented in Figure 2.

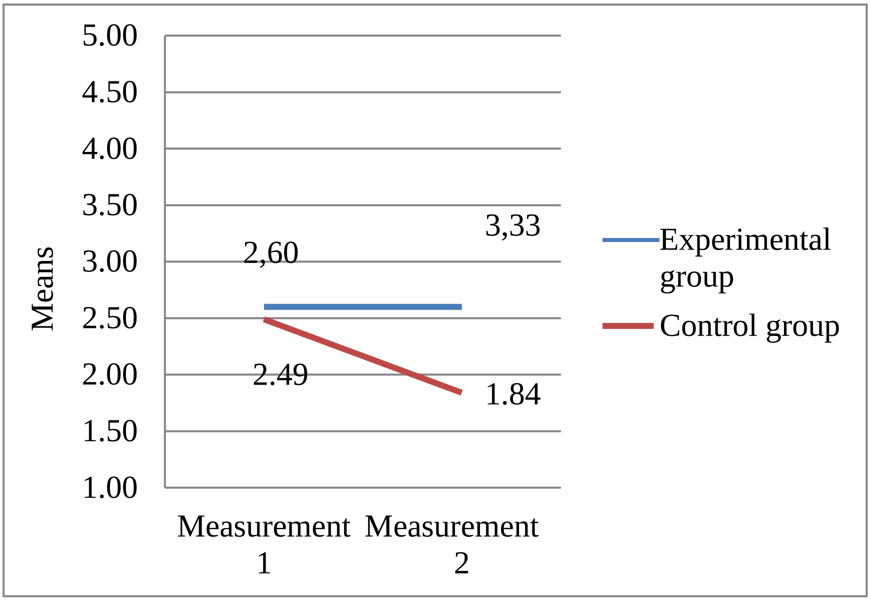

Figure 2: Children's conditional knowledge before and after the instruction

Conditional knowledge and school performance

To examine whether school performance before and after instruction affects children's conditional metacognitive knowledge, an Anova analysis was conducted. Interestingly, even though children's conditional knowledge in both groups was at approximately the same level before the intervention, after instruction statistical significant differences were observed for the total of children ($F_{(2,35)}=4.168$, $p<.05$). Tukey post-hoc tests showed that these differences were due to students with high performance, who showed statistically significantly higher means than children with low ($p<.01$) performance and those with average performance ($p<.01$). However, the Anova analysis conducted after instruction revealed significant differences only for control group children ($F_{(2,16)}=7.300$, $p<.01$). Tukey post-hoc tests showed that these differences were due to students with high performance, who showed statistically significantly higher means than children with low ($p<.01$) performance. On the contrary, such differences were not confirmed for the experimental group children ($F_{(2,16)}=2.872$, $p=.086$), indicating that for them the level of school performance did not influence their conditional knowledge. These findings are presented in Table 2.

Table 2: Conditional knowledge and school performance after instruction

			All children	Experimental Group	Control Group
Tukey HSD	Low	Average	.393	.695	.206
		High	.006	.073	.004
	Average	Low	.393	.695	.206
		High	.006	.263	.078
	High	Low	.006	.073	.004
		Average	.092	.263	.078

GENERAL DISCUSSION

The present study attempted to reveal to what extent metacognitive instruction improved third graders' conditional metacognitive knowledge when solving non-routine mathematics problems as well as the relationship between this improvement and their school performance. The analysis of children's responses revealed two main findings. First, despite the fact that children's conditional knowledge in both groups was at approximately the same level on the pretest, experimental group children improved their conditional knowledge after metacognitive instruction, whereas traditional instruction in the control group did not result in any improvement. This finding is consistent with previous studies in which metacognition needs to be taught in order to develop (Desoete, & De Craene, 2019). More specifically, experimental group children seemed to be aware of the conditions that affected their problem-solving performance after the intervention, since they stated that they were able to apply the appropriate strategy, judge why a particular problem-solving method was effective or not and when they should change it, in order to find the best solution. Therefore, the development of their conditional knowledge in the post-test improved a metacognitive approach to mathematical problem solving. For example, all children in the experimental group, regardless of their mathematical abilities, showed a flexible and reflective way of thinking and acting after the intervention.

Second, although all children in the experimental group benefited from metacognitive instruction and improved their conditional knowledge, those with low school performance benefited the most, as they managed to close their gaps with their high-achieving counterparts. This finding is in agreement with the results from previous studies in which metacognitive instruction is found to be more effective for children with low mathematical performance (e.g., Cornoldi, Caretti, Drusi, & Tencati, 2015; Vissariou, & Desli, 2023). On the contrary, neither the subgroup with high performance nor the group with average and low performance from the control group benefited from traditional instruction.

Several teaching implications arise from these findings. Although in the present study we concluded that conditional metacognitive knowledge as a subcomponent of metacognition is of great importance in problem solving, the abovementioned studies, as well as ours, suggest that in order to enhance problem-solving ability, teachers should invest in the development of metacognition. The instruction model used in this study may offer teachers and researchers a means to examine the complexity of problem-solving and its relationship with metacognition.

Finally, it is important to consider the limitations of the present study. Firstly, the small sample size should be taken into consideration. Further studies with larger and more diverse samples may yield findings that can be generalizable and testable in other age groups or geographic locations. Moreover, from a methodological perspective, it is important to note that a self-report questionnaire such the one used in the current study might provide only a little about children’s conditional knowledge (Winne, 2010). Although the instrument used was quite short, its statements are considered representative of metacognitive knowledge, since, according to Antal (2007, in Magno, 2009, p. 8), “*a single item can be representative of a strong indicator of the domains measured or even a variety of abilities*”.

The assessment of conditional knowledge in the present study was only one part of the assessment of children's metacognitive level: in the present project self-report questionnaires were also used for declarative knowledge, procedural knowledge, and metacognitive skills of planning, monitoring and evaluation and metacognitive experiences before and after problem solving. Thus, it would be interesting for future research to focus on an overall view of children's metacognitive knowledge. Last, changes in children's conditional knowledge in the context of routine problem-solving processes might provide another perspective on metacognitive knowledge and metacognitive instruction in general.

Our results underscore the argument that problem solving might be facilitated by metacognitive instruction, with students participating in identifying problem-solving methods, employing and alternating them when needed, to strongly improve their performance in cognitive and metacognitive levels. This might help them to expand, enrich and develop their understanding of mathematical concepts and aid their subsequent mathematics learning and mathematics achievement.

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SESSION 7
(Educational Sciences-Didactics of Natural Sciences)

USE OF DIGITAL RESOURCES BY IN-SERVICE ELEMENTARY TEACHERS IN TEACHING MATHEMATICS

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Abstract
Educational curricula, in their modern form, are increasingly characterized by the utilization of digital resources. This development represents a challenge for in service teachers, considering the multitude of available types of digital resources and the variety of functions they perform. The objective of this quantitative research is to investigate what kind of digital resources the in-service active primary education teachers use and how they use them in the tuition of Mathematics. As a research tool for data collection, a questionnaire of closed-type questions was used in digital and printed form for 150 in-service teachers. From the results of this research it became clear that (a) the majority of the teachers reported that they receive training regarding digital resources and include these resources in their teaching (b) there is a statistically significant correlation of the use of digital resources with the receiving of a relevant training (c) a statistically significant correlation was found between some individual characteristics of the teachers (age, level of higher education, employment relationship, teaching experience) and the training in digital resources (d) participating teachers reported that they more often choose digital resources of low technical value rather than ones of high technical value.

Keywords: *Digital resources, mathematics education, in-service elementary teachers.*

1. Introduction

During the implementation of a curriculum, a multitude of teaching and learning resources are used, among which are text sources, such as textbooks, teaching guides, worksheets, notes, tests and other material resources, such as teaching aids, calculators, and ICT-based digital resources (Burkholder, Arnillas, & Cauthen, 2018; Pepin & Gueudet, 2018). Focusing on the cognitive field of Mathematics, the utilization of digital resources creates favorable conditions for students in order to engage in logical-mathematical thinking, contributing to the expression of mathematical meanings and ideas, to the development of investigation and experimentation skills, to the utilization of multiple interconnected representations, as well as to support cooperative learning and communication (Kalogeria, Kynigos, & Psycharis, 2012).

The digitization of education makes its presence increasingly vivid in the use of different sources of information, in the possibility of widespread dissemination of ideas and in the transition from traditional to innovative forms of learning, such as blended learning, flipped classrooms, gamification and mobile learning (m-learning) (Micu, 2019, p.1467). Digital technology enables students and teachers to interact with the curriculum through a wide range of digital devices, including desktops/laptops, mobile phones (smartphones), tablets, smartboards and digital cameras (Al-Awidi & Aldhafeeri, 2017, p.107), while maintaining contact with digital resources throughout the learning process and personalizing the learning experience through the use of technology (Moeller & Reitzes, 2011).

Modern teachers treat digital resources as essential tools for formulating their lessons, while they are increasingly encouraged to rely on digital resources in their instructional planning and preparation of educational materials, while students, on their part, make use of these resources in the context of their participation in the learning process (Pepin & Gueudet, 2018).

An extensive number of case studies reveal a wide range of available digital curriculum resources, categorized into thematic categories that can be used in teaching Mathematics (Umameh & Monaghan, 2017; Muir, 2014; Loong & Herbert, 2018; Gueudet & Pepin, 2019; Attard, 2018; Engelbrecht, Llinares, & Borba, 2020; Kay, 2020). However, since the integration of the digital dimension in the teaching of mathematics is still weak and problematic, modern research data highlights the important role of teachers in terms of their manipulations at the level of selection, use, and management of digital resources (Abboud-Blanchard, 2014).

The present study attempts to investigate the types of digital resources used by elementary in-service teachers and the way in which these resources are used in Mathematics teaching. Moreover, it attempts to investigate whether the individual characteristics of teachers and their training in digital resources influence the possible integration of these resources in their teaching.

Subsequently, an attempt to approach the concept and specific characteristics of a digital curriculum and the digital resources on which it is based, in combination to the specific characteristics of digital resources used in a Mathematics curriculum is regarded as essential.

1.1. Digital curriculum

A digital curriculum is defined as any digital content that can take various forms in the context of the curriculum and the achievement of the desired educational goals, while as a concept it includes any digital medium accessible to students at any time. The term digital media can include text, graphics, audio, video, web applications, and any other technology that can be used in the formation of the digital curriculum. (Al-Awidi & Aldhafeeri, 2017; Martin, 2015; Tatnall, Kereteletswe, & Visscher, 2011). The term digital curriculum corresponds to those interrelated aspects of a curriculum that focus on promoting, developing and enhancing skills related to IT and digital literacy (Clark & Simpson, 2020). It can be understood as the way of channeling digital teaching material through internet, aiming to form a dominant digital component in every manifestation of teaching and learning (Abbey, 2009; Micu, 2019; Scanlon & Buckingham, 2003). The digital curriculum is differentiated from other forms of educational technology, given the comparative advantages implied by the use of multimedia content, integrating assessment systems of the learning process, while ensuring access to a full range of educational materials (Choppin, Carsons, Bory, Cerosaletti, & Gillis, 2014).

1.2. Digital Curriculum Resources-DCR

Digital curriculum resources (DCR) can be characterized as electronic/digital materials used during the interaction with electronic means of teaching and learning, available and accessible at any time and context. Types of such digital resources are digital content in text, spreadsheet, PDF format, digital educational applications and software, serious games, websites, digital educational platforms, collaborative learning tools, digital assessments and electronic books (Pepin & Gueudet, 2018, p.173). These tools, given that they are effectively integrated into the curriculum, are able to substantially enhance the learning experience, while providing the opportunity to approach primary learning elements, utilizing data collection, recording methods, communication, and exchange learning experiences. Moreover, digital resources such as Twitter, blogs, Wikis and YouTube can support the digital curriculum, enhancing engagement, guidance and learning assessment (Al-Awidi & Aldhafeeri, 2017; Eady & Lockyer, 2013).

1.3.Characteristics of a digital curriculum and its digitalresources

The exploitation of digital content in a curriculum constitutes a substantial challenge, aiming to highlight its special characteristics and the possibilities that it offers (Burkholder, Arnillas, & Cauthen, 2018; Cauthen, 2015). In this perspective, a distinction is made between the traditional content, characterized, even in digitized form, by a lack of interactivity, dynamic adaptation, assessment and feedback. Instead, digital resources provide a personalized learning environment, differentiated, presented and applied according to the learning process, based on interaction, content sequencing and adaptability (Burkholder, Arnillas, & Cauthen, 2018).

Contemporary research data demonstrate that the use of digital curriculum materials is able to make learning more interactive, offering more engaging and effective learning experiences, dynamically adaptive learning conditions and possibilities for continuous assessment of learning progress (Choppin, Carsons, Bory, Cerosaletti, & Gillis, 2014).The characteristics of a digital curriculum resource can be grouped into categories concerning the use of digital media, challenges of implementing digital books, interactivity, socialization, customization of the learning experience, continuous assessment and reporting of student progress, as well as potential economic benefits deriving from the use of digital content (Choppin, Carsons, Bory, Cerosaletti, & Gillis, 2014, pp.12-13; Fletcher, Scaffhauser, & Levin, 2012, p.8).

A distinction between digital resources, in light of the complexity of their programming, can be done through the following graded ranking scale, with an increasing level of complexity (Burkholder, Arnillas, & Cauthen, 2018, p.181; Cauthen, 2016, p.5):

- *Digitized documents of low technical value (Digital document)*
- *Low-tech animations (Single-loop animations)*
- *Content in form of videos of low technical value (Video)*
- *Collection of digital content (Collections)*
- *Feedback digital resources*
- *Coding digital resources*
- *Fully adaptive and multisensory digital software in virtual learning environment conditions*

1.4.Digital resources used in the educational process within a Mathematics curriculum

The digital resources used in the educational process within a Mathematics curriculum, based on the findings of international research, can be classified into some broad categories:

- *General purpose software,* including Microsoft Word, Excel & PowerPoint, Google Docs, Sheets & Slides (Gueudet & Pepin, 2019; Polly, 2014; Loong & Herbert, 2018; Naftaliev, 2018)
- *Cooperative digital tools,* such as Blogs, Google Drive, Skype, Facebook, Twitter, Wikispaces and Edmodo (Engelbrecht, Llinares, & Borba, 2020; Umameh & Monaghan, 2017)
- *Electronic manuals/books,* such as Creativity Book, Visual Math e-textbook, E-Math and Sesamath e-textbook (Pepin, Gueudet, Yerushalmy, Trouche, & Chazan, 2015; Gueudet & Pepin, 2019; Hägerstedt, Mannila, Salakoski, & Back, 2014; Kynigos & Kolovou, 2018)
- *Resource banks,* such as Khan Academy, Mathsbox, Math playground, Youtube, Wikipedia and Discovery Education (Light & Pierson, 2014; Mason, 2014; Muir, 2014; Ruthven, 2018; Umameh & Monaghan, 2017; Engelbrecht, Llinares, & Borba, 2020; Trigueros, Lozano, & Sandoval, 2014; Polly, 2014; Gueudet & Pepin, 2019)
- *Math game-based apps,* such as ST Math, Explore Learning Collection, Brainology®, Matific and Minecraft (Callaghan, Long, van Es, Reich, & Rutherford, 2017; Peddycord-Liu, et al., 2019; Chao, Chen, & Star, 2016; Kay, 2020; Meaney & Pajic, 2018; Attard, 2018)

• *Mathematical, educational and fun-like applications,* such as King of Maths, Khan Academy Kids, Tux Math and Wordwall (Umameh & Monaghan, 2017; Muir, 2014; Loong & Herbert, 2018)
• *Digital educational platforms (Learning Management Systems and Virtual Learning Environments),* such as Google Classroom, Moodle Learning Management System, LaboMEP (Sésamath), MOOC and Mathletics, (Gueudet & Pepin, 2019; Gruson, Gueudet, Le Hénaff, & Lebaud, 2018; Attard, 2018; Muir, 2014; Trouche, Gueudet, & Pepin, 2018; Panero, Aldon, & Touche, 2017; Taranto, Arzarello, & Robutti, 2018; Engelbrecht, Llinares, & Borba, 2020)
• *Data collection and management software,* such as Plickers and Socrative (Umameh & Monaghan, 2017)
• *Dynamic Mathematics Software,* such as Geogebra and Desmos (Santos-Trigo, Reyes-Martínez, & Ortega-Moreno, 2015; Umameh & Monaghan, 2017; Gueudet & Pepin, 2019; Korenova, 2017; Assis, Gitirana, & Trouche, 2018; Trouche, Gueudet, & Pepin, 2018)

2. The current study

Taking into account the findings of the studies already reviewed and the gaps inspected in already existing literature the purpose of this research is determined as:

Investigation in regards to the utilization of digital resources in teaching Mathematics according to in-service teachers in Greek primary schools.

Research questions

Based on the above research purpose, the research questions are:

1st R.Q.: What digital curriculum resources do in-service teachersreport using while teaching Mathematics?

2nd R.Q.: To what extent are the characteristics of in-service teachers related to their training in digital resources and the use of such resources in teaching Mathematics?

3. Methodology

The methodological approach in this study is quantitative. The specific empirical approach is considered the most appropriate for the present research, since it ensures the standardization of collected data, the possibility of approaching a large part of the population, the correlation of variables and the amenability to various statistical methods of analysis, avoiding a possible influence of the researcher on the data collection process (Cohen, Manion, & Morrison, 2011; Creswell, 2016; Bryman, 2017; Athanasopoulou, 2018).

Participants

In this study, the participating teachers live in Greece and work in Greek schools and belong to various age groups. As part of their teaching work, they taught Mathematics in the entire range of Primary School classes, serving as permanent or substitute teachers in various regions of the Greek territory. The sampling method adopted in this study is that of snowball sampling, due to the difficulties in applying probability sampling, a fact that constitutes a substantial limitation of the research in terms of the generalizability of its conclusions to the general population. More specifically, 15 primary school teachers participated in the pilot study, while 150 primary school teachers from Greece participated in the main study. In the first phase, a certain number of people with the specific characteristics were selected, while in the second phase, these people suggested other teachers who were able to participate in the research (Korres, 2013).

Sample characteristics

Sex: In the context of the main research, 150 in-practice Primary Education teachers participated, of which 54 (36%) were men and 96 (64%) were women.

Age: The age of in-service teachers ranged from 23 to 63 years, while their average value was 31.64 years.

Higher education level: Regarding the level of higher education, 67 (44.70%) had only a bachelor's degree, 71 (47.30%) had a master's degree, and the remaining 12 (8%) were PhD holders.

Work profile

Working relationship: Regarding their work relationship, 82 of the participants were permanent in-service teachers (54.70%), while 68 of them (45.30%) were substitutes.

Working experience: The work experience of the participants ranged from 1 to 38 years, while its average value was 10.25 years.

4. Results

The digital resources witch teachers report that they use in teaching Mathematics

Considering the answers to the questionnaires, the majority of teachers (n=116, 77.30%) stated that they use digital resources in teaching Mathematics, while most of them (n=105, 70%) stated that they received training regarding the use of digital resources.

Based on the answers of the participants, it seems that the majority of them {specifically 115 of them (76.70%)} choose to use, while teaching Mathematics, (at least once a month) digital resources thatare included in the category "Banks of digital resources", with typical examples being "YouTube" (n=109, 72.70%), "Fotodentro" (n=107, 71.30%), "Wikipedia" (n=106, 70.70%) and "Mathematics of Nature and Life" (n=88, 58.70%). The majority of teachers (n=113, 76%) also stated that they choose to use "General purpose software", with typical examples being "Text processing software" (n=105, 70%) and "Presentation software" (n =105, 70.00%). Finally, the majority of teachers (n=103, 68.70%) stated that they choose to use "Digital collaborative learning tools", with "Google Drive" being a typical example (n=81, 54%).

As found in the literature review, there is a lack of research that extensively investigates teachers' use of digital resources in teaching Mathematics. However, based on the existing literature, there aredigital resources that teachers use while teaching and were found tobe utilized by the majority of teachers who participated in the present research. More specifically, Engelbrecht, Llinares & Borba (2020), Gueudet & Pepin, (2019), Gueudet (2018), Ruthven (2018), as well asHollands and Pan (2018) mentioned in their studies the use of digital resource banks in teaching Mathematics. The utilization of general purpose software was highlighted in the studies of Gueudet & Pepin (2019), Loong & Herbert (2018), Naftaliev (2018) and Polly (2014), while the deployment of digital collaborative tools was investigated inthe studies of Engelbrecht, Llinares & Borba (2020) and Umameh & Monaghan (2017).

It seems that in-practice teachers choose digital resources of low technical value the most, such as digital documents, moving graphics (single-loop animations), content in the form of videos and collections of digital content, that require more extensive teaching planning. On the other hand, they use more complex digital resources of high technical value less often, such as digital feedback resources, digital coding resources and fully adaptive and multisensory digital educational software in virtual learning environment conditions, that entail more automated learning (Cauthen, 2015; Cauthen, 2016; Burkholder, Arnillas, &Cauthen, 2018).

Correlations between study variables

Investigating the relationship between training in digital resources and the use of digital resources in the teaching of Elementary Mathematics

The vast majority of participating teachers (77.30%) use digital resources while teaching Mathematics, while the majority of them (70%) had been trained to use them. The relationship between the use of digital resources and the training in them is statistically significant ($\chi^2=6.092$, $p=0.014$), that is to say those who stated that they were educated in the use of such resources reported a higher frequency of using digital resources than those who were not. The specific correlation was found to be weak to moderate intensity ($\varphi=0.202$), as a result of the Phi and Cramer's V coefficients test. Consequently, it seems that the use of digital resources in the teaching of Mathematics is generally related to the training they receive in the use of digital resources.

Relationship between the individual characteristics of the teachers with previous training in the use of digital resources in the teaching of Mathematics

In order to examine a possible correlation between the individual characteristics of the teachers and their training in digital resources, a test was carried out with the χ^2 statistical criterion and the coefficients Phi and Cramer's V were calculated, in order to define the degree of correlation between the variables.

Based on the results, a statistically significant correlation ($\chi^2=21.644$, $p<0.05$) was found between the training received by teachers in the use of digital resources and their experience in teaching (higher rates of training in the case of 31 and over), while the degree of correlation was found to correspond to a moderate intensity of correlation ($\varphi=0.380$). A statistically significant correlation ($\chi^2=20.337$, $p<0.05$) was also found between the training received by teachers in the use of digital resources and their working relationship (higher rates of training in the case of permanent teachers), while the degree of correlation was found to have a moderate intensity of correlation ($\varphi=0.368$). Also, a statistically significant correlation ($\chi^2=12.537$, $p=0.014$) was found between the training received by teachers in the use of digital resources and the age group to which they belong (higher rates of training in the case of the age groups 40-49 and 50- 59 years old), while the degree of correlation was found to have a moderate intensity of correlation ($\varphi=0.289$). A statistically significant correlation was found ($\chi^2=6.963$, $p=0.031$) between the training received by teachers in the use of digital resources and their level of higher education (higher rates of training in the case of PhD holders), while the degree of correlation was found to have a moderate intensity of correlation ($\varphi=0.215$).

On the contrary, no statistically significant correlation was found between the training of teachers in digital resources and their gender ($\chi^2=0.667$, $p=0.414 > \alpha=0.05$).

5. Conclusions

Based on the results of this research, it becomes evident that the majority of participating primary education teachers had previously received training on digital resources in the teaching of Mathematics. It was even found that there is a statistically significant correlation between the training in digital resources and the use of such resources in teaching Mathematics.

It is important to note that a statistically significant correlation was found between the training of teachers in digital resources and their individual characteristics (teachers with an age range of 40-59 years, PhD holders, permanent employment, teaching experience of more than 30 years), while no significant correlation was found with their gender. Considering the teachers' responses, while they overall state that they use a wide range of digital resources at least once a month, the majority of them seem to trust specific categories of digital resources and, specifically, to use digital resources that fall under the categories of "banks of digital resources", "general purpose software" and "digital collaborative learning tools". The genre of these digital resources makes it clear that teachers more often choose digital resources of low technical value (digitized documents, animations, video content, collections of digital content), while they use more complex resources of high technical value (digital feedback and coding resources, adaptive digital educational software) less often.

6. Research Limitations

In the present study the snowball sampling method was implemented. This, combined with the limited number of 150 participants, makes it difficult to generalize the results and, therefore, the conclusions should be used as indications of trends that characterize the general population.

An additional limitation has to do with the information collected through the closed-ended questions of the questionnaire, regarding the types of digital resources used in the teaching of Mathematics. Based on the answers given, it is not clear whether the use of digital resources was an essential part of the educational process within the school classroom or the specific resources were used as a supplement during the preparation and/or evaluation of the teaching interventions.

Finally, the digital completion of questionnaires in the form of Google Forms, was the basic means of data collection, although there were also cases of teachers who requested a paper copy of the questionnaire as an alternative, possibly due to their lower computer literacy. Therefore, another limitation of the study was the digital distribution of the questionnaire, that may have reduced the number of participants, mainly affecting those with limited knowledge in the use of new technologies.

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SESSION 7
(Educational Sciences-Didactics of Natural Sciences)

A STUDY ON MATHEMATICAL ANXIETY IN GREEK PRIMARY SCHOOL STUDENTS. INVESTIGATING INTERVENTIONS TO CURE IT WITH THE USAGE OF NEW TECHNOLOGIES

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Abstract

A large proportion of students have serious negative emotional reactions to mathematics. These emotional problems can lead to performance difficulties and/or can become barriers that discourage students from further mathematics education, even if their performance is good. Over the past decade, many studies have highlighted the negative short- and long-term effects of MA on children's academic and daily lives. Regarding the multiple connections between MA and mathematical performance, it becomes clear that reducing MA symptoms and through the use of new technologies can be a relevant approach to support children's mathematical development. The purpose of the present research is to study the latest developments on math anxiety and negative satellite emotions for math in male and female students in Greek primary school grades 4 to 6. In addition, to examine whether the use of New Technologies - with the use of dynamic geometry software - can help to eliminate mathematical anxiety in elementary school students. The approach to the subject was carried out through empirical quantitative investigation. Quantitative analysis was carried out in combination with qualitative analysis with semi-structured interview. In the applicability of the research, the results will be valuable for educational designers when designing appropriate applications or software in mathematics, to incorporate appropriate technologies to facilitate students' learning motivation in mathematics, especially for students with high anxiety.

Key-words: *GSP, intervention, mathematics anxiety, new technologies, primary school*

1. Introduction

Mathematics is often included in the category of difficult subjects by a significant number of children and adults, who tend to experience feelings of anxiety, worry, tension or discomfort when faced with this subject (Dondio, Gusev, & Rocha, 2023) which can seriously disrupt their mathematical learning and performance, both by causing avoidance of mathematical activities and overloading and disruption of working memory during mathematical tasks (Dowker, Sarkar, & Looi, 2016). Affecting 1 in 6 students, this condition is more common among elementary school girls than boys (Luttenberger, Wimmer, & Paechter, 2018; Stoet, Bailey, Moore, & Geary, 2016; Van Mier, Schleepen, & Van den Berg, 2019), thereby exacerbating the existing problem of gender inequality in STEM education (Stoet et al., 2016). MA can already be detected in elementary school children (Ramirez, Gunderson, Levine, & Beilock, 2013), potentially hindering their future occupational performance and career choices (McMullan, Jones, & Lea, 2012).

2. Brief literature review of previous research

Researchers and educators have long recognized the role of mathematics in academic and professional success. One factor that affects learning and knowledge of mathematics is stress (Mononen, Niemivirta, Korhonen, Lindskog, & Tapola, 2021). Math anxiety seems to be as much an aspect of 'stress' as it is an aspect of 'math'. MA occurs when a person experiences emotional disturbances or negative feelings due to situations involving mathematics in learning or daily activities (Namkung, Peng, & Lin, 2019).

In recent years, however, views on the nature of MA and its origin have changed. Researchers observed that since children in fourth or fifth-grade experience math anxiety, this means that MA may already have started earlier (Gunderson et al., 2017). The apparent increase in MA with age is consistent with findings showing that other attitudes toward mathematics change with age. Unfortunately, they tend to worsen as children grow older (Dowker, 2005; Mata, Monteiro, & Peixoto, 2012).

For some years, there has been an interesting debate about whether children have the cognitive sophistication to adequately report their feelings about math anxiety (Ashcraft & Krause, 2007; Ganley & McGraw, 2016; Vukovic, Kieffer, Bailey, & Harari, 2013 as cited in Ramirez et al., 2018). MA is considered an important predictor of mathematical skills in school-age children, adolescents, and adults (Dowker, et al., 2016; Zhang, Zhao, & Kong, 2019). In recent years, studies conducted among younger and younger students report in their results that even children starting school feel some level of MA (Carey, Hill, Devine, & Szűcs, 2017; Cargnelutti, Tomasetto, & Passolunghi, 2017 · Ganley, & McGraw, 2016; Harari, Vukovic , & Bailey, 2013 · Hill, Mammarella, Devine, Caviola, Passolunghi, & Szűcs, 2016; Jameson, 2013, 2014; Krinzinger, Kaufmann, & Willmes, 2009; Mutlu, 2019 · Ramirez, Gunderson, Levine, & Beilock, 2013; Ramirez, Chang, Maloney, Levine, & Beilock, 2016; Vukovic, Kieffer, Bailey, & Harari, 2013; Young, Wu, & Menon, 2012; Wu, Barth, Amin , Malcarne, & Menon, 2012 as cited in Szczygieł, 2020).

Findings regarding gender differences in MA are more inconsistent. Although research has not shown gender differences in the links between MA and math achievement (Barroso, Ganley, McGraw, Geer, Hart, & Daucourt, 2021; Zhang et al., 2019) the results of most research on young children show that girls are more anxious about mathematics than boys (Carey et al., 2017; Hill et al., 2016; Szczygieł, 2019; Szczygieł, 2020 as cited in Szczygieł & Pieronkiewicz, 2022), but there are also contradictory studies that prove this fact to be non-existent (Kucian et al., 2018; Ramirez et al., 2018; Young et al., 2012 as cited in Szczygieł & Pieronkiewicz, 2022; Primi, Donati, Izzo, Guardabassi, O'Connor, Tomasetto, & Morsanyi, 2020), while boys have sometimes been found to show higher MA than girls (Dowker et al., 2019).

A frequently reported finding is a negative link between MA and math performance (Barroso et al., 2021). Some studies, mostly cross-sectional, demonstrate the presence of MA already in the first grades of primary school (Szczygieł & Pieronkiewicz, 2022) and its coupling with lower performance in mathematics (Gunderson et al., 2018; Primi et al., 2020), while other studies fail to detect this negative association (Haase, Júlio-Costa, Pinheiro-Chagas, Oliveira, Micheli, & Wood, 2012; Krinzinger, Kaufmann, & Willmes, 2009 as cited in Mononen et al., 2021).

Research has shown that teaching with technology can improve mathematics learning, for example, by offering the possibility of dynamically connecting different forms of representation and supporting more constructive teaching approaches (Ball, Drijvers, Ladel, Siller, Tabach, & Vale, 2018; Bray & Tangney, 2017; Drijvers, 2019; Drijvers, Ball, Barzel, Heid, Cao, & Maschietto, 2016; Hillmayr, Ziernwald, Reinhold, Hofer, & Reiss, 2020; Olsher & Thurm, 2021 as cited in Thurm, & Barzel, 2022).

Mathematics educators are calling for the implementation of technology in the classroom at all grade levels, ability levels, and across different content areas. The influence of technology has grown to the point where it has become one of the guiding principles of mathematics education (NCTM, 2000, as cited in Dimakos, & Zaranis, 2010). Dynamic mathematics software is an important form to promote the development of educational information and the application of digital learning (Wang, Zhang, Li, Cai, Chen, & Rao, 2020). The Geometer's Sketchpad' is an excellent and powerful interactive tool for teaching Geometry, Algebra and Trigonometry and an open-injury learning environment and allows students to create their own understanding of geometry and mathematical ideas (Furner, & Marinas, 2007). Its design and construction were based on long-term research in the area of mathematics teaching. It is an internationally tested learning tool for which there is a rich literature and documentation.

Exceeding MA is considered an important recipe for students to be successful in mathematics (Bolaer, & Staples, 2008). When examining students in some of the studies conducted to eliminate MA, it appears that many researchers suggest different methods (Burton, 1984; Stuart, 2000; Geist, 2010; Alkan, 2013 as cited in Atoyebi, & Atoyebi, 2022). Indeed, technology-based education is suggested as one of the methods to help eradicate MA (Sun & Pyzdrowski, 2009; Istikomah & Sakinah, 2013; Soewardini, Setiawan, Suhartono, Amin, & Bon, 2020; Wangid, Rudyanto, & Gunartati, 2020 as cited in Türkan, & Çetin, 2022) and therefore technology is a useful tool for reducing MA in classrooms (Pokay, & Tayeh, 1997; Wittman et al., 1998; Nelson, & Watson, 1990 -1991; Riley & Evant, 1999 as cited in Sun, & Pyzdrowski, 2009).

Studies to further strengthen the evidence base in the field of technology interventions to reduce or eliminate MA, some future studies should focus on areas such as examining how mathematics applications can support children who do not achieve well in mathematics as well as how they contribute to reducing their MA and these children should be reliably identified in ways that do not threaten the internal validity of the findings. Within-child factors, such as the child's age and language skills, should also be taken into account to understand variability in learning but also in reducing MA with different types and characteristics of math applications (Outhwaite, et al., 2023).

3. Brief description of the present research study

The purpose of the present research is to study the latest developments for MA and the negative satellite feelings about mathematics in male and female students in the Greek primary schools from grades 4 to 6. In addition, to examine whether the use of New Technologies - with the use of dynamic geometry software - can help eliminate MA in Primary School students.

4. Methodology of the research process

4.1 Research questions

The research will attempt to provide answers to the following questions:

1. Are the demographic characteristics of the students (gender, class, grade and nationality) related to MA?
2. When does the MA start and how do the students experience it?
3. What can we learn from examining students with high MA and high achievement in mathematics and from students with low MA and low achievement in mathematics?

4. Does the GSP contribute to the reduction of students' MA?

4.2 Sample

82 children were examined with 32.9% being in the 4th grade of primary school, 18/3% in the 5th grade and the majority 48/8% (40) children being in the 6th grade. Accordingly, 53.66% (44) were girls and 85.4% were of Greek nationality with 11% being of mixed Greek and Balkan nationality.

4.3 Techniques of Analysis, Presentation, and Interpretation of the results

Descriptive statistical analysis and quantitative statistical analysis were applied. In addition, inductive statistical analysis was applied between the variables. Data collection scales for MA were used in conjunction with semi-structured interviews.

5. Presentation, Analysis, Discussion of the results

5.1 Scales

The children answered questions from 2 related scales, Learning Mathematics Anxiety (LMA) and Perception of Difficulty and Motivation (PDM) as well as questions directly related to Mathematical anxiety as they experienced it (MA). Gender and ethnicity had no role in the score in all three scales while the grade of mathematics had a statistically significant relationship with the score in all three scales especially between low and high grade in mathematics ($p<0.01$).

5.2 Investigating questionnaire responses - Correlations of demographic variables with questions

Considering the demographic data, partial statistical correlations were made to find chance relationships between the demographic factors with the LMA, PDM and MA scales.

Correlations were performed with the non-parametric Spearman's test. Class and age had only a moderate positive correlation with the PDM subscale (rho=0.229, p=0.039). On the contrary, the grade in mathematics presented large negative correlations with all three scales with the highest correlation with LMA with rho= -0.630, (p=0.001), and a little smaller with MA with rho= -0.409, (p=0.001) .

The individual scales had a large positive correlation as they had much in common in measurement. LMA had rho- 0.781(p=0.001) with PDM and rho= 0.682(p=0.001) with MA. While PDM had a slightly weaker relationship with MA with rho =0.554(p=0.001).

5.3 Linear multiple regression analysis

To find the truly independent influencing factors linear regression analysis was performed on the MA scale score using clustered sampling (bootstrapping) to account for the non-parametric nature of the data. From the regression analysis, it appears that only the LMA subscale is the statistically significant independent variable that affects the score on the Mathematical Anxiety scale satisfaction is the level of education (Graph 4.8 and Table 4.9). Specifically, if the score on the LMA scale goes up by 1 the scale increases the score by 0.715.

5.4 Exercise rating before and after the intervention

After answering the questionnaires, an intervention was made using the Geometer's Sketchpad dynamic geometry software.

Scores on the exercises were scored as correct, incorrect and partially correct. In all but the last one where they had to circle the square between different shapes there was a noticeable difference in improvement.

5.5 Interviews and CHIC analysis

10 semi-structured interviews were conducted and after grouping the answers were presented per question as well as a chic analysis was conducted.

6. Summary of all findings – Discussion

The main purpose of this study was to investigate MA and negative satellite emotions related to mathematics in students of grades 4-6 in primary school. In addition, it examined whether the dynamic geometry software – GSP can help eliminate the MA of the participating male and female students of the research. The research data were obtained through the collection of data from scales for MA, from semi-structured interviews and mathematical projects in conjunction with the implementation of the intervention in the experimental group. The following conclusions emerge from this research:

- Gender and ethnicity had no role in the score on both scales of the MA.
- The grade of mathematics had a statistically significant relationship with the score on both scales of MA especially between low and high grade in mathematics ($p<0.01$).
- The factor grade and score on the MA scales showed no differences between the scales and differential grades except for the PDM scale where there was a marginally non-statistically significant difference between 5th and 6th grade with a mean score of 13.33 versus 16.25 for 6th grade.
- The MA in the Greek primary school starts either in the 5th grade or from the beginning and the grades 1 – 3 of the Greek primary school.

- Students in the Greek primary school experience MA as (1) stress in learning mathematics and (2) stress in assessment of mathematics.
- The symptoms of MA reported by the students in our sample include uncomfortable feelings arising from unstable emotional states about some mathematical task.
- As many studies have focused on the extremes of scattered mathematical performance and MA (while there is a complete absence of evidence in this part in Greek studies) students with high MA and high mathematical performance and low MA and low mathematical performance were examined in a Greek study.
- For the one student with low MA and low math achievement, MA did not seem to affect math performance beyond current skill level while it did not seem to affect stressful situations, e.g. time pressure in competitions, high stakes). His MA tends to occur at certain times.
- For the two students with high MA and high math achievement MA seems to affect math performance beyond the current skill level which was very good mainly in stressful situations while their MA does not subside spontaneously and shows some duration.
- The dynamic geometry software GSP contributed to the reduction of MA in the part of the sample of 39 students who belonged to the experimental group.
- The dynamic geometry software GSP contributed to an improvement in the mathematical projects and the percentage of correct answers that the students were asked to complete.

Therefore, this study is a multidimensional response to the gap in the research literature on MA in school-aged children (of course taking into account the limitations of the study). Some research suggestions for the future that could be considered in planning future research based on the present study providing useful directions are listed below.

7. Conclusions – Suggestions

This study aimed to ascertain the latest developments for MA and the negative satellite feelings about mathematics in male and female students in Greek primary schools from grades 4 to 6. In addition, to examine whether the use of New Technologies - with the use of dynamic geometry software - can help eliminate MA in Primary School students.

After careful analysis of the data from this study, it is clear that there is a significant relationship between MA and math achievement. These findings could help inform the next steps to improve student achievement and student development in mathematics. To reduce the symptoms of MA, or even to prevent it outright, our research supports the need to build and develop students' confidence in mathematics.

Primarily, a technology-assisted intervention program could be developed to target students with high levels of MA. Professional development could also be provided to classroom teachers to implement instructional technology-assisted strategies that have been proven to reduce MA in students. Perhaps a reformed math classroom with the help of technology would improve retention of math concepts and help reduce MA. Finally, it is good for teachers to reflect the 'Math Anxiety Bill of Rights' in their classroom culture, exposing students to a culture and climate of redefining mathematical success.

The research is an important effort both globally and locally, as it examines a primary school sample for which additional knowledge about mathematics anxiety is needed.

Based on the findings of this study, even more questions can arise such as:

- What resources can be made available to students outside the classroom to combat their MA? and
- What teaching strategies enhance the reduction of academic stress in all subjects including mathematics?

Possible extensions of the present research could be a. the study of the role of MA in the development of flexible strategic thinking and conceptual understanding. Mathematical flexibility describes the ability to flexibly switch between different strategies and reasoning when doing math, which is considered a critical skill for solving new and unfamiliar math problems Further investigations could focus on the longitudinal cause-effect relationships between the variables. A critical next step for future research is to examine both the role of cultural factors in the origin, prevalence, and distribution of MA and how best to intervene to mitigate its negative effects on math performance and participation in STEM occupations. Finally, MA needs to be addressed both with interventions and the use of technology that focus on students' attitudes and beliefs, metacognition, and motivation

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SESSION 8
(Educational Sciences- Didactics of environmental sciences)

THE IDEAS COSMOS: EVIDENCE MODEL IN BIOLOGY TEACHING

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Abstract
The choice of the appropriate theoretical model for the design of a Teaching Learning Sequence (TLS) in the context of constructivist learning is crucial for its effectiveness. The present study focuses on the selection of the Idea-Cosmos-Evidence (ICT) modelas a design tool. This particular model, drawing inspiration from laboratory sciences, directs the selection of educational activities based on a classification of the entities of the learning process into three categories: Cosmos, Ideas, Evidence which are in constant interaction. The purpose of this study is to investigate whetherthis model could increase the effectiveness of TLS for Biology topics when it is beingused as a design tool. For this purpose, two subject areas were chosen: Basic concepts of Ecology and Evolution theory. A similar methodology was used for bothtopics. In particular, an initial TLS was designed, according to the basic principles of the model of educational reconstruction, and it was subsequently analyzed with theICT model. It was then modified to adapt to ICT design principles and resulted in a different version of the original TLS. The total of four TLSs that emerged were applied in 3rd grade junior high school classes and the performance of the students who participated in the two different versions of each TLS was evaluated and compared. The first results from the implementation and evaluation – internal and external – ofTLSs for concepts of Ecology are encouraging, since they show that the cognitive development of students participating in a TLS that is designed in such a way as to satisfy the design specifications of the ICT model is further enhanced.

Key words: *Ecology, Evolution Theory, Ideas -Cosmos -Evidence model, Teaching learning Sequence*

Introduction

The most popular research-based learning environment in Europe is the design of teaching learning sequences. A TLS can be seen both as an interventional learning activity that suggests the way we will teach, and as a product, linked to the students' learning. All TLSs are lasting a few weeks. They include well-validated teaching-learning activities empirically adapted to student reasoning and teachers' guides with well-documented teaching approach and expected student reactions.

In the case of TLS, various grand theories are possible. These theories can be related to pedagogy, development, learning, motivation, epistemology, history of the subject and sociology of education, and cognitive and social constructivism sources or may afford general suggestions that can contribute to design principles. Researchers have worked out frameworks to be used by designers as intermediates between grand theories and topic-oriented demands for developing a TLS.

The present research is based on the model of educational reconstruction (Duit et al., 2012) and the Ideas -Cosmos -Evidence model (Psillos, Tselfes, Kariotoglou, 2003), whose effectiveness is being tested. The model of educational reconstruction is well-known and established as a tool for designing teaching learning sequences. We will analyze the main features of the second model used in the research, which is based on some starting assumptions summarized below:

- ✓ Science is doing (intervening) as well as knowing (representing).
- ✓ Ideas, evidence and material world are entities internal to scientific inquiry and making connections between them is characteristic of scientific practice
- ✓ In educational contexts, establishing connections between theoretical ideas, evidence and material world is essential in assisting learners understanding in science and their scientific thinking
- ✓ Clarifying the meaning of Ideas, Evidence and Cosmos entities, according to the model, "Ideas" includes specific theoretical entities, like systematic theory, models or concepts, methodological entities that gain certain meaning in a specific theoretical framework, like questions and hypotheses, and implicit views, i. e. views of reality, causality, the relation between the subject of the knowledge and the external world, which can influence the construction of scientific knowledge. The 'Evidence' entity includes representations of entities that have been derived either from the senses or from a systematic

processing of raw data, e. g. representing them in specific ways, classifying them according to chosen criteria, comparing them with other data, etc. Finally, ‘Cosmos’ includes materials and artefacts, such as devices, measurement instruments, samples and instrument readings, which constitute the raw data. The use of the ICE framework in educational settings has the advantage of allowing a fruitful analysis of teaching–learning activities in terms of scientific practice; it does not, however, imply that the variety of possible patterns is precisely similar for students and scientists.

- ✓ Previous studies that have used the model have used it as an evaluation tool. In particular, in the first survey, carried out by Psillos, Tselfes and Kariotoglou, three successive versions of the same TLS were a posteriori analyzed and it was found that its improvement, as teaching trends evolved over time, went hand in hand with the increase in the number of connections between the entities. In the second research, conducted by Kallery, Psillos and Tselfes, activities carried out during pre-school education were analyzed and it was found that, for the majority of them, only part of the connections promoted by the model were recorded and usually the intervening ones were absent. The purpose of the present research is to investigate whether this model could enhance the learning outcomes expected from the implementation of teaching learning sequences designed for different subject areas of Biology, when used as a design tool.

Methodology

- ✓ In order to investigate the effectiveness of the model, two thematic areas of Biology were selected. One was the basic concepts of Ecology and the second was the Evolutionary theory (ET). For each topic, a similar methodology was followed: an initial TLS was designed following the basic principles of the educational reconstruction model and design principles sought in the literature (Knap και D’ Avanzo, 2010, Hoskinson et al, 2014, Burrow, 2018). For the design of the TLS related to the basic concepts of Ecology, emphasis was placed on the identification and formulation of a set of ecological principles, the definition of clear learning objectives, the development of multiple ways of assessing student understanding, the selection of learning activities that activate the equal participation of students in work groups, the use of models and the design of an interactive classroom. Thus, a TLS of five teaching scenarios emerged. Main concepts were: structure and function of ecosystems, plant growth and nutrition, energy flow – food webs, ecological succession and biodiversity, while representative activities carried out were the use of models, observation, discussion and others.

- ✓ For the design of the TLS that related to ET, design principles were again sought from the literature (Neubrand & Harms, 2017, Smith, 1994, Da Silva et al., 2015, Deci & Ryan, 2004), that proposed highlighting the unifying role of ET, creating active learning environments, ensuring a climate of free expression of student's thoughts, emphasis on the different use of concepts in scientific and everyday speech and satisfying basic psychological needs for autonomy, competence and sociability. A TLS of six teaching scenarios was thus created. The central concepts included in the scenarios were similarities - differences of organisms, mitosis – meiosis, mutations, natural selection, genetic drift and the mechanisms of evolution in action, while typical activities performed by the students were observation, discussion, simulations and others.
- ✓ Both TLSs, TLS 1 for Ecology and TLS 1 for ET, wereanalyzed by the ICE model. They were then modified so that all the connections promoted between the model entities are present in their new versions. That procedure resulted in TLS 2for Ecology and TLS 2 for ET. Table 1 presents the differencesbetween the initial TLS for ecology 1 and the revised one in terms of the number of connections promoted by the model. The same comparison is presented for both different TLSs for ET (Table 2).

Table 1: Ecology TLSs differences

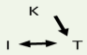
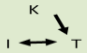
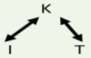
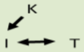
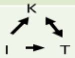
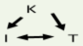
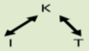
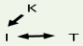
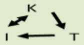
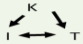
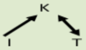
Scenario	Main concepts	Connections	
		TLS 1	TLS 2
1	Structure and function of ecosystems		All
2	Plant growth and nutrition		All
3	Energy flow and food webs		All
4	Ecological succession		All
5	Biodiversity		All

Table 2: Ev. Theory TLSs differences

Scenario	Main concept	Connections	
		TLS 1	TLS 2
1	Similarities - differences of organisms		All
2	Mitosis - Meiosis		All
3	Mutations		All
4	Natural selection		All
5	Genetic drift		All
6	The mechanisms of evolution in action		All

All four classes - in which the different TLSs were implemented - included students with low to excellent science performance and zero to very strong interest in science.

The evaluation of the TLSs was based on three types of tools: Questionnaires, worksheets, and a teacher's diary. The questionnaires completed before and after teaching had a similar format for both subjects. Specifically, they included 8 multiple choice questions with widespread misconceptions as possible answers as well as 2 open ended questions. The worksheets and the teacher's diary provided information about the formative evaluation of the scenarios.

Results

This research presents a part of the analysis of the results that focuses on the number of correct answers to the multiple-choice questions of the questionnaire, comparing:

- The correct answers per question before and after in each group.
- The correct answers per student before and after in each group
- The differences between the two groups per question and per student

According to chart 1, the number of correct responses was increased only for five questions to the Ecology's TLS 1 group. In contrary, the Ecology's TLS 2 group had better results to all the questions

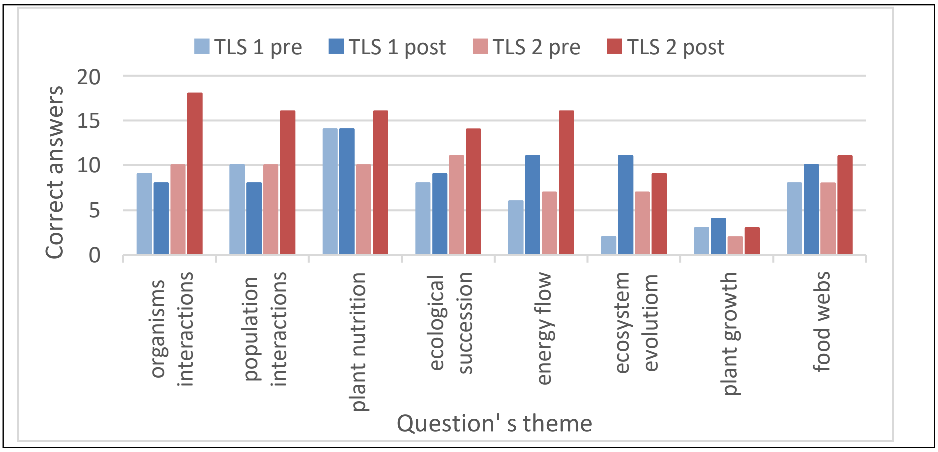


Chart 1: Correct answers per question – Ecology TLSs

Focusing on the number of correct answers per student, it is obvious that most of the students in the Ecology's TLS 1 group increased that number. That increase concerns all of the students included to the TLS 2 group, except for one who maintains the high number of correct answers that he already had.

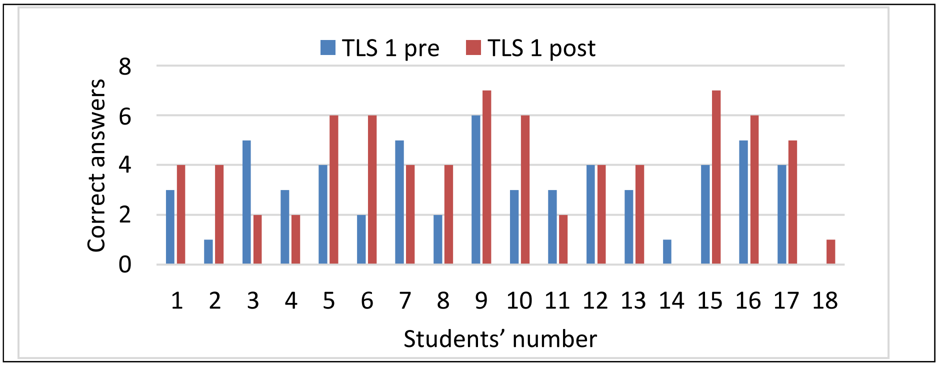


Chart 2: Correct answers/ student – Ecol. TLS 1

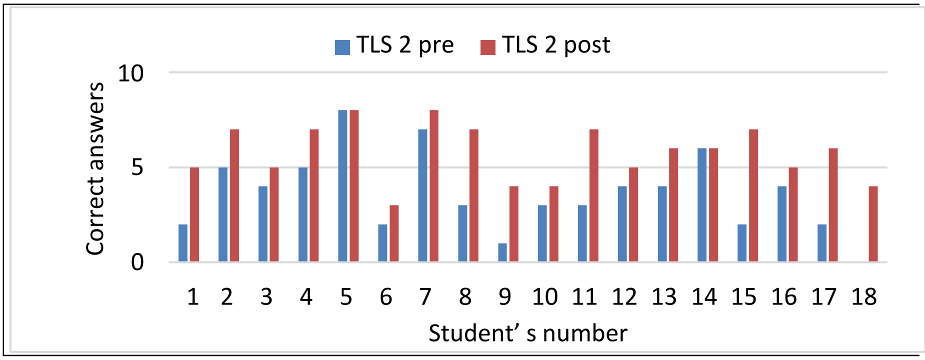


Chart 3: Correct answers/ student – Ecol. TLS 2

The results from the evolution theory's TLSs' s implementation don' t show any quantitative differences between the two groups, as far as the correct answers per question is concerned.

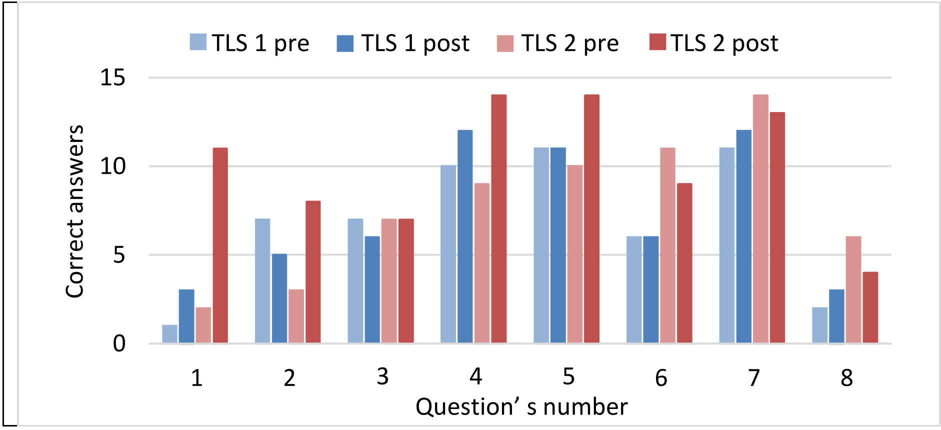


Chart 4: Correct answers per questions – Evolution theory TLSs

But if we focus on the number of correct answers per student, it is clear that the students from the TLS 2 for Evolution theory group had better performances.

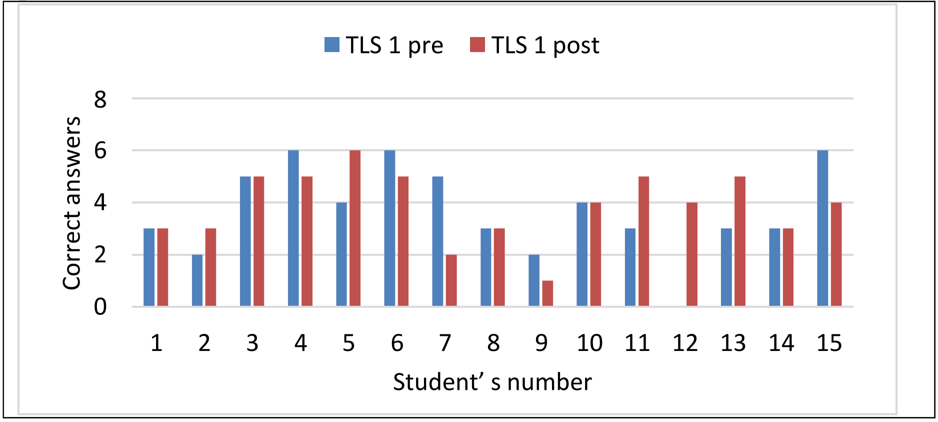


Chart 5: Correct answers/ student – ET TLS 1

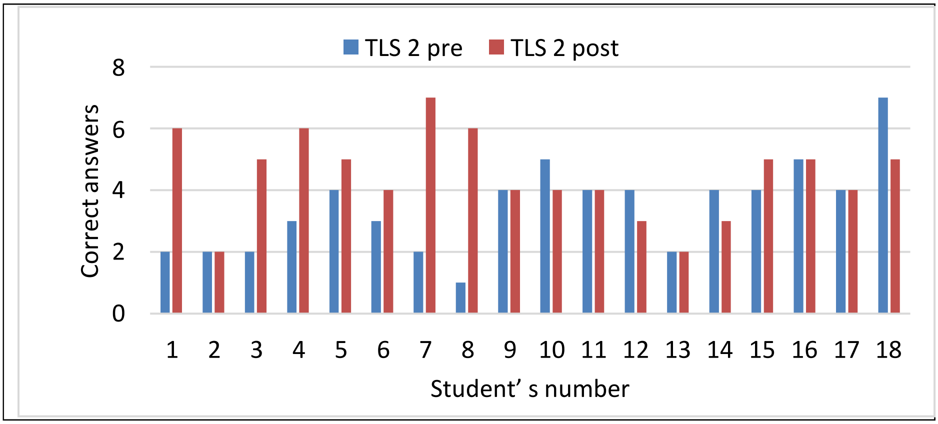


Chart 6: Correct answers/ student – ET TLS 2

Discussion

In conclusion it can be said that most students moved closer to the scientific point of view, for most concepts, in the implementation group of the Ecology's TLS 2. In the same group (Ecology's TLS 2) overall understanding was favored for more participants compared to the group of Ecology's TLS 1. Comparing the groups of Evolution's theory TLSs

1 and 2, the second appears to have more students that have improved their understanding of related concepts

The above observations can lead to the conclusion that the use of ICE model as a design tool might enhance the learning outcomes expected from a TLS's implementation.

Important limitations of the research that need to be mentioned are that Biology in junior high school in Greece is being taught only for one hour per week. Furthermore, Ecology and Evolution theory are not part of the previous grades' analytical program so many concepts are new for the students. In addition, the special conditions that had been imposed by the pandemic reduced teaching time more.

Further research may include the formative evaluation of the TLSs, taking into account the limitations and difficulties that emerged from their implementations, qualitative analysis of the data collected from all three TLS assessment tools and similar research in other subject areas of Biology.

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SESSION 8
(Educational Sciences- Didactics of environmental sciences)

A STUDY OF ENVIRONMENTAL EDUCATION GROUP COOPERATION WITH SOCIAL NETWORK ANALYSIS

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Abstract

When implementing an Environmental Education Program, students develop group activities by working together in small environmental groups to achieve common goals, while helping each other to learn about the environment and sustainability. The purpose of this study is to explore the patterns of cooperation among environmental groups of students implementing an Environmental Education Program. Cohesion is a key characteristic of cooperative groups. It refers to the way in which the interactions that are developed among the members of a cooperative group are shaped so that these members are connected to each other in such a way that the group becomes unified and functional. The research questions that are addressed in this study were the following: In relation to the implementation of an environmental education program, what conclusions can be drawn about: (a) the cohesion of cooperative environmental groups, (b) the functionality of cooperative environmental groups (c) the effectiveness of the environmental education program. For the purpose of this study, 74 secondary school students visiting an Environmental

Education Centre were placed in environmental groups and asked to complete a questionnaire before and after the implementation of an Environmental Education Program aiming to record their group cooperative interactions. Responses were analyzed using Social Network Analysis, a method of investigating social interactions based on mathematical graph theory. Networks of cooperative interactions per group were created, and indicators of consistency of interactions per network were also calculated. The analysis showed an increase in the cohesion and functionality of the cooperative groups and an increase in the effectiveness of the environmental education programs.

Key words: *Cooperative Group, Environmental Education, Environmental Education Program, Environmental Group, Group Cohesion, Social Network Analysis*

1. Introduction

This paper is part of a PhD thesis which focuses on the study of cooperative learning in environmental education using Social Network Analysis (SNA). The purpose of this study is to explore the patterns of cooperation among environmental groups of students implementing an Environmental Education Program (EEP). When implementing an Environmental Education Program, students develop group activities by working together in small groups to achieve common goals while helping each other to learn about the environment and sustainability (Gayford & Saveland, 1978; Slavin, 2015). The cooperative nature of EEPs facilitates students to develop social and learning skills contributing substantially to their socialization and learning (Gillies, 2016; Schul, 2011). During cooperation, group members develop interactions with each other that lead to the construction of group knowledge which in turn, through interactions, is diffused amonggroup members (Altebarmakian & Alterman, 2019). A key characteristic of group cooperation, that is related to group performance, is group cohesion (Strijbos, Martens, Jochems, & Broers, 2004; Wang & Li, 2008). It refers to the way in which the interactions that develop between members of a cooperative group are shaped so that members are connected to each other in such a way that the groupfunctions in a unified and effective manner (Altebarmakian & Alterman, 2019; Reffay & Chanier, 2003). Interaction cohesion is studied using the SNA method which is based on the mathematical theory of networks and is a method of investigating social structures byconsidering social structures as systems, and the activities, relationships, and influences that are develop within them as networks of interactions among their members (Otte & Rousseau, 2002; Saqr, Fors, Tedre, & Nouri, 2018; Wang & Li, 2008). When applying SNA to an EEP, a network represents a specific activity, relationship, or influence (e.g., communication activity, friendship relationship) that it is developed among the members of the environmental group and it is consisted of its members and the interactions that are develop among them within that activity, relationship or influence (Saqr et al., 2018; Xu, MacDonnell, Wang, & Elias, 2023).

With regard to the implementation of an EEP, the research questions that are addressed in this study are the following: (a) Which is the cohesion of cooperative environmental groups in such EEP; (b) Which is the functionality of cooperative environmental groups in the same EEP? (c) Which is the effectiveness of this EEP?

2. Methodology

To answer the research questions, we chose to study the two main activities that were performed between the members of cooperative environmental groups during an EEP; (a) The social activity of *communication*, through which group members are socialized by exchanging values, attitudes and skills, and (b) the learning activity of *information dissemination*, through which group members learn by exchanging information relevant to the subject matter of the teaching.

To study these communication and information activities, we developed a questionnaire that was administered before and after the EEP, aiming to record the interactions of these activities that existed between team members (Table 1). The pre-questionnaire responses captured the pre-cooperation communication and information interactions, on the basis of which the non-cooperative communication and information networks were then created, representing the pre-cooperation (pre-EEP) communication and information dissemination activities. The responses to the post-questionnaire captured the communication and information interactions that developed during the cooperation, on the basis of which the cooperative (post-EEP) communication and information networks, representing the communication and information dissemination activities during the cooperation, were then created.

Participants in the study were 74 students from two secondary schools located in Thessaloniki. Students were organized in 10 groups, each one comprised of 7-8 members, and implemented a daily EEP in an Environmental Education Centre.

Table 1. Pre- and post-questionnaire recordings of communication and information interactions.

	COMMUNICATION INTERACTIONS	**INFORMATION INTERACTIONS**
PRE-QUESTIONNAIRE	**With which members of your group do you have good communication?**	**Which members of your group would you ask about the environment?**
POST-QUESTIONNAIRE	**Which members of your group did you have good communication with here today?**	**Which members of your group did you ask about the environment here today?**

In order to study the cohesion of group interactions, we computed, in cooperative and non-cooperative networks, the following network indexes commonly used in educational research to study the cohesion of student groups with SNA:

a) *Density*. It is a measure of the extent to which members of a network of a group tend to interact with each other (Dado & Bodemer, 2017; Dou & Zwolak, 2019; Lee & Bonk, 2016).

b) *Clustering Coefficient*. It is a measure of the degree to which members of a group tend to cluster, within the network into subgroups, interacting with each other to form network cliques (Saqr & Alamro, 2019; Saqr et al., 2018; Saqr, Nouri, & Jormanainen, 2019; Saqr, Nouri, Vartiainen, & Tedre, 2020; Traxler, Gavrin, & Lindell, 2018). The higher this index is, the morerobust and resilient a network is due to the high alternative connectivity provided by the clique interaction grids (Saqr et al., 2018).

c) *Degree Centralization*. It reflects the distribution of interactions between the members of a network. That is, whether interactions are distributed unevenly within a network, to one or two members, or more evenly, to more or all members (Hernandez & Uddameri, 2016; Mameli, Mazzoni, & Molinari, 2015; Saqr et al., 2020). Networks with high values of the centralization index are characterized by a concentration of interactions in one or a few members, making them vulnerable to the removal of these members (Saqr et al., 2020).

All three network indexes take values from 0 to 1. As the Density and Clustering Coefficient indexes tend towards 1, the number of interactions tends towards the maximum possible, while as the Degree Centralization index tends towards 1, the interactions tend to be distributed unevenly among the members of the groups (Hernandez & Uddameri, 2016; Saqr et al., 2020).

Based on these network indexes we defined and calculated the following cohesion indexes respectively:

1) *Network Interaction Size Cohesion (NISC).* This index calculates cohesion based on the Density index (NISC = Density). It measures the cohesion resulting from the extent of interactions between members of a network. It has a range of values from 0 to 1. As its value tends towards 1, the interactions of the network becomedenser and cohesion increases.
2) *Cluster Interaction Size Cohesion (CISC).* This index calculates cohesion based on the Clustering Coefficient (CISC = Clustering Coefficient). It measures the cohesion resulting from the extent of interactions of the clusters into which the members of a network are grouped. It has a range of values from 0 to 1. As the value tends towards 1, the cluster interactions become denser and coherence increases.
3) *Network Interactions Distribution Cohesion (NIDC).* This index calculates cohesion based on the Degree Centralization index (NIDC = 1 - Degree Centralization). It measures the cohesion resulting from the distribution pattern of interactions of a network. It has a range of values from 0 to 1. As its value tends towards 1, interactions tend to be evenly distributed and coherence increases.

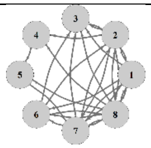
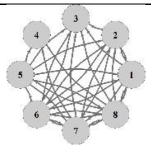
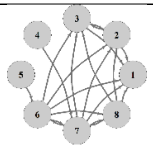
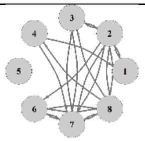
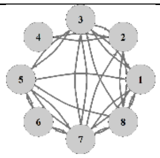
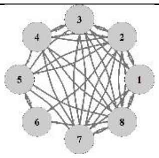
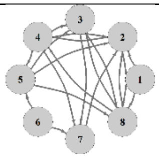
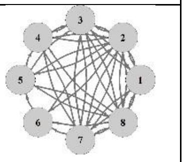
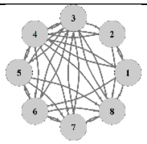
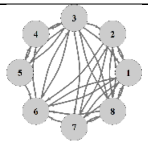
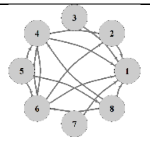
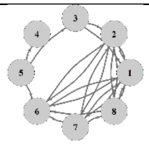
The average of the above three cohesion indices gives us Total Cohesion (TC), which has a range of values from 0 to 1. As its value tends towards 1, the TC increases, indicating a greater cohesion among group members.

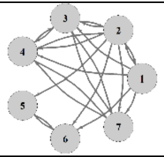
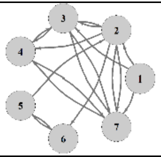
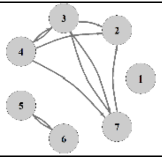
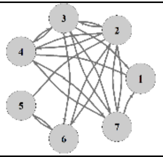
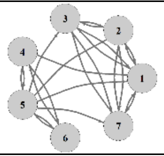
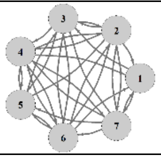
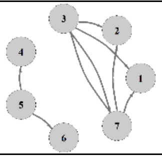
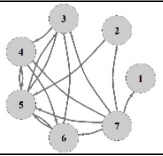
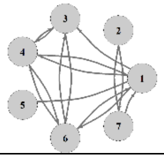
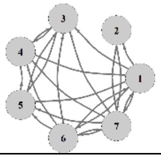
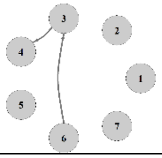
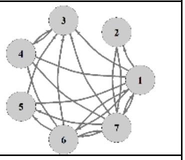
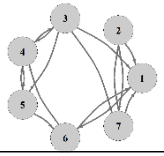
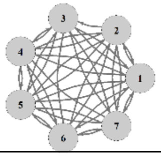
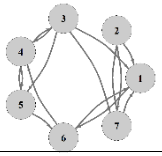
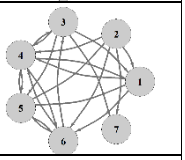
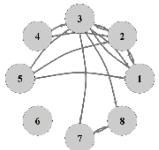
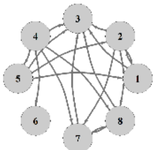
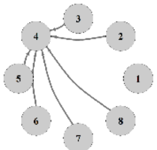
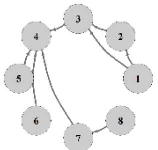
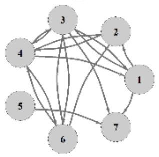
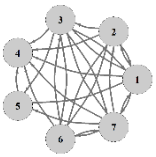
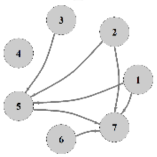
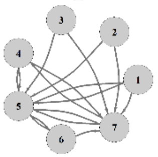
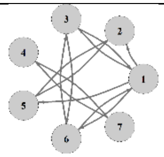
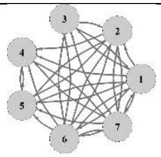
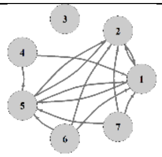
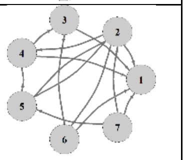
For the data analysis, the following software and criteria were implemented: The R programming language in the R-studio environment was used for data processing (development, representation and analysis of networks, estimation of statistical significance, effect size and construction of graphs). The Wilcoxon signed-rank test was used to estimate the statistical significance of the difference in the averages of the Cohesion Indexes between non-cooperative (pre-EEP) and cooperative (post-EEP) networks (Carolina, 2008). Cohen's d Effect Size was used to estimate the magnitude of the difference in the averages of the cohesion indexes between non-cooperative (pre-EEP) and cooperative (post-EEP) networks (Sullivan & Feinn, 2012). The matching of the magnitude (Effect Size) of the difference in the averages and Cohen's d values is as follows: very small (0.01), small (0.2), medium (0.5), large (0.8), very large (1.2) huge (2) (Sawilowsky, 2009).

3. Results

By visually comparing the illustration of the non-cooperative (pre-EEP) and cooperative (post-EEP) communication and information networks of each group (Table 2), we observe that the interactions of the cooperative networks (post-EEP), in the far most cases, appear denser and more evenly distributed among network members than the interactions of non-cooperative networks (pre-EEP. That is, cooperative networks (post-EEP) show greater cohesion.

Table 2. Illustration of students' groups non-cooperative (pre-EEP) and cooperative (post-EEP) communication and information networks.

	Communication Networks		Information Networks	
	pre-EEP	post-EEP	pre-EEP	post-EEP
Groups	Non-Cooperative Networks	Cooperative Networks	Non-Cooperative Networks	Cooperative Networks
1				
2				
3				

4				
5				
6				
7				
8				
9				
10				

Comparing the average values of the cohesion indexes (NISC, CISC, NIDC) and TC values between non-cooperative (pre-EEP) and cooperative (post-EEP) communication and information networks (Figure 1), we observe that, in general, the level of post scores (cooperative networks) appears higher than pre scores (non-cooperative networks).

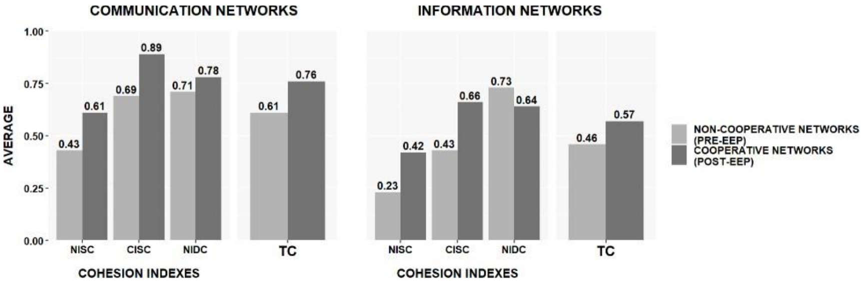


Figure 1. Plots of the average values of the cohesion indexes (NISC, CISC, NIDC) and the value of Total Cohesion (TC) in the non-cooperative (pre-EEP) and cooperative (post-EEP) communication and information networks.

More specifically, the averages of the NISC cohesion indexes of the cooperative communication and information networks (post-EEP) appear to have statistically significant positive differences (0.18* and 0.19**) from the averages of the corresponding indexes of the non-cooperative networks (pre-EEP) (Figure 2), and these differences present very large magnitude (1.3 and 1.6 Cohen's d Effect Size respectively, Figure 3).

In respect of CISC, the average of the particular index, regarding cooperative communication and information networks (post-EEP), seem to have statistically significant positive differences (0.20* and 0.23*) from the average of the corresponding index of the non-cooperative networks (pre-EEP), and these differences also have medium to large magnitude (1.6 and 1 Cohen's d Effect Size, Figure 3). Regarding the NIDC index of cooperative networks, a statistically significant difference in communication networks were recorded between the non-cooperative (pre-EEP) and cooperative networks (post-EEP) (0.07*), and this difference is of a medium magnitude (0.7 Cohen’s d Effect Size). On the contrary, a negative, non-significant difference was identified in the information networks between the non-cooperative (pre-EEP) and cooperative networks (post-EEP) (-0.09), and this difference presented a negative large magnitude (-0.8 Cohen's d Effect Size). However, as this difference (-0.09ns) is not statistically significant, it is considered as zero (equal to 0).

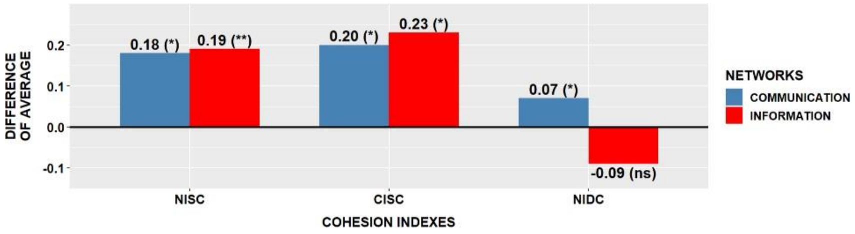


Figure 2. Plot of the differences and their statistical significance between the averages of the cohesion indexes (NISC, CISC, NIDC), non-cooperative (pre-EEP) and cooperative (post-EEP) communication and information networks. Statistical Significance (2-tailed) symbols: ** (Significant at p ≤ .01 level), * (Significant at p ≤ .05 level), ns (Non-significant at p > .05 level).

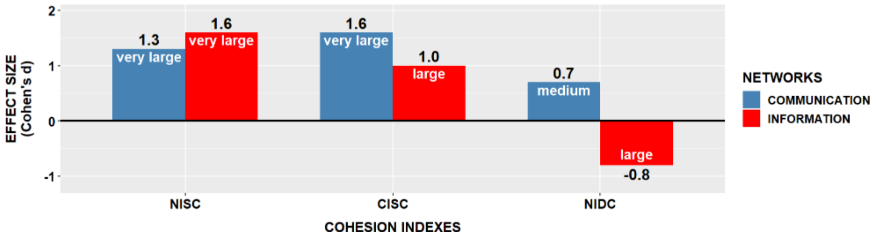


Figure 3. Plot of the magnitude (Cohen's d Effect Size) of the difference between the Total Cohesion (TC),non-cooperative (pre-EEP) and cooperative (post-EEP) communication and information networks. The matching of the magnitude (Effect Size) of the difference in the averages and Cohen's d values is as follows: very small (0.01), small (0.2), medium (0.5), large (0.8), very large (1.2) huge (2).

Based on the above and given that TC is calculated by averaging the values of the three cohesion indexes above, in terms of estimating the difference in TC (Figure 4) and its magnitude (Figure 5) between non-cooperative (pre-EEP) and cooperative (post-EEP) networks we obtain the following results: In relevance to the communication, the cooperative (post-EEP), compared to the non-cooperative (pre-EEP) networks, show a positive difference [(0.18+0.20+0.07)/3=0.15] in TC, which is accompanied by a very large magnitude [(1.3+1.6+0.7)/3=1.2 Cohen's d Effect Size].

Similarly, and in the information domain, the cooperative (post-EEP), compared to non-cooperative (pre-EEP) networks, present a positive difference [(0.19+0.23+0)/3=0.14] in the TC, which also has a large magnitude [(1.6+1.0+0)/3=0.9 Cohen's d Effect Size].

We observe that, although the difference in TC between the non-cooperative (pre-EEP) and cooperative (post-EEP), communication and information networks is almost the same (0.15 in communication networks and 0.14 in information networks), the magnitude (Cohen's d Effect Size) of the difference is larger in communication networks (1.2 Cohen's d Effect Size) than in information networks (0.9 Cohen's d Effect Size).

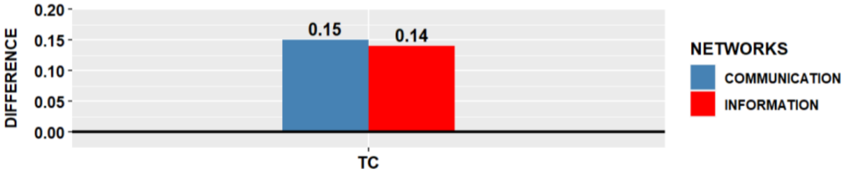


Figure 4. Plot of the difference between the Total Cohesion (TC) of non-cooperative (pre-EEP) and cooperative (post-EEP) communication and information networks.

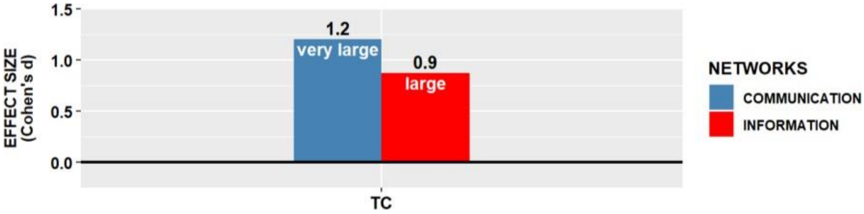


Figure 5. Plot of the magnitude (Cohen's d Effect Size) of the difference between the Total Cohesion (TC), non-cooperative (pre-EEP) and cooperative (post-EEP) communication and information networks. The matching of the magnitude (Effect Size) of the difference and Cohen's d values is as follows: very small (0.01); small (0.2); medium (0.5), large (0.8); very large (1.2); huge (2).

4. Conclusions and Future Research

According to the results, there is a very large increase in the cohesion of cooperative communication networks and a large increase in the cohesion of cooperative information networks (post-EEP), compared to the cohesion of the corresponding non-cooperative networks (pre-EEP). Though, it can be concluded that the implementation of the EEP, facilitated the development of a high level of cohesion among team members.

Regarding the functionality of cooperative environmental groups during the implementation of EEPs (2nd research question), it can be drawn that communication networks represent the (social) activity of communication through which members of groups are socialized by exchanging values, attitudes and skills. Their analysis can give us a first rough assessment of the prospect of group socialization. In addition, information networks represent the (learning) activity of exchanging information relevant to the subject matter of instruction. Their analysis can give us a first rough estimate of the learning perspective of groups, and cohesion is an index of group functionality.

In respect of the effectiveness of the EEP (3rd research question), results indicate that teaching intervention helped groups to acquire a high level of cooperative functioning in terms of the (learning) activity of information dissemination and especially in terms of the (social) activity of communication. In addition, the implementation of the cooperative EEP can be considered as quite effective both in terms of the development of learning, and especially in terms of thedevelopment of socialization among the group members. Further exploration of this first estimate about the effectiveness of EEP is a future goal of our research, by creating and analyzing additional networks representing a variety of social and learning activities and using different indexes of the SNA method.

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SESSION 8
(Educational Sciences- Didactics of environmental sciences)

EXTRACURRICULAR ACTIVITY CLUBS: A PILOT STUDY IN A PUBLIC LYCEUM SCHOOL IN GREECE

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Abstract

This study examines the implementation of extracurricular activity clubs in a public school in Greece, specifically focusing on Biology club. The research aims toevaluate students' experiences in Biology club, identify students' interests in future club activities, and explore the obstacles faced by both students and teachers in participating in clubs. The study employed a mixed-methods approach, utilizing group interviews, structured questionnaires, and open-ended questions. The results indicated that students found the Biology club engaging and enjoyable, and it contributed to their knowledge acquisition, laboratory skills, collaboration, critical thinking, and scientific skills. However, a significant number of students faced difficulties attending clubs outside of school hours due to additional obligations such as private tutoring. Despite these challenges, students expressed a keen interest in participating in various club activities if given the opportunity to adjust their schedules. On the other hand, teachers expressed reservations about participating in clubs, citing reasons such as unpaid work, heavy workloads, and multiple school assignments. Additionally, some teachers questioned the necessity of extracurricular clubs within the current educational system. The findings suggest that extracurricular clubs provide valuable educational experiences for students, promoting their skills and interests beyond the formal curriculum. However, barriers such as scheduling conflicts and teacher concerns need to be addressed to enhance participation in clubs. The study emphasizes the need for school autonomy, planning, and competent leadership to facilitate the successful implementation of extracurricular activities. Further research is recommended to generalize the findings and address the limitations of this pilot study.

Key words: *Biology Activity group, innovation, extracurricular activities, Greece*

Introduction

Extracurricular activities encompass educational activities outside the school's formal curriculum (Merriam-Webster, 2010). They include sports, art, music, physical sciences, practical skills, and more (Mahoney & Cairns, 1997; Marsh, & Kleitman, 2003). Participation in extracurricular activities can lead to improvements in various aspects of a student's life, enriching their educational experience beyond the typical academic program (Bloomfield & Barber, 2009; Fredricks & Eccles, 2006; Mahoney, Cairns & Farmer, 2003). Students develop their knowledge and skills (Eccles, 2003), expand their interests beyond the formal curriculum, and simultaneously cultivate abilities such as collaboration, communication, and leadership (Conrad, 2004; Shosh & Wescoe, 2007). In fact, it has been shown that students often make progress in areas such as language and mathematics (Lauer, 2006).

Extracurricular activities have been a beneficial educational experience for students and have been implemented in many countries around the world for decades, with variations depending on each country's educational system. In the United States, for example, almost every middle school and high school offers extracurricular activities (NCES, 1995). In Greece, extracurricular activities have been implemented in private schools for many years. These schools quickly recognized the benefits of such activities and incorporated them into their programs (Vyzaniaris, 2016). In recent years, extracurricular activities have also been introduced in public schools, initially in Model and Experimental schools (Law 3966, Government Gazette A 118/24.05.2011), and most recently, in all public schools (Law 4823, Government Gazette A 136/3.08.2021, Government Gazette 4509/2022).

Private schools, having an extended schedule, incorporate extracurricular activities within their regular program. Furthermore, educators who organize extracurricular clubs are compensated for their services. In fact, the availability of quality extracurricular clubs seems to be a criterion for parents when choosing a private school for their children (Maloutas, 2007). In private schools, extracurricular clubs are an integral part of the school culture and are present in both primary and secondary education. These clubs are divided into thematic units such as Language, Mathematics, Physical Sciences, Information Technology, Social Sciences, General Interest, Arts, Strategy Games, and Environment. The purpose of these clubs is to nurture students' inclinations and talents while providing opportunities to engage in sciences and activities that particularly interest them (Vyzaniris, 2016).

According to Law 3966/2011, Model and Experimental Schools have been allowed to organize clubs since the 2012-2013 school year. These clubs are integrated into the school schedule and cover various fields such as mathematics, physical sciences, robotics, art, literature, sports, etc. The initial implementation results of these clubs showed that children derive pleasure from their participation, and it revitalizes their educational experience (Efthimiou & Vergou, 2014). Through group activities in these clubs, students acquire knowledge and become familiar with collective decision-making processes and problem-solving techniques. Simultaneously, they develop the ability to express their emotions and communicate more effectively. Through this process, each student takes on a specific role within the group or class, feels actively involved, adapts harmoniously to the group's environment, and enjoys acceptance from other members (Koutroudi, 2022).

The remaining public schools, both primary and secondary education, have integrated clubs into their operation starting from the 2022-2023 school year (Law 4823/2021). Similar to Experimental, Model, and Private schools, they can organize activities resembling those mentioned above. It is emphasized that clubs should not, under any circumstances, serve as supplementary teaching or preparation for subjects covered in the official curriculum. Additionally, clubs operate outside of regular school hours in secondary education. Participation in clubs by both students and teachers is not mandatory. The time that responsible teachers dedicate to organizing, preparing, and running the club is not included in their regular workload and therefore is not compensated. However, they earn a half-grade bonus in their evaluation for future administrative positions.

Research Goal and Research Questions

The research goal of this study is to evaluate the Biology club, as it was the first year of its implementation, and to explore the needs of students for future club activities, as well as the obstacles/difficulties faced by both students and teachers in participating in a club. The research questions are:

1. How did the students in the Biology club evaluate its implementation the academic year 2022-2023?
2. What are the interests of the students in the school regarding the creation of future club activities?

3. What potential obstacles or difficulties will students face in participating in these clubs?
4. What obstacles or difficulties do teachers face that prevent them from participating in clubs?

Method

Participants

The research took place at a Lyceum located in East Attica the school year 2022-2023. The school consists of four classes per grade and has various facilities such as a multimedia room, a Physics Sciences laboratory, a spacious courtyard, and sports facilities. The total student population in the school is 278, consisting of students who reside in the area. Specifically, there are 90 students in the 1st grade, 93 students in the 2nd grade, and 95 students in the 3rd grade. The school is staffed by 30 active teachers from different disciplines, including 6 substitute teachers. Additionally, there is one Principal, two Vice Principals, and three staff members responsible for cleaning and security.

The Biology Club had a total of 10 student participants, with three students from the 3rd grade (3 female), three students from the 2nd grade (2 female, 1 male), and four students from the 1st grade (2 female, 2 male). In terms of school students, 66 students from the 1st and 2nd grades participated, accounting for 36% of the total. Among these participants, 77.3% were female and 22.7% were male. Furthermore, 65.2% were students from the 2nd grade, while 34.8% were students from the 1st grade. In terms of teachers, 18 of them participated, representing 60% of the total. Among the teachers, 88.9% were female and 11.1% were male, and most of them had extensive teaching experience.

Research Strategy and Data Collection Tool

For the first research question, a qualitative approach was employed, and data collection was conducted through semi-structured group interviews. For the second and third research questions, a quantitative approach was adopted, and data collection was carried out using a structured online questionnaire created and distributed to the students via Google Forms. Lastly, for the fourth research question, a semi-quantitative approach was utilized, and data collection was done through a structured online questionnaire that included open-ended questions. This questionnaire was created and distributed to the teachers using Google Forms.

The students who participated in the club initially responded to demographic questions regarding their characteristics, such as gender and grade level. Subsequently, they were asked to provide insights on how they became aware of the Biology Club and their reasons for joining. They also evaluated the experiments, equipment, and the instructor, offered suggestions for enhancing the club, and provided additional comments based on their experiences of participating in the club.

The questionnaire for assessing student interests in future club activities and potential obstacles consisted of two parts. The first part included demographic questions about gender and grade level. The second part corresponded to the second research question and assessed students' interests in various club activities using a structured questionnaire. Additionally, it included five Likert scale questions pertaining to the potential obstacles or difficulties (third research question) that students might encounter when participating in these clubs (Table I).

The questionnaire for identifying obstacles or difficulties faced by teachers in participating in clubs encompassed demographic questions about gender and teaching experience. It also included five Likert scale questions addressing the obstacles or difficulties they encounter in club participation, along with the provision for open-ended responses (Table I).

Table I: Research questions and corresponding questionnaire items

Research questions	**Questionnaire**
What potential obstacles or difficulties will students face in participating in these clubs?	Extra class after school School workload Other activities Home distance from school

	No free time
What obstacles or difficulties do teachers face that prevent them from participating in clubs?	No need for activity group Not paid Outside the regular work hours Work in multiple schools Heavy work load

All participants were presented with detailed information about the research, including the researcher's background, and were informed about the rights of individuals participating in the study (Bryman, 2016).

Results

Evaluating the Implementation of the Biology Club in the Academic Year 2022-2023: Insights from Student Feedback.

Most of the students learned about the club through an announcement from the School Administration and the Biology teacher. They chose to join the club because they enjoyed Biology, experiments, and found it interesting to participate. They considered the equipment and instructions provided by the instructor to be sufficient. It seems that the club had a positive impact on them, and they expressed their emotions, saying, "It was awesome!! It gives me motivation for more adventures and the pursuit of knowledge. All thanks to our teacher who dedicated his time to us," (Student 1) "Awesome Club!!!! I'm glad I got closer to this science!", (Student 2) "The Biology club is an opportunity to learn things that cannot be covered in Biology class." (Student 3) They also expressed satisfaction, saying, "We had fun, it was enjoyable," (Student 4) and they learned communication and collaboration skills, stating, "I learned to follow protocols and collaborate with my classmates to achieve a common goal" (Student 5).

Uncovering Student Interests for Future Club Activities: Exploring the Preferences of School Students

The results indicated that the students had diverse interests in selecting club activities. As shown in Table II, most students expressed their interest in joining a photography club (30.6%). Many students chose Natural Sciences clubs (Physics & Chemistry, Biology) (17.7%), modern and traditional dance clubs (19.4% & 17.7%), music band and choir (16% & 8.1%), and cooking club (21%). A few students chose a Mathematics club and a chess club. In general, they selected among various interests.

Table II: Students' Interests in Club Activities

Club Activity	Percentage
Photography	30.6%
Natural Sciences (Physics & Chemistry, Biology)	17.7%
Modern Dance	19.4%
Traditional Dance	17.7%
Music Band	16.0%
Choir	8.1%
Cooking	21.0%
Mathematics	Low
Chess	Low

Identifying Obstacles and Challenges in Student Participation in Club Activities

Nevertheless, it became apparent that a substantial proportion of participants (66.6%) encountered challenges in attending the club during non-school hours. Among those who reported having difficulty attending, it was evident for the majority that either they had classes immediately after school (72%) or had a heavy workload (56%). Various responses were given regarding the existence of other activities for students that take place after school and hinder their participation in the club. Finally, the distance from the school and the time it takes to get there do not pose an obstacle. If they had known before the beginning of the school year that the chosen club would take place, most participants (65.9%) stated that they could adjust their schedules to participate.

Overcoming Obstacles: Exploring Challenges Hindering Teacher Participation in Clubs

Regarding the obstacles or difficulties faced by teachers who did not participate in the club, a significant percentage (38.9%) considers the club unnecessary and therefore did not wish to participate. Most teachers agree (55.5%) that they do not want to participate in the club because it is unpaid. In fact, colleagues specifically stated, "I would prefer either to be paid or for it to be within school hours. I believe it is not right for anyone to offer any professional service without pay!!!!" and "Public schools must first solve the main problems: impoverishment and devaluation of educators, low academic standards, inadequate textbooks, an unacceptable evaluation system, indifference, and low learning level for students. Educators have dignity; they are not rubber bands to be stretched whenever the current Minister decides to introduce a model from anywhere." Several teachers believe that they cannot work outside of regular hours (44%). Finally, many mentioned that they work in multiple schools and therefore do not have time to organize a club (50%). Lastly, according to the educators, the lack of equipment in the school does not appear to be an obstacle to the implementation of a club (69%).

Discussion

As part of the assessment of the Club, students expressed their satisfaction with the significant knowledge they acquired in the field of Biology. Additionally, they developed laboratory skills, collaboration skills, life skills, critical thinking skills, scientific skills, and skills necessary for the 21st century. These findings are similar to research conducted in experimental schools on the value of Activity Clubs (Efthimiou & Vergou, 2014).

Furthermore, our research showed that many students in the school would like to participate in a Club, but it is not possible because it takes place outside of school hours, and they have additional obligations such as private tutoring classes aimed at success in university entrance exams. The daily lives of teenagers globally are highly pressurized (Torsheim & Wold, 2001). Similarly, the workload of teenagers in Greece is particularly heavy (Kokkevi, Fotiou, Stavrou, & Kanavou, 2011). However, it was evident from the research that adolescents have many interests and would like to participate in a Club to explore their interests. They also stated that they would be willing to adjust their schedule and participate in a Club, despite their demanding daily routines, on the condition that they would choose a Club before the start of the school year and that activity would take place. However, this requires school autonomy, planning, and competent leadership (Papaioannou, 2019).

In our research, it appeared that teachers were hesitant to take on a Club. Many believe that the Activity Club as an institution is not necessary. This perspective may be related to the findings of the OECD on the Greek Lyceum level, where "teaching in the Lyceum focuses solely on learning for university and technical college admission, rather than studying for knowledge" (OECD, 1997). Most teachers focus on the fact that Club activities take place outside of working hours and are mostly unpaid. Additionally, there is a heavy workload and the possibility of teachers being assigned to different schools, which results in a lack of organization and implementation of Activity Clubs. It is a fact that the salaries of Greek teachers have dramatically decreased in recent years due to the economic crisis, while their working hours and bureaucratic obligations have increased (Plymeropoulou, Skorda, & Sorkos, 2015). This could explain the lack of willingness to take on additional workload.

In light of the students' perspective, the Biology Activity Club proved instrumental in fostering the acquisition of cognitive and laboratory skills. Moreover, it facilitated the development of essential competencies, including collaborative abilities, life skills, critical thinking aptitude, scientific prowess, and aptitudes crucial for thriving in the 21st century. In general, the students in the school would like to participate in an Activity Club, as long as they know it will take place so they can adjust their tutoring obligations after school hours. Lastly, due to the structure of the Lyceum regarding preparation for university admission, many teachers disagree with the institution of Activity Clubs. Additionally, due to the economic constraints on teacher salaries, they disagree with working without compensation, especially outside of working hours.

This study represents a pilot study conducted in one Lyceum. Further investigation is needed to draw reliable generalizations and conclusions.

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EDUCATION OF PRESCHOOL CHILDREN ON ENVIRONMENTAL PROTECT

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Abstract

The spread of knowledge and education on environment encourages and supports the development of environmental awareness and love for nature as well as the awareness about the necessity of environmental protection among preschool children. Through the holistic approach, children are trained to use research and observation as a means of discovery and learning. It affects the encouragement of active learning through projects, systematization and connection of acquired knowledge, divergent opinion in the process of solving problem situations. The imagination develops, through the creation of new ideas and original solutions, the tactile sensitivity is increased, the sensory experiences are enriched through researching-touching different kinds of materials, the child is supported and encouraged to persevere in the process of learning and discovery, the child is encouraged in his/ her own way to convey his/ her own thoughts, experiences and solutions. Correct attitude towards material values (the use of food, water, energy and materials in the kindergarten) the child can use various safe materials and objects from the environment: mud, sand, paper, water, steam. The child expresses joy and satisfaction from successfully completed work. The activities are carried out continuously with children at the age of 3 to 6 in the premises of the kindergarten, in the yard, the surrounding area and in the children's families. The child recognizes and participates in activities to apply the rules of ecology culture.

Key words: *awareness, children, environment, kindergarten, parents, protection, research.*

Introduction

The spread of knowledge and education on environment encourages and supports the development of environmental awareness and love for nature as well as the awareness about the necessity of environmental protection among preschool children. The idea of ecological upbringing and education is not an innovation of the modern era, but its necessity. More than ever before, it is necessary to highlight the development of environmental awareness and competence, skills to achieve sustainability in all areas of human life, knowledge and attitudes that will enable the establishment of a balance between human needs and the needs of nature. Environmental education is extremely important for preparing children in kindergartens to develop environmental awareness and environmental protection. Educators as educators in addition to parents are the basic source for building a positive attitude towards nature, its protection and sustainable development. I believe that the prevailing environmental paradigm - that increasing the amount of knowledge acquired in a given field improves attitudes about the environment - is one of the determining factors. Given the aforementioned paradigm, I expect more positive attitudes among older children. With increasing age, attitudes towards the reality of life should become more positive. An ecologically educated person can comprehensively express his opinion about the environment in which he lives not only from an ecological point of view, but also from a social point of view. He is involved in the life of the community and strives for its development. He knows the impact of human activity and lifestyle on the environment and tries to eliminate these impacts (e.g. through prudent behaviour). He is open to new ideas aimed at improving the state of society and life on Earth. He knows the natural qualities of his surroundings.

1. Children and the process of learning and discovery

The imagination develop through the creation of new ideas and original solutions, the tactile sensitivity is increased, the sensory experiences are enriched through researching-touching different kindsof materials, the child is supported and encouraged to persevere in theprocess of learning and discovery.

Environmental education is necessary if we want to raise environmental awareness. If we want environmental values to be a part of every individual and, in fact, of the entire philosophy of living, it is necessary that they receive completely different streams in education, which will result in a completely different way of acting, thinking and behaving for each person. In the domain of pedagogy, the need for ecological education of people is becoming more relevant. More precisely, we are talking about ecological pedagogy, which "studies the educational influence in the context of building ecological awareness and developing ecological culture in the person from an early age.

In terms of how to realize environmental education, three basic ways are indicated (Popova-Koskarova, 2011):

- formation of children's cultural attitude towards nature;
- systematic formation of a system of knowledge about nature;
- forming an aesthetic attitude towards nature.

2. Children and environmental protection

The formation of the individual's attitudes towards the environment depends not only on his emotional sensitivity, but also on the conscious knowledge of the phenomena and the awareness of his own responsibility for his actions that affect the environment.

- ○ Correct attitude towards material values (the use of food, water, energy and materials in the kindergarten) the child can use various safe materials and objects from the environment: mud, sand, paper, water, steam.
- ○ The child expresses joy and satisfaction from successfully completed work.
- ○ The activities are carried out continuously with children at the age of 3 to 6 in the premises of the kindergarten, in the yard, the surrounding area and in the children's families.

3. The child as a part of nature

Children look forward to nature with admiration and enjoyment. They notice its beauties, for example, running on the grass, running on water and sand, making figures with the snow and performing children's games. Children staying in nature feel happy and satisfied while experiencing pleasant positive emotions, so they often seek to stay in nature during all seasons.

-Nature education

Children should learn from nature through direct experience in the form of informal learning, preferably from an early age.

By playing with objects and touching them, we provide the child with immediate knowledge of the environment and the world that surrounds him. Those children who are younger (closer to the fifth year) have not yet developed a logical opinion while those who are older already connect knowledge in a system begin to show a logical understanding of cause and effect connection. Children should be asked to think and connect knowledge and share them with each other. Curiosity comes to the fore in them, which is expressed through frequent asking of questions. The game can be used as a method and as a means of learning. They often compare and compete in knowledge, and if this is left to spontaneity, the differences between younger and older children will be deeper.

4. Preschool children and environmental education

The process of getting to know nature starts from the birth of a child and lasts a lifetime. Foreign research draws attention to the fact that for children, staying in nature is indispensable for their healthy development. Nature can fulfill an important educational role.

“Nature is one of the most powerful factors in the education of a person.” - Russian teacher Konstantin Dimitrievich Ushinsky.

An important prerequisite for the successful implementation of environmental education in modern education is its interdisciplinary and holistic approach and incorporation into the entire curriculum, instead of existing only as a separate subject. In the Republic of North Macedonia, the need for the introduction of environmental education was recognized as a prerequisite for the development of knowledge and the need to protect the environment from the youngest school age. The implementation of environmental education goes without saying (Srbinovski, 2005):

1. acquiring knowledge about the diversity of nature and understanding the complex relationships between people and the environment, developing critical thinking and personal and social responsibility necessary for sustainability;
2. thinking and gaining knowledge about the causes and consequences of human influence on nature, which contribute to the development of all forms of thinking, especially creative thinking and problem solving;
3. developing solidarity and empathy towards people, responsibility towards all living beings and the environment and motivation to act for the benefit of the environment and all people;
4. active work in the kindergarten and the community in order to identify needs, design appropriate and innovative solutions and concrete contribution to the community;

5. and encouraging future-oriented thinking and developing personal responsibility towards future generations.

The stated educational goals and other expectations from the teaching of environmental education can be realized through problem-oriented teaching, such as real experiences of children, hypothetical examples, etc.

Accordingly, the strategy for upbringing and education about nature included in the curriculum should:

1. recognizes that nature education lasts a lifetime,
2. create a sense of responsibility for the state of nature starting from local to global levels,
3. ensure recognition of the problems with waste and nature as their own problems and encourage steps to take appropriate measures,
4. provide everyone with accurate, complete and timely information,
5. the principles of sustainable development are encouraged,
6. encourages the partnership of all relevant stakeholders and to use all available resources,
7. the most effective approaches in upbringing and education for the environment are researched and applied.

5. Ecology

Ecology is a science that studies the conditions in nature and the relationships between living organisms, as well as the impact of living organisms on the environment. In other words, ecology deals with fundamental issues that affect all living things and are common to all living things. Ecology and pedagogy, in essence, are two different scientific disciplines, but they have areas that are of common interest and point to mutual familiarity if we want the changes that should be made to truly be part of everyday human life. The modern time we live in today, in conditions of developed science, technique, technology and production, leads to uncontrolled use of nature by man (Kamčeva Panova, 2022). "Destruction of the environment and the biosphere as a whole (chemical, radioactive, thermal, sound, visual, psychological disturbance or pollution from waste - industrial, agricultural or communal, and even moral disturbance - (the bad influence of television, pornography, shunt, the display of violent inserts) with the final result - deviant behaviour and destruction of the environment, that is, genetic degradation, which means agreeing to life in an unhealthy environment." (Risteski, 1999).

In the search for a way out of this situation, we come to pedagogy as a science. Pedagogy should find a way to create a healthy person with modern values, by consistently applying separate didactic, methodical and developmental characteristics of the population it covers. Education is a main segment in the action of man on nature: "...education as one of the basic and permanent social activities that consists in the conscious and intentional transfer of social-historical experience from the older generations to the younger ones in order to equip each generation for its social role in the present and the future and thus ensure the continuity of social life. Education is an essential condition for the existence of human society and one of the most important factors for its development (Leškovski, 2002)."

Scientific and educational institutions are increasingly aware of the "ecological failure" at all levels of education. The main reason for this is the low ecological awareness of people, lack of ecological feeling and position for environmental protection. Unfortunately, our planet is still facing big problems. But one thing is clear, only its inhabitants can help and save it. This is necessary not only for overall survival, but also for the restoration of planet Earth.

In the preschool age, the foundations of ecological education are laid with the aim of building positive attitudes of children towards nature, through the acquisition of knowledge, skills for interaction and responsibility for the preservation and clean nature for future generations.

6. Kindergarten activities with preschool children

1. Name of the activity: help for the bees

Topic:

- ○ Ecosystem
- ○ Climate changes

Key words: bees, water, food, source

Target group:

- ○ Kindergarten children - from 4 to 6 years old

Objectives:

- ○ To enable the child to get to know the environment and help it

- ○ To understand the essence of the interdependence of the entire ecosystem
- ○ To train for the recognition and classification of animals and insects according to the place and living conditions, their characteristics, their benefits, as well as the ways of safe and humane behavior.

2. Name of the activity: Magic Toilet Paper

Type of activity:

- Activity inside the study room
- Activity outside the classroom
- Activity with parents (homework)

Topic:

- Ecosystem

Keywords: water, recycled toilet paper, science, trick, fun, drawing

Target group:

- Kindergarten children (3-4, 4-5. 5-6 years old)

Objectives:

- o Getting to know general terms from the environment
- o Development of creative skills

3. Name of the activity: Plants and water pollution

Type of activity:

- Activity inside the study room
- Activity outside the classroom

Topic:

- Pollution

Key words: soil, water, pollution, waste, food

Target group:

- Kindergarten children (age 4 to 5 years)

Objectives:

- ○ Raised awareness of kindergarten children about the impact of pollution and waste water on the soil and people.

4. *Name of the activity: hot/cold air*

Type of activity:

- Activity inside a study/study room

Topic:

- Climate changes

Key words: ice, hot, cold, air, water, steam

Target group:

- Kindergarten children (age 4-6 years)

Objectives:

- To encourage knowledge about climate change
- To create interest in the scientific approach to the study and understanding of nature
- To encourage awareness and discovery of the properties of bodies and objects.

5. Name of the activity: avocado cultivation

Type of activity:

- Activity inside a study/study room

Topic:

- Sustainable development

Key words: germination, seed, water, light, heat

Target group:

- Kindergarten children - from 4 to 6 years old

Objectives:

- To understand the importance of the production of vegetables and fruits, as well as the human contribution to it.

- To develop a sense of care and responsibility in the cultivation or growing of plants which are the source for the survival of all living beings.
- To understand the essence and need of the basic factors for life and survival of plants and all living beings.

7. How to build a positive attitude towards nature?

The basic principles from which the educator starts and is guided in organizing, planning and realizing the educational tasks and contents are:

- the age of the children,
- the prior knowledge and experience,
- the interest and needs of the children.

A variety of means and methods

- (visual methods-observation,
- looking at pictures, photos, films;
- practical methods that include play, experiments, modeling;
- didactic games, eco-creative games, dramatizations...)

turns children from passive observers of nature into active partners and creators of their own knowledge.

Conclusion

From all this, it can be concluded that getting to know nature and the environment has a great role and influence on the formation of the child's personality. For this purpose, parents, educators, professionals who work with children and for children, should take into account the specificity of the development of the child's personality, nature and the need for knowledge and discovery of natural and social phenomena and in that regard to direct and guide certain contents for realization and concretization in accordance with the possibilities, interests and needs, which will create conditions for joyful and pleasant experiences, which will leave pleasant traces and impressions, and with that we will enable the interaction to come to the fore.

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SESSION 9
(Educational Sciences- Didactics of arts and humanities)

MODERN THEATRE TENDENCIES IN DIRECTION AND ACTING IN THE 21st CENTURY: FROM THE MINIMAL TO THE GRANDIOSE

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Abstract
In this article, we examine the new tendencies in theatre direction in the 21st century. Theatre, as all social expressions does not remain stable but evolves, in an automatic way. We analyze the new efforts of improving sceneries, costumes, and -secondary- music and lighting in this art. Here are analyzed also the elements that stay stable and the reasons for that stability.

Theatre evolution tends to set up performances in two directions: towards the «big» (grandioze) and the «small» (minimal). In the first case, everything is large or oversized, often unnecessarily. The "big" here is tented for reasons of impression and not in the service of dramaturgy or the understanding by the possible spectators. Theater's refreshment is based on four key areas: a. in selecting the texts, b. innovations in directing, c. the improvement of actors' techniques, d. to the renewal of the scenery. The other elements (music, sounds, colorings, lighting) are of minor importance, because they do not greatly influence the overall effort.

In this paper we examine the reasons for these changes, regarding the fact that theatre is a part of a whole social system, which is also evolving. If society evolves, theatre will also evolve. So, we are examining their parallel "roads" from the past towards the future.

One major aspect of this analysis is the "public", that is the theatre spectators. Theatre is depending on them, so we are examining its preferences and gouts that are forming the shape and the context of this art.

Key-Words: *Direction, Public, Semiology, Stage, Technology, Tendencies, Theatre.*

Introduction

A theatrical performance is designed by one or more individuals in order to be presented at a certain point in time in front of an audience. We assume that the main artistic responsibility is undertaken by a person called the «director». The other organizers or artists (managers, actors, musicians, visual artists, etc.) collaborate with him or her in order to achieve a positive outcome. However, everyone follows his/hers desires and ambitions. Whether the final result fails or succeeds, the responsibility lies solely with the director (Moussinac, 1948: 10).

What is the goal of this person? To satisfy both the audience and the collaborating artists by the final result. A good theatrical performance cannot be conceived without this dual satisfaction. Of course, there is also the satisfaction of the critics who will write about what they see, but often they have specific criteria, and their thoughts are contradictory, even unnecessary if the audience enjoys the performance and the actors are satisfied by performing it.

The director has two main goals: a. to serve the text (some directors subvert, "betray" it) and b. to keep the audience during all the period of a show in front of the stage, with unwavering interest, from the beginning to the end (Gargalianos, 2020: 149). There are other goals as well, but they are secondary: a. this collaboration to leave good memories for all participants, even from the beginning of rehearsals, b. to take photos and videos of the performance in order to leave "traces" for future directors and researchers, c. to always maintain absolute or relative cleanliness in the space, especially after the final performance.

This artist has a stage to fill with words, movement, music, lights, and other elements. He sees the stage sometimes as an obstacle and other times as a launching pad to showcase his worth (Bablet, o.p.: 67).

Their efforts are based on the principles of Semiotics, which is a valuable tool for both directors and spectators in terms of directing and analysis. Consequently, the general public, which is not familiar with the rules of semiotics, cannot perceive the messages of such kind of “advanced” performances. Contemporary directors struggle between the trend towards innovation and attracting an audience. It is a dilemma that is hotly debated and concerns both the artistic and commercial aspects of a production.

Methodology

To begin and complete this research we relied on 42 (forty-two) years of newspaper and magazine archives. We also studied theater programs of 1,350 (one thousand three hundred and fifty) performances as well as 145 (one hundred forty-five) interviews with directors, scenographers and actors, given to the above-mentioned journals. We studied and analyzed their views on directing in the 20th and 21st centuries. In special observation sheets we recorded the modern trends of theater, in the fields of direction, scenography and acting.

We attended special screenings of 236 (two hundred and thirty-six) theater performances by European and Greek troupes, both from the state and private sectors.

We have examined all of these data and attempted a comparison between them, aiming to draw useful conclusions regarding our research, as well as to corroborate our own perspective with the historical data we managed to find in the aforementioned archives.

We considered it appropriate to verify what various historical sources (articles, books, specialized and general references) state on the subject, in relation to what we gathered from the Greek and foreign press, as well as our personal impressions from attending theatrical performances for 35 (thirty-five) years (1988-2023). The first number represents the year when the author of this article began intensively following theater, and the second one the time of his participation in the 5th International Conference.

He heavily relied on his own opinions based on what he observed or read, which he documented, encoded or not, on the special observation sheets, using his personal writing style. It is worth noting that the author of the article has also been a critic for 25 (twenty-five) years (1988-2013), which facilitated his ability to record and provide sharper commentary on what he observed -in a professional manner.

Basic parameters

Theater, like all forms of art, evolves over time. The question is whether this evolution is towards a positive or a negative direction. If we look at images of representations of ancient drama vases, we will understand that everything in antiquity, and for many centuries, was elementary and simple. Theater initially was one-dimensional and unambiguous: speech prevailed over imagery (Pavis, 2006: 201). However, gradually and especially in the early 20th century, imagery prevailed over speech.

Renewal in theater is based on four main areas: a. the selection of texts b. innovations in direction c. improving the actors' techniques of portrayal d. renewal in stage design.

Directing tends to create productions in two directions: towards the grandiose and the minimal. In the first case, everything is large or even oversized, often without reason. The "grandiose" serves the purpose of impressing the public rather than serving the dramaturgy or aiding audience understanding.

On the other hand, minimalism involves shrinking efforts to change the parameters, even for financial reasons. Unfortunately, theater is an expensive endeavor, so the solution of minimalism may conceal a reluctance to invest significant funds in sets and also publicity. The empty space, in many works, may be impressive but also reveals a sense of stinginess or relative "poverty".

Today, in modern theater, we see a trend of both gigantism and minimalism, as well as abstraction. Minimalism means minimizing all means of expression, from the actor's performance to the stage design. Abstraction is similar, but here there is a tendency to remove elements or the actors from the stage, so that only the essential remains.

What needs to be examined is whether there is a tendency for modern theater to be improved, compared to earlier performances, and of which the latest pieces (i.e., the current ones) are the natural culmination of the previous ones. Each director takes into account the performances of previous directors with the aim, primarily, of not repeating what has already been done, that is, to present something new.

With this in mind, we can assume that each time the performances are renewed, but we don't know if they are improving. After all, improvement is relative: some spectators (experts or not in theater) will say that what they see as new is for the better, while others will say it's for the worse (Grammatas, 2003: 37).

Modern Theater and its audience

Audiences often consider theater as a "magic" space, a place that will take them away from their daily lives and lead them into beautiful or even strange situations (Moussinac, ibid: 76). What interests us here is to examine, initially, for which audience the theater is renewed. In a preliminary analysis, we accept that the theater audience is limited in relation to the overall population (estimated at 7% of the latter) (Gargalianos, 1994: 127).

We also accept that the majority of this audience -again according to scientific measurements- attends theater only for musical and satirical performances, i.e., revue in Greece (Grammatas, o.p.: 47). In other words, contemporary directors forget that most spectators go to theater to be entertained, not to be intellectually challenged.

Therefore, when we talk about renewal in theater, we mean that it is happening for a small portion of the audience, which we would call "informed" or "studied" spectators. Directors are aware of this and, based on it, dare to present productions that are particularly sophisticated but inappropriate -we could say incomprehensible- for the larger mass of the audience.

Many directors are driven to novelties by their own producers (i.e. the directors of the groups or organizations), who also want to present new “openings” in theatre presentations in the hope that they will cause the public’s interest, hence potential gains (Pavis, 2006: 326).

Theater must be renewed because the audience demands it. One of the trends is for it to either expand or shrink. The majority of theater performances take place in medium-sized theaters, meaning those with a seating capacity of 150 to 1,000 spectators (journals-revues: Thessaloniki, Makedonia, Ta Nea-1998-2021). Furthermore, since ancient times and during the Byzantine era, theater was presented in large courtyards (Hardnol, 1998: 25).

The lack of a strong connection between text and space raises questions from the audience, but often conceals a lack of new ideas behind it (Bablet, o.p.: 120). The latter is covered up by such solutions, which simply leave unanswered questions for the spectators. No matter how hard they try to find answers, they won't succeed because some issues in theater are inherently inexplicable.

In general, we can say that contemporary theater is driven towards innovations due to both the audience's desire to see something different but also to the directors' need to present something innovative, perhaps even groundbreaking.

Theater and texts

The chosen texts are no longer purely theatrical but rather poetic and narrative. Directors select non-theatrical texts as a means of renewal, possibly due to the lack of appropriate theatrical texts (Bablet, o.p.: 119). It is considered banal to stage purely theatrical works (Ubersfeld, o.p.: 254). Additionally, well-known texts may have been staged countless times, losing their appeal (Pavis, 1985: 276). Furthermore, contemporary artists may fear comparison with other directors who have left their mark on established and acclaimed productions, which serve as milestones for certain texts. Every well-known and established text can also be a trap for contemporary theater artists who fear being compared to their predecessors.

Stage as a main parameter

In directing, the selection of spaces is also taken into account. Theater is not limited to classical venues with seats, large curtains, and many lights, but can also be performed in basements, small apartments, warehouses, fields, barns, and various other unique spaces (journals Ta Nea-19/2/2020 – p. 34-36 – Kathimerini – 20/4/21 – p. 56-57).

Concerning the stage, we see, firstly, the choice of spaces that are not theatrical. A scene to set up must take into account the general space that will come in, so even the choice of general space is an element of scenography (Gargalianos, 2020: 152-153). Then there comes the combination of spaces and texts, where the first does not match the second ones, and this makes the dramaturgy of the space worth analyzing, based on a lasting "why": Why this, why that.

In terms of staging, we observe, at a primary level, the selection of non-theatrical spaces. To create a set, the space it will occupy must be taken into consideration, so even the choice of the space is an element of scenography (Pavis, 1985: 201). Then comes the combination of spaces and texts, where the former may not align with the latter, leading to productions that warrant analysis based on constant questioning: Why this, why that, and so on.

Presenting a text and organizing the space leads to questions from spectators. The latter is covered by such solutions, but they simply leave unanswered questions to spectators (Moussinac, 1993: 39-40). Whatever they are looking for to answer, they will not do it because some issues at the theater are inexplicable by nature (Ubersfeld, o.p.: 210).

Actors in front of an evolution

Actors are called upon to find new ways to perform their texts, either on their own initiative or at the suggestion of directors. In both cases, these trends may come at the expense of their own physical abilities, resulting in physical and mental “injuries”. In other words, contemporary actors are expected to find new paths of physical expression that may potentially harm them as they push themselves to the extremes (Tsolakides, 2019: 78). The major question is whether the actors themselves are driven towards these new performances or if they are imposed by directors or even the audience.

Lip microphones are an innovation that started 20 years ago and serves actors who do not have a strong voice, especially when they are called to perform in front of a large audience in very large venues. However, this is an acoustic convenience that does not align with the physical demands of large stage spaces.

There, bodies are called upon to "fill" enormous theatrical stages, but the parameter of "voice" does not support the physical presence of the actor. There is thus a discrepancy between voice and body, where the former is aided by technology (lip microphones - sound is amplified through large speakers), while the body has no assistance and is left exposed to huge stages that it must cover with the meager means at its disposal.Very large stages push actors to physical and mental extremes, which can harm them in the medium and long term.

Actors who can comfortably perform on both large and small stages are rare. It requires special physical and mental abilities, as they need to make "leaps" in short periods of time. In other words, actors are required to transition from one scale to another without proper training in this aspect.

On the other hand, small theaters, where actors perform within breathing distance of the audience, can lead to both the fear of exposure in such close proximity (where even the smallest physical flaws are magnified) and the habit of performing for small audiences, hindering their development in expressing themselves to larger audiences (Tsolakides, o.p.: 71). The solution lies somewhere in the middle, that is, in training actors with the ability to perform in both large theaters and medium-sized as well as small ones.

Conclusions

To summarize, we can say that directing in the 21st century constantly experiments, moving between experimentation (for internal renewal), attracting audiences (for financial survival), the modern and postmodern (to undergo necessary transformations), and neoteric elements and imagination (to avoid stagnation).

Simultaneously, contemporary directors shape a heterogeneous ensemble based on symbolism and semiotics, aiming to enchant or even disorient their already fragmented audience due to economic constraints and socio-artistic impasses. However, they are aware from the outset that such attempts lead to distancing the larger mass of society from Theater as a whole because gradually an artistic form is created that drives this art into difficult -we could say deadlock- paths. We tremble at the idea of Theater after 30, 50, or even 100 years. Will it be dominated by the incredible forces of technology, due to large stages? We already see significant "steps" in lighting, sound, and visuals: video projections have multiplied in the last 20 years to the point where many actors do not appear live in front of the audience but through cinema or video. Can we imagine a future where holograms dominate the spectacle?

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SESSION 9
(Educational Sciences- Didactics of arts and humanities)

TEACHING LOCAL HISTORY THROUGH CINEMA

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Abstract
This article aims to represent the pedagogical meetings and the final product (student short film) that included the curriculum of the Innovation Group of the Experimental Elementary School of Florina entitled: "Cinema and History" implemented during the previous academic year 2021-22.
The "Cinema and History" Club was created and operated in the afternoon program of Innovation Groups of the Experimental Elementary School of Florina, by the scientific leaders of the school's director Mr. Konstantinos Sechidis and the deputy director Anastasia Kappatou.
The Cinema and History Group is aimed at students of the 6th grade of Primary Schools of the wider area of Florina.
The Group's philosophy has been for the students to realize that the cinematographic lens is a means of cultivating the collective memory of a society. A motion picture is a mirror of the political, economic and cultural situation of the time period in which it was filmed.
By attending the afternoon meetings of the Group, the aim of the teachers in charge was for the students to:
✓ *Be introduced to basic cinematographic techniques.*
✓ *Enjoy film screenings representative of important historical events.*
✓ *Acquire a critical-historical criterion for the films they watch.*
✓ *Distinguish history from fiction.*
✓ *Compare the depiction of historical events in a film with the actual historical event as revealed by the research of historical sources.*
✓ *Try to make their own movie.*

Keywords: *cinema, history, innovation Club, student film*

Introduction

According to the law of the Greek Ministry No. 3966 that define the Institutional framework of the Experimental Schools, at the

Experimental Primary School of Florina, various innovation clubs operate in the afternoon hours. The purpose of these groups is to help students find out or develop their special activities, inclinations and interests. The number of Innovation groups varies every year depending on the school staff and the educational needs. In these groups participate students from every public primary school of the region of Florina and the lessons duration is approximately once or twice a week for 2 hours.

As far as the innovation group of “Cinema and History” is concerned we must point out that 15 students attended the classes, coming from various schools of the region of Florina. The structure of the classes due to the existence of two teachers was divided in two categories: one class for History and another one for cinema.

General philosophy

The innovation group of “Cinema and History” was created because the teachers (Kappatou Anastasia and Konstantinos Sechidis) pointed out a change in the teaching methods of the subject of history. Specifically, in the last 30 years with the predominance of the basically-Anglo-Saxon model- of the New History (Burke, P., pp. 1-23) the emphasis on the teaching of the subject has shifted from the content to the process of historical knowledge. Moreover, nowadays students are dealing with a storm of information and images relating to history, apart from the school lesson, in such a degree that we must talk about developing 'defensive' mechanisms, that means ways of managing the generously and unrestrainedly offered historical material, by developing skills in young people which are useful in future management of everyday problems. In order to understand the variety of extracurricular historical influences that young students deal with, nowadays, we have to point out, at first, the impact of media, such as radio but most of all television programs (Mavroskoufis, 2005), the news, talk shows, documentary, interviews from famous people with local or global historical impact. Furthermore, the influence of the internet is not to be neglected. All of the above became the arise of the issue of educating young people how to separate the truth from fiction, especially when watching a movie with historical background.

Impact of cinema in history

Cinema very quickly became the main affordable entertainment for broad social strata in America, Europe and gradually most of the world, that is why it became an integral part of the economic history of the 20th century. Moreover, cinema is an art form and therefore its history is part of the history of 20th century art. And finally, because cinema as a "product" of a specific society is historical evidence, a direct or indirect testimony of the society that produced it (Koulouri, 2008). The role of cinema in revealing history issues is determinant. This is because, first of all, cinema appears to reproduce and reflect a particular vision of the world, with many different types of behavior, habits, hierarchies and values that characterize a society. Secondly, by 'presenting' the world and a particular society, cinema aims to create a particular point of view in the audience. We cannot forget that the Soviets and the Nazis were the first to deal with cinema in all its scope, analyze its function, give it a privileged position in the world of knowledge, propaganda and culture (Ferro, 2002, pp.68-69).

Educational goals of the innovation group “Cinema and History”

As mentioned earlier, the main educational purpose of the innovation group was to make students realize that when watching a movie, besides the pleasure we gain, we can, also, distinguish social and historical information. Moreover, by attending this innovation group students will have the opportunity to:

- Obtain information about basic cinematographic techniques. For example, they will learn about the different shots in the cinema depending on the distance of the camera to the item. When the director wants to focus on the feelings of the actor, he uses closeup shots and when he wants to point out the exterior environment, he uses far away shots.
- Acquire a critical-historical criterion on the films they watch. The combination of history and cinema lessons will provide students with the knowledge of the means of historical research, so as they will be able to distinguish fact from an event. In this way they will be able to know when a movie is historical and when it is just fiction.
- Make their own movie. In the end of the innovation group lessons, students will have the opportunity to create their own movie, by writing their own script and actually play in the

movie. This activity excites students and activates their fantasy and creativity.

Structure and implementation path of the lessons in the innovation group

At this point we think it is crucial to present a diagram of the teaching course during the period of October and June that lessons of the Innovation group took place.

Specifically, the first two lessons contained the theoretical background of both the cinema and the history. Specifically, about the cinema, students learned information about the origin of the cinema and how cinema works (Bazin, A., 1988 & Fragoulis, Γ., 2004). As far as history is concerned, they studied the significance of the research of historical resources in constructing the history Knowledge (Asdrahas, S., 1999). In the next sessions teachers dealt with making students realize the differences between the historical movies, the documentaries and the historical fiction films. For this purpose, in the history classes the subject of discussion was the historical resources and specificallywhich of them can considered as historical evidence (Mavroskoufis, D., 2005 & Myrogianni E-Mavroskoufis, D.,). During the cinema lessons students had the opportunity to watch a movie representative from each kind (historical movie, documentary and historical fiction film) and by filling out specially organized worksheets to recognize thedifferences between them depending on the way they are filmed.

Continuing in the courses the interest of the teachers focused on the local history. By discussing photographs from the local history, monuments and by studding archive material students in the history classes, took a glance in the history of their town and realized how the history evidence are constructed. During the cinema sources the interest turns to the study of cinema techniques, for example the different ways of cinema shots depending on what the director wants to point out. For example, close shots in people faces when the actor is showing an emotion, like crying and far away shots like showing the mountain to point out the landscape in which the movie is filmed.

Moreover, students had the chance of making small stories using the information that they conducted from the historical research in their local history and at the same time during the cinema lessons they learn about the script and how it is important when making a movie (Huet, A., 2008 & Valoukos, S., 2006).

In the next lessons students are busy with making their own movie. They are separated into groups and obtain a certain role each, for example one student group writes the script, another directs the actors, other students are the actors, other the scene designer, the costume designer and other student group deals with the music of the movie. At the same time the students watch films of other students in order to realize what they are suppose of doing.

At this point we can show some pictures from the movie that students made last year. The first topic that the movie dealt was the incidents of violence that occur inside the school building, either in purpose and either without purpose. The purpose of this movie scene was to show that violence has increased during years in the educational system and we all (educators and students) must be alert of this phenomenon. The movie shows an unintentional application of violence from an older student towards the young sister of his classmate. When the brother of the girl finds out about the violent behavior of his classmate, he wavers between his teacher’s words that we must not use violence to confront violence and his personal need to protect his sister.

Photograph 1: Big children often don’t pay attention to younger ones

Photograph 2: Many accidents happen in the school building

Photograph 3: Brother confronts his classmate

The second topic of the movie was the war in Ukraine and how students in a classroom behaved when a girl from Ukraine joins the classroom. At first girls tried to approach the newcomer of their class and when they realized that she wants time to overcome her trauma that war created inside her soul they used art to show her that she is not alone. In this scene children also present every war that their town was involved, for example with the Bulgarians and the Turkish and with this way they demonstrated their contrast to the war. In this point we have to say that Florina, was under a double occupation (Bulgarians and Turkish) for many decades until 1913 that became a Greek city. Its population are aware of how difficult it is to be under occupation for so many years. Shots from these years were presented in the film.

Photograph 4: The Ukrainian girl

STOP THE
WAR!!

Photograph 5: The children's message about the war in Ukraine

The third scene of the movie deals with the stress that students submit themselves about the school grates. It describes the anxiety of a student that has low grates in Maths and becomes a victim of psychological violence from her classmates. As a result, he becomes sick and he decides to reveals her situation to her teacher which is going to find a solution.

Photograph 6: Making fool of the girl’s grades

Photograph 7: The girl talks to teacher about her problem

Conclusion

Seeking to make an assessment of the learning benefit from the operation of the Innovation Group "Cinema and History" we could record the following observations.

We believe that the production of the material of the pedagogical meetings served the original goals of the Innovation Group. The students of the Group acquired the theoretical resources necessary to distinguish a historical film based on historical evidence from a historical fiction film.

The rotation of subjects and teachers piqued the interest of the students and was a pleasant change for them. The production of the final film at the end of the Club enabled the students to realize in practice the techniques of cinema (e.g. different types of shots, value of film music and editing). In conclusion, I would like to testify that the students throughout the theoretical courses had the feeling that shooting a film is something simple and short. Also, while the lecturer emphasized to them that this is a group work, where everyone has to cooperate perfectly with the other to achieve the final result, they were not able to understand this truth. After creating and participating in their own film they found it to be a complex and demanding task and recognized the value of teamwork.

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SESSION 9
(Educational Sciences- Didactics of arts and humanities)

THE REPRESENTATION OF THE FEMALE FIGHTER IN MONUMENTS AND STATUES IN THE REGION OF FLORINA:
THE CASE OF THE WOMAN OF VEVI IS PROPOSED. AN INSTRUCTIVE UTILIZATION OF LOCAL HISTORY IN ITS PUBLIC SPHERE

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Abstract
In the context of the educational and teaching activities of the Skills Workshop and specifically in the Thematic Cycle "I Take care of the Environment" and the Thematic Unit "Global Local and cultural heritage", the skills cultivation program entitled "The Representation of the female fighter in monuments and statues in the region of Florina: The case of the woman of Vevi is proposed. An instructive utilization of local history in its public sphere."
The aim of the program is for students to get to know and study the role of women in the social struggles of their region as they are represented through monuments and statues. It is a teaching proposal on the investigation of the monumental representation of the female gender. It is addressed to Third Grade students of Gymnasium in the Public Greek Education. The objectives of the program set are harmonized with the Unified Framework of Curricula. The program is implemented in an interdisciplinary way with History, Informatics, and Fine Arts and it is structured according to the institutional framework of the Skills Workshops as defined by a relevant ministerial decision and includes, as a basic principle, the combination of the cognitive field of the Curricula with the development of students' abilities and aims to shape them into free and responsible citizens (Government Gazette 3567 / B / 04-08-2021). In this context, the cultivation of life skills, technology, art, and science is enhanced, as well as the learning of students through collaborative and creative actions of a critically reflected teaching methodology. (Government Gazette 3567/B/04-08-2021).

In this teaching scenario, learning theories such as experiential, exploratory, and revealing theories are utilized to activate learning motivation and develop historical consciousness and understanding of the past through an interdisciplinary approach. (D. Mavroskoufis, 2016:211).
Within the framework of the program, relevant research is carried out in public and private archives, and on-site visits to monuments, and libraries. In addition, students conduct semi-structured interviews and conduct qualitative research.

Keywords: *Local history, public history, historical culture, female fighter, identity, gender*

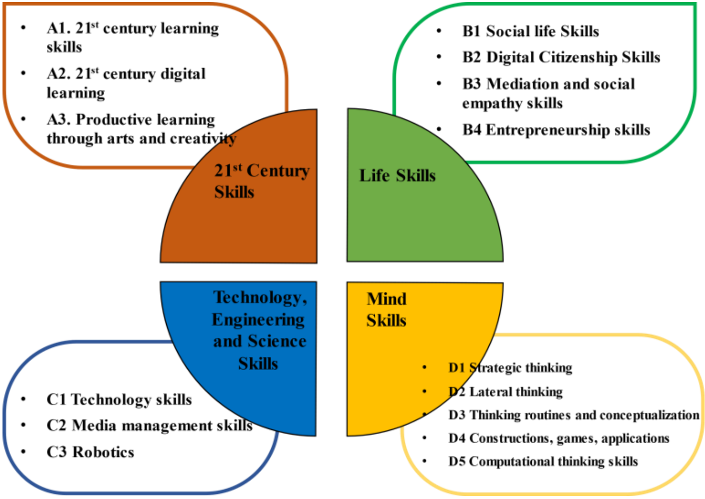
Introduction

Learning and teaching via group cooperation engage students in collaborative group activities, enhancing knowledge, the value of collectivity, cooperation skills, as well as other psychomotor skills (Matsagouras, 2000:16, 29-30, Matsagouras, 2004, Ortwijn et.al, 2008:146-159). In the context of local history, the main purpose is to cultivate and develop skills such as identifying and comprehending traces of the past, as well as understanding people’s different perspectives over time (Palikidis, 2019).

The interpretation of the past emerges not only through a one-dimensional presentation of it from history textbooks but also through various other forms of expression of the need for history (Apostolopoulos - Kokkinos, 2017:2) One of them is the monuments. The historical representation that takes place through various ideological and perceptual cognitive schemes in the context of public history, enables social subjects to define themselves, to form their own identity, individual or collective, and to train historical thought and culture (Apostolopoulos - Kokkinos, 2017:4). The didactic use of monuments through experiential learning methods contributes to this cultivation (Mavroskoufis, 2016) and raises students’ interest in history (Howell, 2015, Milo, 2017 in Kourgiantaki, 2020) as well as for the study of gender in the context of social history (Andreou – Vamvakidou, 2006:199) while applying an interdisciplinary model with modern supervisory means (Αγγελάκος 2004).

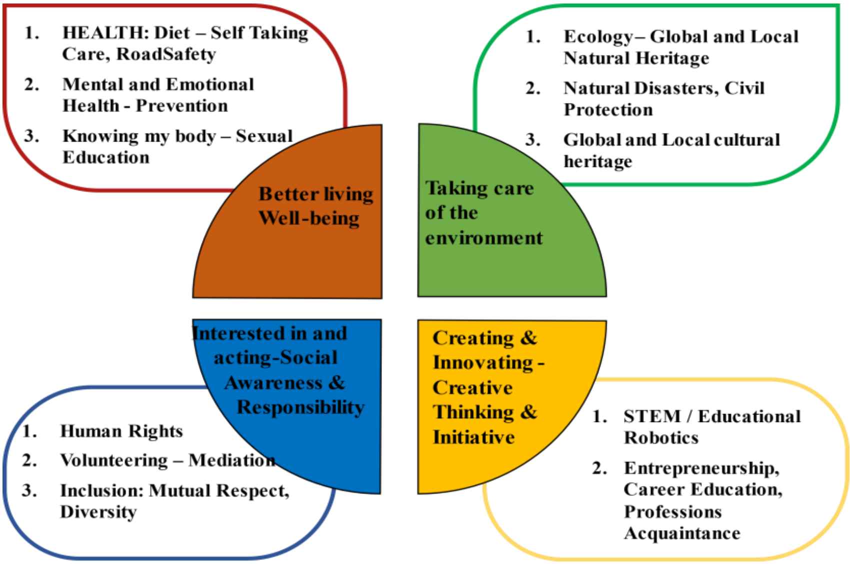
Presentation of the Skills Cultivation Program

The skills workshops course is taught in the Whole-Day Gymnasium of the Greek state for one teaching hour per week according to the Timetable in each class. In the Skills Workshops, the targeted skills are grouped and trained in four target-setting cycles as follows: A) 21st-century skills, B) Life skills, C) Technology, engineering, and science skills, D) Mind Skills (Government Gazette 3567/B/04-08-2021).


• A1. 21st century learning skills
• A2. 21st century digital learning
• A3. Productive learning through arts and creativity
21st Century Skills
• B1 Social life Skills
• B2 Digital Citizenship Skills
• B3 Mediation and social empathy skills
• B4 Entrepreneurship skills
Life Skills
Technology, Engineering and Science Skills
• C1 Technology skills
• C2 Media management skills
• C3 Robotics
Mind Skills
• D1 Strategic thinking
• D2 Lateral thinking
• D3 Thinking routines and conceptualization
• D4 Constructions, games, applications
• D5 Computational thinking skills

(Government Gazette 3567/B/04-08-2021)

The curriculum and the educational material of the "Skills Workshops" are grouped into four (4) Thematic Units: 1) Better Living -Well-being, 2) Taking care of the environment, 3) Interested in and acting-Social Awareness & Responsibility, 4) Creating & Innovating-Creative Thinking & Initiative. (Government Gazette 3567/B/04-08-2021).


1. HEALTH: Diet – Self Taking Care, RoadSafety
2. Mental and Emotional Health - Prevention
3. Knowing my body – Sexual Education
Better living Well-being
Taking care of the environment
1. Ecology– Global and Local Natural Heritage
2. Natural Disasters, Civil Protection
3. Global and Local cultural heritage
Interested in and acting-Social Awareness & Responsibility
1. Human Rights
2. Volunteering – Mediation
3. Inclusion: Mutual Respect, Diversity
Creating & Innovating - Creative Thinking & Initiative
1. STEM / Educational Robotics
2. Entrepreneurship, Career Education, Professions Acquaintance

(Government Gazette 3567/B/04-08-2021)

The skills cultivation program entitled: "The representation of the female fighter in the monuments and statues in the region of Florina: The case of the woman of Vevi" is proposed. An educational utilization of local history in its public sphere, integrated into the Thematic Cycle "I take care of the environment" of the Thematic Subunit "Global local and cultural heritage".

This program aims to enhance students' knowledge of the role of women in the social struggles of their region through public visual references, to understand the multiple inventions of the past and their uses, and to cultivate historical culture through conceptualization and reconceptualization of the social role of the female fighter in the *history of her region* (Andreou – Vamvakidou, 2006: 198) and beyond.

Based on the model "Skills Cultivation Programme" of the scientific body of the Institute of Educational Policy of the Ministry of Education, the following action plan is presented:

Correlation with Detailed Curricula

The correlation is realized with the history lesson and specifically with Chapter 2 of Unit 8 entitled "The Evolution of the Greek Revolution (1821-1827)" (p. 30) and with Chapter 4 of Section 22 entitled «The Balkans of conflicting national aspirations", paragraph c, Macedonian issue (p. 67) of the Third Grade history textbook of Gymnasium. The title of the program is "The Representation of the female fighter in the Monuments and Statues in the region of Florina: The Case of the Woman of Vevi". The target skills of the laboratory concern life skills and especially social life skills, as listed in the relevant Government Gazette 3567/B/04-08-2021 and as they are presented in the corresponding figure. The proposed skills cultivation program is linked to the Key Theme "Global Local and Cultural Heritage".

In this context, the following skills workshops are proposed:

Workshop 1

Title: "In front of a statue of a woman"

Expected learning outcomes:

Through the projection of audio-visual material, students are expected to be activated and predisposed about the subject of study, which is the representation of the female fighter in the monuments and statues in the region of Florina with a focus on the statue of the woman of Vevi.Then, through an online search, students are expected to cultivate teamwork and digital literacy skills.

Activity 1: Inspiration

Inspired by the observation of the history textbook of the third-grade gymnasium in Chapter 2 of Unit 8 entitled "The evolution of the Greek revolution (1821-1827)" (p. 30) about the participation of women in national and social struggles and the corresponding portraits included in the book, the discussion is provoked through brainstorming. The pupils, after observing the reports and images projected, are asked to respond to the ratio of men to women in terms of their presence and role. This is followed by a discussion on the central question about the presence of female figures at the local level and specifically through public art references.

Activity 2: Online Research

Students divided into groups are invited to visit the following websites (videos, images, designing tools) that contain monumental representations. Useful resources:

- National_Audio_Visual_Archive (EOA):

  http://www.avarchive.gr/portal/digitalview.jsp?get_ac_id=2957&thid=13991
- Video from Archive of Hellenic Radio Television: https://archive.ert.gr/8509/), (Retrieved 07/04/2023).

- Design tool of I. Kaskamanidis entitled:

  "Public monuments of Florina/ Memory-History-Identity": (https://www.learn4change.gr/archives/1789) (Retrieved 07/04/2023).
- Diploma thesis: "Official Places of Memory of the Macedonian Struggle"

  (https://apothesis.eap.gr/archive/item/6657), (Retrieved 10/04/2023).
- Electronic Library of the University of West Macedonia:

  http://libcatalog.uowm.gr/cgi-bin-EL/egwcgi/28514/query.egw;/-1+83.212.174.75:211/ADVANCE (Retrieved 10/04/2023).

Each group is requested to record from the sources above the female monumental representations of the region of Florina and to present these results through the online tool. Padlet. (https://el.padlet.com/)

Workshop 2nd

Title: "On-site Monuments Tour"

Expected learning outcomes:

Through public representations, students are expected to understand the dimensions of gender identity relative to the stereotypes. They are expected to distinguish the different representations of the female statues/monuments of the Macedonian struggle between the "Woman of Vevi", the "Monument of Macedonian Fighters of Itea" and the "Monument of Macedonian Fighters of Lehovo". Through comparison, students are expected to understand the female folk identity of the

Woman of Vevi, especially in its locality, an element that substantially differentiates it from the other two monuments of women of the Macedonian struggle.

Activity: Tour the female monumental representations of the Macedonian Struggle. In this context, students are suggested to visit on the spot and observe the female statues referring to social struggles in the area. They are then asked to record their characteristics on an observation sheet. It is suggested that students fill out a worksheet on the structure, composition, characteristics, vesture, objects she holds, the posture of the body, and parts of the statues and monuments, as well as a second worksheet on the conceptualization of the role of the female fighter as it emerges from the tour – observation.

Workshop 3rd

Title: "Interviews with citizens"

Expected learning outcomes:

Through interviews, students are expected to explore how citizens perceive, in the context of local history, the role of the female fighter of the Macedonian struggle through the monumental representation of the Woman of Vevi.

Activity: Ask citizens about the statue of the Woman of Vevi.

After being informed about the methods of conducting an interview, students create a questionnaire in the form of semi-structured interviews, in which they record the questions collaboratively and in real time in a Google digital document. (WEB 2.0)

Workshop 4th

Title: "On-site visit to the Library"

Expected learning outcomes:

Students are expected to enhance their historical knowledge through research in libraries and to cultivate investigative skills through contact with printed material. In this context, a relevant review of the book by A. Andreou and I. Vamvakidou entitled: "The Population of Statues, the Case of Florina" is proposed.

Activity: Visit the library of the University of Western Macedonia.

The students work collaboratively on the material of the book. They search for information in the book and record on a worksheet their observations about the statue of the Woman of Vevi.

Workshop 5th

Title: "Female fighter beyond time and place"

Expected learning outcomes:

Through the case study of the statue "The Woman of Toil" by the Greek sculptor Mary Papakonstantinou for the daily and timeless struggle of the woman of the world at all levels, students are expected to cultivate historical thought and culture, critical thinking and contemplation, through the awareness of the timelessness of the role of women in all social struggles not only locally but also globally.

Activity: Case study

A case study of the statue "The Woman of Toil" of Mary Papakonstantinou is given along with the following link: https://odosell.blogspot.com/2011/03/blog-post_3618.html. Then, through group collaboration, students are asked to complete a worksheet on the analysis and recording of the statue elements that highlight the social role and contribution of the female symbol in the struggles of everyday life. The presentation of the results is followed by a discussion and questions of reflection and correlation with the "Woman of Vevi" are raised.

Workshop 6th

Title: "Creation of artwork".

Expected learning outcomes:

Students are expected to come in contact with basic concepts of object design, from its initial conception to its implementation, to create aesthetic forms by combining various materials, and to produce their artistic work according to their perceptions and references.

Activity 1st: "Visiting art workshop"

In the framework of skill workshop drawing, a visit to an art workshop (such as the School of Fine Arts of the University of Western Macedonia, art workshops, etc. Is paid) involving students in observation and interaction with various materials – techniques – tools as well as visual works of corresponding laboratories. Then, a discussion follows.

Activity 2nd: "Creation of artworks concerning the woman fighter"

The students are invited to create collaboratively (divided into groups) their artwork – sculpture with reference to the Woman Fighter. The students discuss and choose through specific materials given to them and related to the sculpture "The Woman of Vevi" such as stones, cement, fabric, and colors. Each group presents their artwork and then photographs and posts it on a collaborative online Padlet.

Conclusions

Through skills workshops, as an innovative course, more flexibility is given to research with the possibility of deepening into global local, and cultural heritage issues. Students develop their critical thinking, cultivate their historical culture, and enhance their historical knowledge. At the same time, they cultivate 21st-century life skills such as communication, cooperation, and self-initiation skills that contribute both to the formation of their civic identity and to the formation of a citizen across borders.

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SESSION 9
(Educational Sciences- Didactics of arts and humanities)

COMMUNICATION SKILLS AND STRATEGIES: A RECORD OF STRATEGIES EMPLOYED BY PRIMARY SCHOOL STUDENTS

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Abstract

In the present study, an attempt was made to record the strategies of oral speech and communication, employed by 16 Greek primary school students of 5th–6th grades. This project aims to record firstly, the degree of communication of students in potentially everyday situations and second, the strategies employed by students in the oral production. The strategies were recorded through non-participatory observation and tools specifically created for this purpose. The tools consisted of a checklist, which was used to record the communication strategies that the students used while being involved in a role play game. For the creation of the checklist Mariani's taxonomy (2010) strategies were deployed. Moreover, an activity of oral production was created and a rubric was used to check the recorded strategies. The rubric was created from the combination of three graduated scales of evaluation of oral speech as presented in Griva and Kofou (2021). From the qualitative and quantitative data of the study we conclude that students have showed different degree ofcommunication skills and strategies in the Greek language. In both activities, a greater number of strategies were used by more efficient students. During role- playing, time-saving tactics and non-verbal strategies were used more than asking for help. On the contrary, during the second activity, the employment of all the above-mentioned strategies from the part of the students was significantly reduced. Taking into consideration the data, we suggest that it should be necessary to enhance students' communication strategies by involving them in authentic activities in the language classroom.

Keywords: *communication activities communication skills, communication strategies, first language (L1), oral speech*

Theoretical framework

Communication in general, can be defined as a two two-way process of creating, transmitting, understanding and utilizing messages and information (Griva & Kofou, 2020). It is basically an exchange of meanings and understanding (Rahman, 2010). However, some problems might be encountered during the communication and the speakers must solve it in order to continue. So, they use some strategies in order to achieve it (Yarahmadzehi et al., 2015).

Those are called communication strategies communication strategies and are employed by speakers or listeners in order to cope with communication problems or transmit and understand a message (Toomnan & Intaraprasert, 2015) in a more efficient way (Dörnyei, 1995). A great number of taxonomies of strategies were created through years, but one of the most recent and also used on this study is Mariani's (2010) taxonomy. This taxonomy contains four categories of oral speech strategies, according to pedagogical purposes. Previews research about communication strategies, mostly concern groups of adults learning a second or foreign language. Their findings show that most frequently used strategies, between those groups, are: a) message reduction strategies b) non-verbal strategies (Huang, 2010; Nakatani, 2006) c) code switching (between different languages) and d) fillings and hesitation (Yarahmadzehi et.al. 2015). On the other hand, the less preferred strategies are: message abandonment (Tensim, 2016; Huang, 2010) and help seeking from the interlocutor (Yarmorhammadi & Seif, 1992). Communication strategies on second or foreign language (L2/FL) can be influenced by strategies employed on first language (L1), personal speech differences and social background (Yarahmadzehi et al., 2015; Kouwenhoven et al., 2018). The quantity and the quality of communication strategies derives from speaker's ease on the target language, its motives, its self-image and the frequency on language exposure. Some researchers conclude that more efficient speakers tend to use a variety of strategies than less efficient ones (Tensim, 2016; Kouwenhoven et al., 2018) while others disagree (Huang, 2010).

Despite the importance of oral speech in people's lives and the fact that it takes almost ¾ of adults' communication in their field of work, teachers do not believe it should be taught like written speech (Palmer, 2014). The prevalence of the written speech seems to be reflected in the analytical school programs in several countries, including Greece (Archakis & Lampropoulou, 2006). Therefore, oral communication strategies are necessary to be taught in order to create competent listeners and speakers (Palmer, 2014). Finally, as Gürsoy (2010) mentions, more research needs to be done, about learning strategies that include communication strategies, firstly in groups of children in primary education and second on groups of speakers/listeners in their mother tongue.

Purpose and aims

The main purpose of the current study was to identify strategies of oral speech and communication, employed by 16 Greek primary school students of 5th- 6 th grades. The two study aims were to record firstly, communication skills of students in potentially everyday situations and second, strategies that are employed by students during oral production.

Sample

The sample consisted of 16 students of primary school 5 of them were boys and 11 were girls and 11 of them were on 6th grade and the rest on 5th. The participants were selected by snowball sampling (Mills et al., 2017).

Method

The basic research tool was non participant observation (Griva & Kofou, 2021) and the communication between the researcher and the participants was limited and only about the instruction of the activities that will be presented later on this paper. During the interaction between the students, the researcher was not interfering and an exception was made when the participants seek for help and employ it as a communication strategy.

Observation tools

The children were involved in two activities and two instruments were designed for observation purposes. More specific, one role play activity and a check list for its observation and an activity of oral production and a rubric for it.

Role playing requires communication between the participants in order to observe their ability of interacting in authentic situations (Griva &

Semoglou, 2016) and can be used in online meetings and chat rooms (Lowestain, 2017). The given scenario to children for role playing activity is the following:

> “Dimitris/Dimitra was given a jacket by his friends for Christmas. However, when he/she tried it on, noticed that its zipper was broken. So, he/she decides to go along his/her mother to the store where the jacket was bought in order to ask the employee for a solution.
>
> Roles: 1. Dimitris/Dimitra 2. Employee”

The checklist, that was designed for the purpose of our study and the observation of the strategies employed during role playing activity, was based on Mariani’s (2010) taxonomy (Table 1):

Table 1

Check list from Mariani’s (2010) taxonomy

Participant’s code	
Strategies of managing discussion	Conversation opening
	Maintain speakers turn
	Time gaining strategies
	Managing of turn’s change
	Seeking help from interlocutor
	Conversation closing
Strategies of non-verbal communication	Gestures and body moves
	Extra lingual tactics

For the oral production activity a different scenario was created and it was a “tool” to see the participants’ empathy towards potential everyday situations such as a racist incident (Ntagli, 2020) and it is following:

> “At school you have a new classmate from Syria, Amin. Some of your classmates make fun of her because of her different clothes (e.g. Burga) and for the poor Greek she speaks. How do you react and what do you do, why?”

The strategies of oral production were recorded through a rubric that was created by the combination of three graduated evaluating scales of oral speech as proposed by Griva & Kofou (2021), (Table 2).

Table 2

Rubric by the combination of three graduated evaluating scales of oral speech by Griva & Kofou (2021)

Participant’s code		Very well	Average	Little
Comprehension of spoken language	Comprehension of oral text			
	idea			
	Comprehension of slow and clear speech			
Oral speech production	Use of correct syntax			
	knowledge			
	Use of rational reasoning			
	Use of fillings and hesitation			
Communication skills	Seeking help from interlocutor			
	Use of Gestures for communication enhance			

Process of data collection

The data collection was divided in three phases. The first phase was about the pilot testing of the tools’ for possible mistakes and checking their difficulty level. It was conducted with two students of 6th grade, in order to test the tools for possible mistakes and check their difficulty. The second phase was the sample collection in which the researcher contacted with children and their parents in order two inform them about the process and ask them to participate in the research. The data collection lasted from 1/2/2022 until 27/2/2022. The final phase was also the main procedure, which involved the meetings of the researcher with participants. The meetings were conducted through "Skype" because of Covid-19. This procedure was based on Willi's framework (1998 to Pitsilka, 2017) and according to that was conducted in three stages.

On the pre-stage, the researcher introduced the participants if they were unfamiliar with each other, "broke the ice" and explained the activities. During the main stage the participants conducted the activities and the researcher was observing, using the check list and rubric, without taking part. During the individual activity of oral production the participant under observation was alone in the natural or online meeting room. On the post stage, after each activity, the researcher was asking the participants questions about the process.

Data analysis

The data analysis has been done through Griva and Stamou's (2014) three stage qualitative data analysis framework. At first 25 Codes were created, one for each strategy that was observed on participants during the activities. Then, those 25 Codes were categorized into broader categories and these categories were included in three thematic strands. The codes, the categories and the thematic strands are visible in the following result tables.

Results

The most important results for both activities will be presented based on the use frequency as observed in participants and according to each stage of the pre-mentioned Willi's process.

Role playing activity results

At this activity, during pre-stage, most frequently used strategy seems to be the role choice (RLCHC). It is used by 14 students and an example of participant's sayings is: "-I want to be the salesman. - Good I want to be Dimitris". On the other hand less used strategies during post stage, with only 2 students to apply them, are discussing about the story line

(DSCSTL) (e.g. - “What should we say? - I will ask you for help. - Good and I will tell you to show me the receipt») and seeking help from the interlocutor (SKHLINT) e.g. “I don’t get what you say, can you repeat?”).

On the main stage, time gaining strategies (TIMGN) are very popular among the sample, as 14 students apply them with hesitations and fillings (e.g “Ahhh… one minute please ehhh… to check the price”). Also, most of the kids seem to be able to manage of turn’s change (MTRNCH) and 12 of them apply nonverbal strategies (EXTVRB) like laugh, smile and eye contact. Furthermore, conversation opening (CONVOP) strategy is observed on 13 students (e.g. “Hello how canI help you? - Hi, I want to change a jacket”) however, only half of them choose to end the conversation properly (ENDCON) (e.g. “thank you for the help- Have a nice day, thanks”)

At the post stage, 8 students mentioned it was an easy (ESPRC) and liked process (LKPRC) and only 2 of them have become familiar (FAMPR) with a role playing activity in school. On the Table 3 you can see all the results.

Table 3

Results of role playing activity

		Students
Pre stage		
Categories	Coding – Functional definitions	
Preparing for role play	Role choice (RLCHC)	14
	Discussion about the story line (DSCSTL)	2
	Seeking help from interlocutor (SKHLINT)	2
Main stage		
Conversation management strategies	Conversation opening (CONVOP)	13
	Maintain speakers turn (MSPTUR)	13
	Time gaining strategies (TIMGN)	14

	Managing of turn's change (MTRNCH)	14
	Seeking help from interlocutor (SKHLINT)	6
	Conversation closing (CONVCL)	7
Meaning negotiation strategies	Use of other language (OTHLAN)	2
Extra-verbal communication strategies	Gestures and body moves (GSTBM)	6
	Extra-verbal strategies (EXTVRB)	12
Post stage		
Reflection on the Process	Familiar with process (FAMPR)	2
	Liked process (LKPRC)	8
	Will for process repeating (PRREP)	1
	Easy process (ESPRC)	8
	No opinion (NOOP)	2

Results of oral production activity

Presented in the same way as above, on the pre stage of oral production activity 14 of 16 students comprehend very well the oral text (COMORTX), the main idea (COMMID) and the slow clear speech (COMSCSP).

On the main stage, most of the students use correct syntax (CSYNT) and rational reasoning (RTRSN), for expressing their opinion, very well or average. On the contrary, seeking help from interlocutor (SKHLINT) (e.g. "What do you mean?") is used only by 2 participants in an average scale and only 3 participants' use of gestures for communication enhancement (GSCMEN) probably because of correspondence communication. At the end 9 participants use of fillings and hesitation (FLHS) during their speech.

On the post stage, 10 participants mentioned that the process was easy for them but only 3 of them tried something like in school. All the results are presented on the Table 4.

Table 4

Results of oral production activity

		Students		
Pre stage				
Categories	Coding – Functional definitions	Very well	Average	little
Comprehension of spoken language	Comprehension of oral text (COMORTX)	14	2	
	Comprehension of main idea (COMMID)	14	2	
	Comprehension of slow and clear speech (COMSCSP)	14	2	
Main stage				
Oral speech production	Use of correct syntax (CSYNT)	9	5	2
	Retrospection of prior knowledge (RTPRKN)	6	3	3
	Use of rational reasoning (RTRSN)	8	5	3
	Use of fillings and hesitation (FLHS)	2	7	7
Communication skills	Use of Gestures for communication enhance (GSCMEN)	1	2	12
	Seeking help from interlocutor (SKHLINT)	0	2	1
Post stage				
Reflection on the Process	Familiar with process (FAMPR)			3
	Liked process (LKPRC)			5
	Will for process repeating (PRREP)			1

Easy process (ESPRC)	10
No opinion (NOOP)	2

Conclusion

Based on the results of this study its shown that time saving strategies were employed by most participants as in the study of Yarahmadzhi et.al. (2015). Also, the help seeking strategy was not used often by the participants. This is in vein with previous studies (Tensim, 2016; Huang, 2010; Yarmorhammadi & Seif, 1992). In the present study most efficient speakers tended to ask for help without fear in contrast to older findings that suggest that less efficient speakers ask for help (Tensim, 2016; Huang, 2010).

Next it is observed that non-verbal behaviors like hand gestures and moves were used only by some participants probably because of online and not face to face communication. During role play activity, the use of non-verbal behavior is observed, more on the students that communicate between them face to face. So correspondence communication seems to have an impact on the way they express themselves non-verbally. Maybe participants that were not in the same physical space felt it were useless to move their hands and bodies because the interlocutor could not see it. However, this explanation can only be guessing because there are no previews research findings about it. At least, facial expressions were used by most participants despite correspondence communication as in other studies (Huang, 2010).

It is worth mentioning that most efficient speakers used a larger number of strategies in agreement with some previous research findings (Huang, 2010; Tensim, 2016) but in contrast with some others (Kouwenhoven et al., 2018).

Finally, it is highlighted that the results of this study cannot be generalized due to the limited number of participants and we suggest a broader study to be carried out in the future. The research about oral speech and communication strategies seems to be very little and it will be useful to be researched in the future.

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SESSION 10
(Educational Sciences- Didactics of languages and literature)

DIFFERENTIATED TEACHING AND LEARNING: A TEACHING PLAN FOR A GREEK LANGUAGE LESSON IN PRIMARY SCHOOL

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Abstract
In today's diverse learning environment, with the varied composition of the student population, the teacher takes into account the learning preferences and readiness of his/her students, and differentiates the course in terms of its content and the teaching process.

In this paper, a teaching plan is presented based on the 3rd Grade Language textbook of the Greek Primary School, with particular focus on the chapter "Make me an Iron Man" from the thematic section "People and Machines". An interdisciplinary approach, integrating language, history and culture, is attempted, with the aim of encouraging students to engage in projects based on their own skills and abilities. The teaching objectives of this unit are oriented towards lexicographical knowledge and speech production, as well as the development of cooperation and communication skills. In particular, the goal of differentiated teaching is to actively involve all students in the learning process, each in an area that they know best or that they prefer the most.

A variety of graded activities are proposed and the student work method will be applied in small working groups with elements of inquiry-dialogue teaching and demonstration through new technologies, promoting observation and inquire-based learning in a self-directed and autonomous manner. This ensures equal participation, full access to knowledge and its progress, so that students feel academically adequate and therefore self-regulated and autonomous.

Keywords: *Diversity, differentiated learning, teaching plan, interdisciplinary approach.*

1. Introduction

Differentiated teaching and learning is a popular and important topic nowadays. Its basic characteristics are tree main aspects that precede the teaching planning. More specifically, teacher has to take into account: a) the learning readiness level of his/her students, b) their interests and c) their learning preferences, not to mention their personal and educational experiences and their social and economic background of their families.

Having these as a basis, teachers are supposed to differentiate their teaching strategies in four essential domains, that means to differentiate: a) the content, b) the activities in the learning process (e.g. to prepare graded activities, or to divide the students into flexible learning groups), c) the final product for each student and d) the learning environment (the classroom).

2. The differentiated teaching plan

In the proposed plan we undertake the interdisciplinary approach which is based in language, history and culture and is also related to physics, informatics and arts. It is designed for a two teaching hours (90 min.) lesson according to the Greek official Curriculum for 9 years old students (3rd Grade), and the students are expected to know already chapters of the Greek mythology but also to be familiar with concepts related to new technologies (electronic games, mobile, tablet, movies). The subject is ‘‘Humans and Machines’’ and is based on the 3rd Grade Greek Language textbook of the Primary School, with chapter title: ‘‘Make me an iron man’’.

2.1. Objectives of the lesson – teaching methods

By the end of the teaching process, the students should be able to succeed in three main dimensions:

1) Cognitive dimension, textual and lexicographical (e.g. to process narrative and descriptive texts, to articulate their thoughts in written and spoken language, to consolidate the ways of formulating imperative declension according to the communicative context etc.).

2) Emotional dimension (e.g. to develop a positive attitude towards learning, to feel confidence, to take enjoyment, to feel part of a group and to feel effective)
3) Pedagogical and social goals (e.g. to cultivate creative and critical thinking, to actively participate in the learning process, to include all the diverse features of students).
These objectives are focused on the cognitive, affective and action-based skills of learning based on Blooms' taxonomy classified into levels of complexity and specificity.
As far as the methods of teaching are concerned, what will be implemented is the student working in small groups with elements of inquiry–dialogic form of teaching and demonstration through new technologies, promoting observation and inquire-based learning in a self-directed and autonomous way. For these reasons, not only the textbook will be used but computer, projector, blackboard, cardboard, worksheets and paints as well.

2.2. The phases (steps) of the teaching plan

We have separated the lesson in four phases chronologically determined (but also flexible), presented as below giving a title to each one:

a) **Phase 1**: ''Student activation, introduction to the new lesson''. The title, topic and objectives of the lesson are mentioned to the students. Brainstorming: based on a photo on the computer, a discussion starts which will end up with the recording of words that come to the students' minds related to the topic (on the board, or alternatively on a piece of sticky paper). These words will be used in a later phase.

b) **Phase 2**: ''Semantic processing of the text''.
Students read the text (silently and aloud). Search of unknown words will continue with the use of dictionary. Comprehension questions of the first text. Discussion about machines and their relationship with humans, but also about the institution of royalty and democracy. Alternatively we organize discussion groups in given subjects from the text.
In the second part of this phase and instead of reading the second short text of the textbook about Talos, the living machine of the Greek

mythology, we will show a video with a reference to the History lesson where Talos is introduced (https://www.youtube.com/watch?v=rlR_8E-c0X4). We edit the video divided into three parts: a) General about robots and how they are made. b) Talos… made of copper (made by Hephaestus) invulnerable, almighty, righteous, he protected the island of Crete from enemies. According to Greek Mythology he was killed by Medea. Reference to the Argonautic Expedition. c) Robots today. Who made them? What is their use and importance in everyday life? The evolution of technology. Discussion about electronic games.

c) **Phase 3**: ‘‘Presentation of grammatical and syntactic phenomena. Applications (writing essays, language exercises)’’.

First part: The king wanted to make a man of iron, while Talos was made of copper. We make adjectives from nouns to show what material something is made of (also nouns: silver, marble, wood, paper, leather, silk, stone, cloth). We make sentences (the same sentence) with a definite article and then with an indefinite article, having our students in pairs. Then they are asked to inflect the sentences they have created *e.g.: the stone wall, a stone wall etc*. and write a story using also the words from the original brainstorming (written or orally).

In the second part of this phase we try to have their writing skills improved with the tittle: Directional discourse - Instructions. / Give instructions. We divide the students into 4 (four) small groups. The exercises are: 1. Imagine you are a king in Africa and you ask your subjects to build a wooden warehouse (use of imperative). 2. Imagine you are King Minos (use of imperative) and you ask the workers to build a wooden storehouse. 3. Imagine that you are the teacher and you ask the students to make a paper construction e.g. a kite (subjunctive). 4. Imagine you are the teacher and you ask your students to make a board game (definite). The essays can also be written as comic stories. Alternatively, the students are divided into pairs (or small groups) and one student (who has difficulties in writing) orally instructs his classmate on how to make an object that he knows well, so that the others can learn it, and the others record ***or*** they tell a story of their own that happened at their grandparents’ (or friend’s) house on their last visit there, using any verbs they like, and the verbs given below: went, saw, entered, heard, climbed, fed, found, played, made, constructed. In this way we engage with the background of our pupils (ethnic, cultural etc.) and include it in the teaching and learning process.

d) **Phase 4**: ‘‘Recap – Evaluation’’.

The representative of each group reads what they have written to the whole class. They draw robots with their imagination, putting a title on their drawing. A small reminder of what was taught is given orally (at the end, the teacher gives them two small spelling exercises for home). Also we give a short questionnaire to each group asking them what they liked the most and what made it difficult for them, for example the activity ‘‘Think-discuss-share’’ (3-2-1): we ask our students to note three words that they consider important, two words that are unimportant and one word that impressed them. In the same way, they are asked to mention three important pieces of information, two unimportant ones, one thing they would still like to know or three things they learned today, two ways they can apply them, and one point that made it difficult for them. Alternatively, we can give them a self-assessment sheet as below:

Table 1. An example of a self-assessment sheet.

Put an X in the box that you think is most applicable to you

	Very much	So and so	A little
I read the text easily			
I participated to the discussion for the meaning of the text			
I participated to the completion of the exercises			
I understood the difference between the definite and indefinite article			
I understood the difference between giving instructions in the imperative and the subjunctive case			

I worked with my classmates in my group successfully			

3. Conclusion

The teaching plan, that was proposed above, is based on a teaching plan that was implemented in a primary school in Florina Greece. Our aim, though, was to present a different perspective in teaching methodology. The main objective of differentiated teaching is the active involvement and participation of all students, accepting and using their diverse characteristics in the learning process in order to improve their academic performance and ultimately create active and responsible citizens. Generally speaking, it can be noted that differentiated teaching is a way of thinking about learning away from the traditional teaching strategies of the past.

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SESSION 10
(Educational Sciences- Didactics of languages and literature)

FOREIGN LANGUAGE CURRICULA OF GREEK AND EUROPEAN SCHOOLS: CONVERGENCE OR DIVERGENCE?

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Abstract
The study aims to explore the foreign language (FL) curricula of Greek state schools and the European Schools through a thorough inspection of their documents to provide a record of the similarities and differences between them. The special legal status of the European Schools, which are intergovernmental entities controlled jointly by the Member States of the European Union (EU) and lie at the heart of EU language policy, offered the rationale for introducing the research.

Document analysis was employed based on criteria related to curriculum development theories to facilitate the comparative analysis of the FL curricula. The broader categories of criteria considered for describing and analyzing these curricula were: a. theoretical background; b. structure; c. methodological approaches; d. the role of the teacher; e. main goals; f. types of assessment; and g. streaming of students.

A multitude of similarities was revealed between the curricula. The structure, goals, and underlying principles reflected in them highlight a very high degree of convergence. Differentiation was identified in terms of teacher roles as further roles are assigned to Greek teachers offering them more freedom. Also, mediation, a newly introduced aspect in the Greek curriculum, is not mentioned in the curricula of the European Schools despite the enhanced attention it has received as part of the EU language policy, most likely because it is catered for by the multilingual context of the European Schools. Concluding, the high extent of convergence suggests that Greece is aligned with the EU educational policy concerning FLs and the latest developments in FL teaching.

Key words: *FL curricula, Integrated Foreign Language Curriculum (IFLC), European Schools' curricula, education policy.*

1. Introduction

Language learning lies at the heart of the EU's educational policy as effective communication in more than one language is considered to enable European citizens 'to benefit from education, training, and work opportunities across Europe' (Eurydice, 2023 p. 15). In line with European policy documents on education, the citizen's learning, studying, and doing research should not be obstructed by borders on European soil where the speaking two European languages in addition to one's mother tongue, tends to become the norm (European Commission, 2017). What is more, according to the 2023 edition of Key data on teaching languages at school in Europe, which contributes to the monitoring of policy developments, "fostering language learning and multilingualism is also part of the vision for high-quality education and key for mobility, cooperation and mutual understanding across borders" (Eurydice, 2023 p. 15). This is reflective of the significance placed on FL learning in educational policies of EU countries.

The ambitious objective of teaching two FLs from an early age, which was introduced in 2002 by the Heads of State or Government gathered in Barcelona (Council of the European Union, 2002), was reiterated in the Council recommendation of May 2019. In particular, it invited Member States to "explore ways to help all young people to acquire before the end of upper secondary education and training - in addition to the languages of schooling - where possible, a competence level in at least one other European language which allows them to use the language effectively for social, learning and professional purposes, and to encourage the acquisition of an additional (third) language to a level which allows them to interact with a degree of fluency" (Council of the European Union, 2019 p. 17). This 2+1 language policy cannot be efficiently implemented and yield the desired outcomes unless the FL curricula of Member States reflect comprehensive language educational policies, and innovative and inclusive language teaching methods and strategies.

At this point the construct of curriculum should be considered as it is a highly influential document in implementing educational policies. In fact, it is not an easy one to define. According to Dubin & Olshtain (1986, p. 3), the term is used "to describe the broadest possible context in which planning for language instruction takes place". Nunan (1988) on his part, identifies curriculum as the totality of content to be taught and aims to be achieved within an educational programme while Berardo (2007) suggests that the curriculum offers systematicity and coherence about how and what is to be taught. Hall & Hewings (2001) identify the curriculum as the "planning, implementation and evaluation of a series of language learning events conceived as a coherent whole with a specified purpose" (p. 1).

Taking content from external standards and local goals, the curriculum is shaped into a plan for achieving effective teaching and learning indicating how the expected outcomes are to be achieved and suggesting appropriate learning activities and assessments towards the students' desired performance (Wiggins & McTighe, 2006). Hanisch, et al., (2014, p. 664) view the curriculum as "a system of statements about the goals, contents, methods and organization of schools' learning processes, set by political authorities" aimed at differentschool types, levels of education or school subjects. At the macro-level,the curriculum is an administrative document which reflects the educational policies of a country or state (Rasmussen, 2013). Its primary function is to indicate the expectations of the educational authorities from the school and the students in terms of learning outcomes in result of tuition the latter receive from their school reflecting both a social and a pedagogical function.

In Greece, a new national curriculum for FL teaching in the state school sector, the Integrated Foreign Languages Curriculum (IFLC), was introduced and piloted in 2011 (Government Gazette, 2320/B/2011) while it was established in the academic year 2016-2017 (Government Gazette, 2871/B/2016). The IFLC is common for all FLs that are currently offered in Greek state schools, while it adopts a generic approach to language learning. This constitutes a major breakthrough, since FL learning is no longer treated in the school curriculum as separate, clearly defined subject, which, in turn, allows for more coherence and systematicity in FL education (Dendrinos, et al., 2013).

The European Schools, which are intergovernmental organizations controlled jointly by the governments of the Member States of the EU, aim to provide multilingual and multicultural education at all levels; starting with an essentially monolingual curriculum in the nursery school, the students receive tuition in two or potentially more FLs other than their first one (L1) at the next levels (European Schools, 2019). The studies including the atmosphere of the schools, the after-school activities and further aspects of school life which immerse students in a FL environment lead to highly effective language acquisition (European Schools, 1994). The language policy of the European Schools is revised on a regular basis, at the latest every ten years (ibid). The European Schools differ from other education systems as they offer part of the education in the dominant language of the students, so that their competence in that language will never cease to improve. Competence in the other FLs in their curriculum is built on the dominant language as according to Cummings (2000), research has proven that continued improvement in competence in the dominant language is conducive to the learning of other FLs and can result in improved academic progress in other subjects. The courses taught in the languages other than the students' L1 comprise a pioneer feature of the European Schools, the Content and Language Integrated Learning (CLIL); The CLIL approach with the early introduction of L2 is used to teach subjects such as Human Science, History, and Geography among other (European Schools, 2019). Within this frame, as a means for learning content, FL learning presents an important goal for the student population.

The study aims to explore the foreign language (FL) curricula of Greek state schools and the European Schools through document analysis of their structure, goals, and underlying principles to provide a record of the similarities and differences between them. The rationale for attempting a comparative analysis of these FL curricula lies in the special legal status of the European Schools within Europe and the fact that they use a model of curriculum and assessment which can be broadly identified as a hybrid of the various educational models currently applied in Europe (Leaton Gray et al., 2018). What is more, the European Schools present the context where all EU educational policies are firstly applied, which identifies them as an ideal counterpart to benchmark the implementation of EU directives in the Greek state school sector. The European Schools are a success story in that their network continues to grow and offer graduates the chance to become multilingual through its longstanding organization of the teaching of a minimum of three languages including their L1, the potential to study some of the subjects through L2, and the coexistence of students from diverse nationalities (ibid). The diverse background of the student population of these schools which come from different Member States lead to the formation of an educational context which shapes curricula that will encapsulate the values, demands, and vision of the EU (European Commission, 1994). Thus, educational reforms or innovations concerning education in Europe are to be introduced in the context of the European Schools and reflected in their curricula.

2. The study

2.1. Research methods

Qualitative research, and more specifically, document analysis was employed for the purposes of this study. Document analysis is considered as a systematic process which includes the review, interpretation, and evaluation of printed and/or electronic documents (Bowen, 2009) to extract meaning, achieve understanding, and establish empirical knowledge (Corbin & Strauss, 2008). It is an analytic procedure which involves finding, selecting, and synthesising data included in the documents, which are organised into major themes and categories through content analysis (Labuschagne, 2003).

For the comparative analysis, documents related to the two curricula were examined to provide an answer to the Research Question: What similarities and differences can be identified in the FL curricula of Greek state schools and the European Schools?

The following documents were considered for the European Schools:

1. The "Curriculum - Second Language - Langue Deux - Zweite Sprache" for the Primary Cycle.
2. The English Syllabus LII primary cycle.
3. The "Syllabus for all LII Languages (Secondary cycle)-Main course".
4. The "Attainment Descriptors for L2 at the end of P5 (Primary cycle) - for the Secondary Cycle they are included in the main document.

For the Greek schools the following documents were explored:

1. The 141417/Δ2 circular published in the Government Gazette containing the IFLC (G.G. B'/2871/2016).
2. The Teacher's Guide to teaching foreign languages at school (Dendrinos & Karavas, 2013).
3. The document "New curriculum, under priority axes 1,2,3-Horizontal act" coded MIS 295450 within the framework of the sub-

project "Elaboration of Curricula for Primary and Secondary Education Teaching Approach Tools".

Before proceeding to the analysis of the documents related to the two curricula, it was considered essential to identify important parameters in curriculum design theory, which are highly influential to FL learning, to create appropriate themes for these contents in a theory-based manner (Mayring, 2014). The pre-defined themes identified by referring to curriculum design theories and principles (Glatthorn et al., 2018; Graves, 2016; Greatorex et al., 2019; Kowalski, 2016; Richards, 2001) were theoretical background, structure, methodological approaches, teacher roles, main goals, assessment types, and streaming of students.

2.2. Results

The data emerged for each one of the themes identified previously was organized into categories and were tabularized (see Tables 1-8) to facilitate the comparative analysis of the two FL curricula. What follows is a presentation and elaboration on the contents of each table.

2.2.1. Theoretical background

An inspection of the contents of the Greek and European Schools FL curricula leads to the conclusion that they both share the same philosophical orientation as shown on Table 1 and presented in the analysis which follows it.

Table 1. Theoretical Background

Philosophy / theory	IFLC	EU Schools FL Curriculum
Constructivism	√	√
Progressivism	√	√
Humanism	√	√

A close inspection of the IFLC documents reflects the educational philosophy of progressivism, constructivism, and humanism as identified by Ganly (2007). In particular, concerning the first one, a detailed account of the framework and principles of the IFLC is offered in the Teacher's Guide (Dendrinos & Karavas, 2013) outlining its support for students' development of critical thinking and experiential learning while teachers' lesson planning should facilitate students in developing as learners in line with their interests, pace, and needs acknowledging their central role in the process as portrayed by the learner-centred approach (Nunan, 1988; Jones, 2007). The philosophy of constructivism can also be traced in the IFLC as it advocates the idea that knowledge can be gradually conquered by students as an active procedure, enriched with new input. Additionally, it embraces learning as a social activity (Firth & Wagner, 2007), acknowledging the significance of the environments beyond the school premises in which students immerse. The principles of humanism are also reflected in the IFLC since it aims through teacher designed activities to promote students' use of their abilities to the fullest and as well as assuming responsibility for learning.

The curricula of the European Schools are highly similar to the Greek IFLC in terms of the underlying philosophies. It should be noted that the L2 secondary cycle curriculum builds on the learning process, knowledge, and skills of the primary cycle curriculum both of which reflect typical principles of constructivism. More specifically, the students are encouraged to build on newly acquired knowledge and apply it through project-based inquiry (Bell, 2010). Both curricula strongly advise the consideration of students' skills, knowledge, competences, and learning strategies acquired after years of schooling, which gradually instil the understanding that language is a system to students. Following the principles of humanism (Ganly, 2007), the curriculum advises teachers to consider the students' individual differences as opportunities rather than obstacles in reaching their potential. Through acquiring what is called 'dynamic competences' in the L2 primary cycle curriculum (European Schools, 2013), students assume responsibility for their own learning. On the same line, students in the secondary cycle are expected to develop independent learning strategies (European Schools, 2015). Finally, elements of progressivism are reflected since students are encouraged to exhibit their critical ability in various skills and activities. What is more, in the didactic principles section of the secondary cycle curriculum, the need to take into consideration students' interests is prioritized (European Schools, 2015).

2.2.2. Structure

In the official document published in the Government Gazette (G.G 2871 B’), the Greek IFLC is structured as follows (see Table 2, items 1-6). Emphasis is not only placed on achieving linguistic competence as the accompanying Teacher’s Guide (Dendrinos & Karavas, 2013) provides insights into the philosophy, pedagogic principles, and goals of the IFLC (see Table 2, items 7-14). In the case of the European School LII curricula, both the Primary and Secondary Education ones (European Schools, 2013; 2015) follow the same structure (see Table 2, items 1-14).

Table 2. Structure of the curricula

IFCL	**EU Schools FL Curriculum**
1. Purpose of IFLC	General objectives
2. Nature of IFLC	
3. Brief description of linguistic competence indicators per CEFR level	Learning objectives
4. Analytic description of linguistic competence indicators per CEFR level	
5. Inventory of structural and functional linguistic tools per CEFR level	Content areas
6.	Support
IFLC Teachers’ Guide	
7. Goals	General objectives
8. Context	
9. Pedagogic principles	Didactic principles
10. Educational approaches	
11. New Learning theory lesson plans	
12. ICT in the classroom	
13. Mediation	
14. Assessment	Assessment

2.2.3. Methodological approaches

A variety of methodological approaches are included in both FL curricula. Even though some receive more extensive attention compared to others, what is considered here is their reference in the official documents. There is an inevitable overlap among some of the components of the different approaches, however, every effort was made not to be rendered repetitive (see Table 3 at the end of this section).

2.2.3.1 The communicative approach

The principles which underlie the communicative approach, also known as communicative language teaching (CLT), are identified in both curricula which highly prioritize communication in the target language via meaningful interaction through the tasks set, taking into consideration students' personal preferences and experiences, and assigning importance on the learning process, and not merely on the language itself (Nunan, 1991).

In the section Purpose of IFLC, it is stated that it attempts to provide students the tools to reach communicative skill along with linguistic awareness (G.G. B'/2871/2016). What is more, the indicators of communicative competence define the communicative activities on which the students should be trained to be able to communicate effectively in a multitude of social contexts in line with their level of competence. Additionally, the accompanying Teacher's Guide to IFLC supports the method of learning-by-experience to be effectively realized through collaborative work (Dendrinos & Karavas, 2013).

Concerning the curricula of the European Schools, teachers are encouraged to find ways to make students realize that learning a new language is not a mere acquisition of language skills but also a vehicle for building empathy, sensibility, and a means to becoming independent thinkers. Communicative competence presents an overarching aim at all levels, with students' individual differences being respected and taken into consideration to their benefit (European Schools, 2013; 2015).

2.2.3.2 Computer-assisted language learning (CALL)

An entire chapter in the IFLC Teacher's Guide (Dendrinos & Karavas, 2013) is devoted to Computer Assisted Language learning (CALL), and how to make the most of the tools available to teachers and students, highlighting the need to introduce them in the FL classroom as important tools for students' learning.

In the case of European Schools, digital competence is highly prioritized. It involves using ICT to communicate and learn while according to the LII Curriculum for Primary cycle (European Schools, 2013) distinct focus is laid on media competence with a focus on CALL.

2.2.3.3 The Common European Framework of Reference (CEFR)

In both the IFLC and the European Schools curricula the learning objectives and attainment descriptors are benchmarked against the reference levels of the CEFR (Council of Europe, 2018). The Framework defines levels of proficiency which allow learners' progress to be measured at each stage of learning and lifelong including the cultural context in which language is set.

2.2.3.4 From mediation to plurilingualism

While mediation is not touched upon in the European School curricula, an entire chapter on is offered in the IFLC Teacher's Guide (Dendrinos & Karavas, 2013). Its significance needs hardly be argued as according to Dendrinos (2014), individuals are active mediators both intralingually and interlingually when learning a new language. The IFLC stresses the role of the mediator as a meaning negotiator, a role which requires the right strategies and practice in it. A mediator does not only play an interlingual role but also an intercultural one since language is one of the hosts of culture (ibid, 2014). Thus, via mediation the element of interculturality is given a prominent place in the IFLC.

2.2.3.5 Cross-curricularity

Cross-curricularity, which considers a holistic approach to topics introduced (Harris, 2008), is strongly advocated in the IFLC since at the end of the Teacher's Guide (Dendrinos & Karavas, 2013), a General Appendix informs the FL teachers about themes and topics included in other subjects so as to introduce some of them as part of cross-curricular projects. It is suggested that the use of language the teacher focuses on can guide the selection of a topic. Advice is provided to teachers on how to structure lesson plans including input from other subjects while collaboration with colleagues who teach the respective subjects is highlighted. The Guide also links cross-curricularity to interculturality (ibid).

Concerning the FL curricula of the European schools, cross-curricular approaches are part of the lesson plans in the Primary cycle (European Schools, 2013) to help students build additional skills, not mere linguistic ones, and help them acquire the new language throughthemes and subjects they are already aware of. Cross-curricularity as an approach is not explicitly proposed in the secondary cycle syllabus, most likely due to the exam-oriented nature of the latter.

2.2.3.6 The emergent literacy approach

The emergent literacy approach is reflected in the IFLC as according to the Teacher's Guide (Dendrinos & Karavas, 2013), literacy acquisition is viewed on a continuum of development, with previous exposure to the FL and knowledge the students bring from their mother tongue being capitalized (Arrow & McLachlan, 2011). In this respect, even though this is not mentioned per se, the mentality of building on prior knowledge permeates the curricula of both cycles of the European Schools (European Schools, 2013; 2015).

2.2.3.7 Differentiation

Differentiated learning in terms of content, process, and products (Tomlinson, 2001) is evident in the Greek IFLC in its endorsement of the New Learning Theory (Kalantzis & Cope, 2013) to enhance learning. This is aligned with the aim of the IFLC to place the student at the center of educational planning. Concerning the European schools in both primary and secondary cycle curricula (European Schools, 2013; 2015), differentiation is highly regarded in the form of varied approaches, support, and tasks presented to students to cater for their diverse needs.

2.2.3.8 Multi-literacy

The IFLC fosters a further principle of the New Learning Theory (Kalantzis & Cope, 2013), multi-literacy. Apart from the aspect of linguistic diversity, it embraces diverse modes of communication through ICTs such as the internet, multimedia, and digital media (Cope & Kalantzis, 2009). Multi-literacy is included in the linguistic competence indicators (Greek Ministry of Education & Religious Affairs, 2016), and the Teacher's Guide (Dendrinos & Karavas, 2013).

Multi-literacy is endorsed in both the Primary and Secondary cycle of the European Schools L2 curricula (2013, 2015) as it is stated that students "will learn to distinguish different types of texts, [...] use digital communication, [...] use verbal and non-verbal communication , [...] distinguish different media supports and texts" in the former (p. 14) and "will achieve fluency and independence by making use of a wide range of learning resources", "pick out information from a literary or non-literary text" in the latter (pp. 3-4).

2.2.3.9 Project-based inquiry

In the European Schools students are expected to be introduced to project-based inquiry and employ it according to the FL primary cycle curriculum. It emphasizes learning activities that are interdisciplinary and student-centered. Unlike traditional classroom activities, the students acquire and apply new knowledge in a problem-solving and collaborative context (Bender, 2012) which can efficiently support the learning process and its outcomes. In the secondary cycle curriculum, its use depends on FL teacher's decision. The IFLC, aligned with the general aims of compulsory education in Greece and the principles or the New Learning Theory (Kalantzis & Cope, 2013), highly supports this approach as well and strongly promotes its implementation by the teachers.

Table 3. Methodological approaches

Approach	IFLC	EU Schools FL Curricula
Communicative	√	√
CALL	√	√
CEFR	√	√
Mediation (to pluriculturalism)	√	-
Cross-curricularity	√	√
Emergent literacy theory	√	√
Differentiation	√	√
Multi-literacy	√	√
Project-based inquiry	√	√

2.2.4. Roles of the teacher

According to the Teacher's Guide (Dendrinos & Karavas, 2013), the teachers' role is highly regarded in the IFLC, in the light of attending to the learners' best interest. This is achieved in multiple ways. Firstly, it provides FL teachers with the freedom to function as the designers and producers of the materials and practices to be used, taking into consideration the distinct characteristics of their students via their own creative initiatives. What is more, educators shape students of today to citizens of tomorrow, and are responsible for equipping them with a multitude of skills and abilities, such as acquiring critical thinking (ibid). Additionally, their role as active collaborators with other colleagues in the learning process is reinforced (De Jong, et al., 2019) while their expertise in their field is fully recognized. Finally, through the use of ICT in the classroom, educators are no longer viewed as the sole knowledge providers, but are expected to act as facilitators and advisors in the learners' educational journey and acquisition of knowledge.

Teachers need to promote intercultural competence, based on the FL curricula of European schools (European Schools, 2013;2015), where language and culture are inextricably intertwined and the learners' appreciation and understanding of other cultures is of paramount importance. What is more, teachers are the planners of the FL syllabus including the choice of methods, skills, and tasks to be included in their courses, while they are not expected to produce materials, which is provided to them. They are also expected to function as facilitators in the learning process and promote critical thinking, which is valued in the European Schools as well. The role of active collaborators and advisors are not referred to in the curricular documents either because they are not prioritized or most likely because they are thought to be part of the mentality of the teachers and the culture of the European Schools. Table 4 below offers an account of the teachers' roles in both contexts.

Table 4. Teacher roles

IFLC	EU Schools FL Curricula
Producer of materials	
Planner of syllabus	Planner of syllabus
Shaper of future citizens	Shaper of future citizens
Active collaborator	
Facilitator	Facilitator
Advisor	
Knowledge provider	Knowledge provider

2.2.5. Main goals

According to the FL curricula of the European schools, the main objectives are to provide students with formal education and to encourage their personal development in a wider social and cultural context. Concerning the LII curriculum of the primary cycle (2013), the aims to teaching and learning languages are presented on the second column of Table 5. Particular attention is assigned to social and civic competences as well as students' cultural awareness and expression. Given that education in European Schools lies on a continuum, these goals are consistent throughout all cycles.

Concerning the IFLC, its goals are presented in the first column of Table 5. As we can see, both the IFLC and the European School curricula emphasize linguistic knowledge, the element of culture and how it affects communication. They also consider the elements of cooperation and caring for the community. Students of today are citizens of tomorrow and cannot function independently of the society they operate in (Eurydice, 2023).

Table 5. Main goals

IFLC	EU Schools FL Curricula
	Give pupils confidence in own cultural identity
Develop understanding & production of speech in different sociocultural contexts	Develop high standards in all languages
Understand basic concepts, procedures, facts	
	Encourage European and global perspective
Teach students how to communicate & work together	Foster tolerance, compassion, communication, cooperation
Produce work & share with community	
	Cultivate learners' development
	Encourage learners' personal development
Acquire intercultural awareness & mediation skills	Assist cultural awareness & expression

2.2.6. Assessment types

According to the IFLC (see Table 6), in primary school there are no compulsory exams, and with the exception of the first two years when assessment is not considered, any quizzes are of formative nature throughout the year. However, in Junior and Senior High school there are compulsory exams at the end of each year as well as end of term tests. These exams are summative, benchmarked against the expected CEFR level. While the goal of summative assessment is to evaluate student learning at the end of an instructional period by comparing it against a benchmark (Taras, 2005), formative assessment includes a range of formal and informal assessment procedures conducted by teachers during the learning process in order to modify teaching and learning activities to improve student attainment (Crooks, 2001). The IFLC promotes the use of both summative and formative assessment to ensure that qualitative data obtained by teachers, along with quantitative data from tests, can help in reaching appropriate decisions to the students' best interest according to the Teacher's Guide (Dendrinos & Karavas, 2013).

A rather similar approach to assessment types can be identified in the European schools (European Schools, 2013; 2015). In the primary cycle, formative assessment is adopted with a clear focus on promoting learning and helping the students' progress relieving them from stress and anxiety. In case summative assessment is opted for, this should be kept to a minimum. Alternative assessment methods such as language portfolios and self-assessment are also considered. In the secondary cycle, while formative assessment is encouraged throughout it, summative assessment is introduced in years 5 and 7 in the form of written exams in reading comprehension and written production, with the added section of literature understanding in year 7 - when students are sitting the European Baccalaureate exam. The assessment types adopted per level and type are presented in the following table (Table 6).

Table 6. Assessment types

IFLC		**EU Schools FL Curricula**	
Level	Type	Level	Type
Primary	Formative (optional)	Primary	-Formative -Summative (optional)
Secondary	Formative & summative	Secondary (S1-S4)	Formative
		Secondary (S5-S7)	Formative & summative

2.2.7. Streaming of students

Based on the IFLC, students attend FL classes streamed with their regular class (see Table 7). However, as stated in the Teacher's Guide (Dendrinos & Karavas, 2013), there is the option of students being grouped according to their CEFR level based on their score in a diagnostic test. Although this would impact the school timetable, the benefits for the FL learners would be considerably high if realized.

There is no mention of a special way students are streamed in FL classes in European Schools (see Table 7).

Table 7. Streaming of students

	IFLC	EU Schools FL Curricula
School classes	√	√
CEFR levels	√	-

In the European Schools the level reached by the students depends on individual language and learning skills but the minimum expected level by the end of primary education is A2. Children with high levels of L2 may progress further into B1 or further. Individual learning traits are acknowledged in the secondary cycle as well; the levels obtained can reach B2 up to C1 or even C1+ for the more advanced learners in the second language (see Table 8):

Table 8: Student CEFR level per cycle in European Schools

Cycle	Level of Competence
1st cycle S1+2+3	Level B1
2nd cycle S4+5	Level B2
3rd cycle S6+7	Level C1 (C1+ if they take L2 advanced)

3. Conclusion

The comparative analysis of the FL curricula of the Greek and European schools, reveals that they are very similar while the differences are not as consequential as one might expect. The principles of two diverse education systems reflected in these curricula are clearly and explicitly stated and reveal a very high extent of convergence. It is considered that the more explicit a curriculum is about its underlying principles, methodological approaches, and objectives, the more coherent it can be (Reiss & White, 2013).

A differentiation was identified in terms of teacher roles as some additional attributes are given to the teacher in the Greek IFLC, namely that of collaborator, advisor, and producer of materials. Along with the fact that the curricular texts in European Schools are much shorter, the role of active collaborators and advisors are not referred to in the European Schools curricular documents either because they are not highly prioritized or most likely because they are part of the mentality of the teachers and the culture of the schools. It cannot be ignored that collaboration among teachers is an important aspect of their professional lives, as a means to exchanging knowledge, critically reflect on teaching practices, design and teach materials or co-teach subjects (De Jong, et al., 2019). The same is applicable to their role as advisors (Shelton-Strong, 2020) as it is part of their everyday teaching to support students to engage in reflective practices which can contribute to fostering learner autonomy as a capacity to control the FL learning process (Benson, 2011). Concerning the role of producer of materials which is not adhered to FL teachers in the curricula of the European Schools, it can be suggested that a centralised control of the curricula has been put to use aiming to maintain standards and provide curricular coherence while decentralised management of the curriculum is adopted in the case of the IFLC, reflecting trust in locally-based decisions on the part of the teachers (Kuiper & Berkvens, 2013). After all, teachers in Greek state schools will have to design lesson plans within the framework of the national curriculum since it is among the teacher's duties to implement the curriculum to meet student needs (Carl, 2009).

The inclusion of mediation in the IFLC comprises an innovation while its significance is further underlined by the updated version of the CEFR (Council of Europe, 2018) which adds a new competence, directly linked to mediation, called plurilingual competence with its own scales and descriptors. The fact that plurilingualism is a fundamental principle of language educational policies in Europe and elsewhere in the world (Beacco & Byram, 2007) presents an added value to the IFLC. Concerning its absence from the European School curricula, it can be inferred that mediation is an everyday tool for students there since their diverse linguistic and cultural background and the particular context offer especially valuable opportunities for the development of plurilingual and pluricultural competence (Bernaus, et al., 2007).

All things considered, based on the data from the comparative analysis, the IFLC is very much aligned with the FL Curricula of the European Schools as well as European policies on language education, which proves that the Greek curriculum can effectively address FL language policies and educational developments in Europe.

In addition, the close inspection of documents concerning the IFLC suggests that its development has resulted an efficient curriculumwhich caters for the development of the students' FL learning abilitiesin a coherent and explicit manner consistent with credible teaching approaches in FL instruction (Kramsch, 2014). This is of paramount significance as the efficiency of the FL curriculum is highly influential in determining the outcomes of the teaching and learning process offering clear guidelines in terms of what is to be taught and learnt (Graves, 2016), and a framework for implementing language teaching to facilitate and enhance students' learning (Anakin et al., 2018). Additionally, as an administrative document reflecting a well-planned language policy, it can promote the development of efficient FL language teaching pedagogies, materials, and assessments (Widodo, 2016).

Nevertheless, successful implementation of any curriculum is strongly related to the teachers' roles, their assumptions, beliefs, and attitudes towards the methodological and pedagogical principles which concern language teaching (Banegas, 2019). After all, the teachers are at the forefront of implementing any curricular change and need to be ready to adopt changes in their practice to support any innovation introduced (Simons, et al., 2000). Finally, it cannot be ignored that claims about the efficacy of the curriculum cannot be fully evidenced until research into its implementation and evaluation has been conducted.

4. Limitations of the study and suggestions for further research

It should be noted that the study falls short of considering and discussing the presence of the eight Key Lifelong Learning Competences in the IFLC, which comprises the sole focus of another study given their increased focus they have received as part of European education policy. What is more, it cannot be ignored that a comparison of curricula based on documentary analysis cannot depict the political and economic contexts in which the curricula are to be implemented (Hodgen et al., 2013) while the principles and methodologies identified in the curricula can differ from the curricula realized (Elliott, 2014). It is for this reason that further research is needed to account for the way the curricula are implemented. Moreover, the preparedness of teachers to implement a new curriculum and support the innovative aspects it introduces should be put under scrutiny. In addition, to further explore these curricula it is suggested to employ curriculum mapping and based on the comparison of the two proceed to evidence-based action (Greatorex et al., 2011). The study can be replicated by researchers in Europe while given that Albania is the host country of this conference, Albanian reseachers having access to the proceedings volume can also be encouraged to produce a similar study related to the foreign language (FL) curricula of Albanian state schools and the European Schools including the Greek one, considering the stated limitations.

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SESSION 10
(Educational Sciences- Didactics of languages and literature)

DIFFERENTIATED TEACHING: EXPLOITING AN ALTERNATIVE FRAMEWORK TO TEACH NEWCOMERS GREEK AS A SECOND LANGUAGE

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Abstract

The onset of multicultural societies due to the constant arrival of refugees and immigrants into Greece and all over Europe has put forward the need for redefining schooling with the aim of smoothly integrating the newcomers into the Greek educational system. Thus, appropriate teaching methodologies are required so as a) to promote communication among people from different linguistic and cultural background b) to boost newcomers' socialization (Papadopoulou, 2007) and c) to cater for the various needs and diverse levels of the newcomers.

In accordance with this need to facilitate refugees and immigrants to better acquire the Greek language, differentiated instruction (Παντελιάδου, 2007; Tomlinson, 2014) was opted for. More specifically, two parameters were focused on, namely the students' learning styles and the product they publish in the Second Language (SL) classroom. Based on the assumption that one's Multiple Intelligences (MIs) are not static but can rather be ameliorated through tuition (Gardner, 2011) as well as their output can be enhanced through the use of a diverse instruction methodology (Tomlinson, 2014) a case study was conducted with two classes of newcomers seeking evidence on the potential of differentiated teaching to fend for their MIs, augment their capacity to present level-appropriate output and enable them to trace evidence of discrimination in a literary text. The participants were profiled in order to be provided with ability specific tasks and required to do level proper activities. The data gleaned from a questionnaire which was administered to the participants attested the contribution of differentiated instruction to accommodate the learners' diverse frames of mind and simultaneously highlighted the participants' acknowledgement of this potential of DI to promote the MIs.

Key words: *Differentiated instruction, Greek as a SL, Multiple Intelligences, Literature, Acceptance of otherness*

1. Introduction

The arrival of refugees and immigrants to Greece in recent years has necessitated the reconceptualization of schooling with the aim of integrating these students in the Greek educational setting, the enhancement of both their everyday and academic skills in Greek as a SL and the promotion of their cultural heritage.

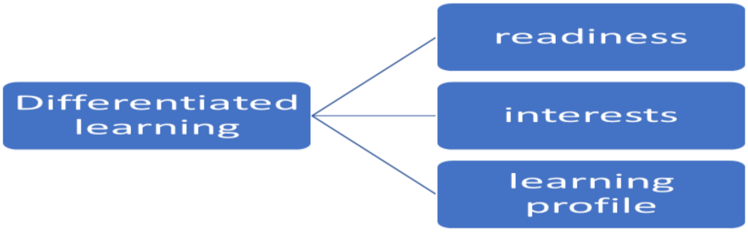
To this end, an attempt was made to capitalize on differentiated instruction and simultaneously address the learners' diverse Multiple Intelligences (Gardner, 2011) in order to aid the students to fully develop their personal potential.

1.1 Tapping into differentiated instruction

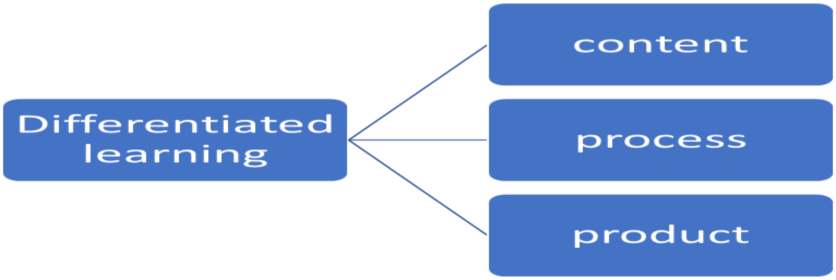
The fact that schooling has become quite challenging due to the emergence of a newly emerged diversity in the student population which exhibits high differentiation due to the existence of mixed-ability classes, the ever-increasing number of students with learning difficulties along with learners from various cultural backgrounds has put forward the need of implementing alternative methodologies which will result in inclusive education. In this sense, differentiated instruction (DI) (Παντελιάδου, Παπά & Σανδραβέλης, 2020) is singled out, since it manages to cater for the heterogeneity of the student population which requires the establishment of an inclusive school setting (p. 31).

Tomlinson (2014) deems DI an interactive process between the teacher and the learners through which the former caters for the diverse wants of the latter, while at the same time the students participate actively in this procedure assuming responsibility for their learning in an effort to maximise their performance. Differentiated instruction constitutes an alternative teaching practice which addresses classes consisting of learners with diverse learning needs. In this line, the emphasis is placed on two axes, namely the student and the syllabus. Regarding the students, the teacher takes into account their level of readiness, their interests and their learning styles. As far as the syllabus is concerned, the content, the process and the end-product can be prioritised (Παντελιάδου, 2007; Tomlinson, 2014).

Axis – Student


Differentiated learning
readiness
interests
learning profile

Axis- Syllabus


Differentiated learning
content
process
product

1.2 Capitalising on MIs within the Differentiated Instruction framework

Having presented the aim and the components of DI, an attempt will be made in the present section to delineate the linkage of MIs (Gardner,1999) to the students' learning styles. Regarding the learners' profiles, Tomlinson (2001) recommends the exploitation of MIs among other students' preferences, that is learning preferences, gender-related ones and culture-informed inclinations (p. 62). Gardner (1999) supported the view that human intelligence is not an entity, but it rather entails several types of brain-based proclivities for learning, all of which should be accommodated in teaching. Eight types of intelligence were framed: “linguistic intelligence” indicates high competence in language use, “logico-mathematical” intelligence signifies critical thinking, while “visual-spatial intelligence” denotes the ability to absorb knowledge by interpreting images and shapes. “Bodily-kineasthetic” learners acquire information through hands-on activities and physical action, “interpersonal” students are predisposed to learn by cooperating with others, whereas “intrapersonal” ones opt for individual study. Students exhibiting “naturalistic intelligence” relate to nature and all living creatures. In this perspective, learners with enhanced “naturalistic intelligence’ are inclined to be more sympathetic to other cultures and otherness. Finally, learners with “musical intelligence” capitalize on music and rhythm in their effort to internalize knowledge.

Translated into the classroom setting, the MIs can serve as a useful tool in designing differentiated tasks appropriate to the various students’ learning profiles.

2. Literature Review

A host of studies focusing on the efficacy of DI or lack thereof have put to the limelight that the implementation of DI has improved the performance of various students, that is low achievers, learners with learning difficulties as well as high performers in diverse subjects (Βαλιαντή, 2015; Mohammed, 2014; Reis, McCoach, Little, Muller & Kaniskan, 2011). More specifically, the learners improved their performance and displayed favorable stances towards each subject under investigation (Karadag & Yasar, 2010; Muthomi & Mbugua, 2014). The effectiveness of DI can be attributed to the active participation of the students in their own learning process, since they decide on their own personal targets, gauge their progress and seek ways to overcome any individual shortcomings (Al-Lawati & Hunsaker, 2007).

Various studies concentrating on the teachers’ attitudes and practices towards DI unravelled a tendency to gradually utilize this paradigm in the classroom. In this line, Παντελιάδου et al., (2020) put under the lens the way DI was implemented in a primary school by specially trained teachers. The findings revealed that the instructors tended to focus on the process of learning exploiting all students' potential. It was also highlighted that the practitioners applied more varied differentiated practices with the older students, that is the fifth and sixth graders.

Much in the same vein, Kalogeropoulou (2015) administered a questionnaire to Greek teachers of English seeking to unveil their familiarization with and implementation of DI (p. 50). Her findings pointed to the fact that several practitioners redirected their practices by capitalising on the DI methodology, while others are not yet eager to alter their teaching practices to fend for the different needs of their students. Furthermore, no alignment emerged between the years of teaching experience, the levels of studies and willingness for ongoing training with the teachers' inclination to include differentiated methods in the English as a Foreign Language (EFL) setting.

Several studies (Batika, 2018; Kafki, 2016; Kourtesaki, 2016) were conducted in the EFL classroom focusing on the impact of DI on the learners' progress in various areas. Batika (2018) explored the efficacy of DI to ameliorate the written output of B1 level EFL students. An experimental and a control group were selected to trace the improvement of the experimental participants after the implementation of DI. Pre and post tests were assigned to both groups to trace any differentiation or lack thereof. The results revealed that the experimental group outperformed their control counterparts due to the application of DI (p. 42).

Likewise (Kafki, 2016) selected an experimental and a control EFL group attending the fourth grade of a Greek elementary school to measure vocabulary improvement through DI. The pre- and post-tests attested that the lexical repertoire of the experimental participants exceeded the vocabulary of the control group students resulting from the implementation of DI (p. 9). Similarly, Kourtesaki (2016) investigated the writing performance of EFL Greek sixth graders after implementing seven lessons which varied the content, the progress and the product in relation to the learners' readiness. The accrued data highlighted improvement not only in the participants' writing capacity but also display of favourable stances and augmented motivation regarding writing (p. 56).

To the best of our knowledge very little research has been carried out concerning the enhancement of MIs through the implementation of DI. Having identified this research gap, the novelty of our study was to measure the potential of the DI framework to optimize the learners' MIs.

3. The study

Having presented the focus of our study, that is the measurement of the improvement of the learners' MIs via DI practices, the following research questions were articulated:

- To what extent does Differentiated Instruction boost the students' Multiple Intelligences?

- Do students who receive DI instruction credit its contribution to the amelioration of their MIs?

4. Methodology and design

4.1 Participants

A case study was conducted in two classes consisting of 25 students -fifteen females and ten males- whose level is B1. The learners who come from different countries, that is Iran, Iraq and Afghanistan are taught Greek as a SL. The lesson revolved around acceptance of diversity based on a part of a literary text named "Astradeni" (Fakinou, E. 1982) (Appendix, I). The topic of the specific section revolves around diversity, since Astradeni, a girl from an island, moves to Athens and is targeted with lack of empathy along with irony from the schoolteacher. The researchers selected this text with three purposes: a) to help the learners identify themselves with the heroine who experiences discrimination at school b) to recognize lack of acceptance of otherness in literature and c) to familiarize them with a text from

Greek literature. In the axis which concerns the students, the implementation of differentiated instruction revolved around their learning profile, that is MIs and concerning the syllabus, differentiation was sought for through diverse products corresponding to the discrepancy in the participants competence even though, they exhibited the same level–B1. In addition, when assigning the outcome of the lesson to the learners, the advancement of their diverse frames of mind was also taken into consideration.

4.2. Instrumentation

4.2.1 Familiarising students with the Multiple Intelligences

As the participants were not acquainted with the term "Multiple Intelligences", an introductory stage was assumed as a prerequisite with the aim of raising their awareness of the various ways that people can acquire knowledge and at the same time safeguard that they would give valid responses to the questionnaire. To this end, the researchers tried to seek the way that the learners perceived intelligence, they presented the eight frames of mind and introduced set of items revolving around MIs to help the participants trace their specific ways of being smart (Appendix II).

4.2.2 Materials introduction and Procedure

Lesson (90 minutes)

Activities

1a. Read the title and the information about the text. Working in pairs, try to guess what the text is about. (10΄) The aim of this activity is to trigger the students' background knowledge and boost their interpersonal intelligence.

1b. Do you find any similarities with your life? (5΄) The learners identify themselves with the heroine enhancing their intrapersonal frame of mind.

1c. Which types of racism can you spot? Underline types of racism in the text. (10΄)

The aim of this task is reading for gist. Additionally, literature is intertwined with the Greek language and the logico-mathematical, the linguistic and naturalistic intelligences (i.e. empathy with other creatures) are activated.

Indicative answers:

City- village,

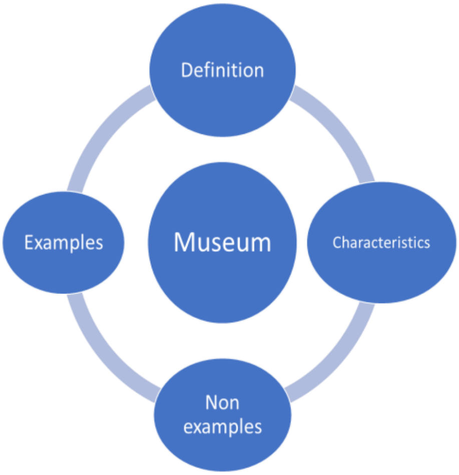
Ugly-handsome/nice.

Ancient things/spaceships

1.d. Think – pair – share. Think about the heroine and her life in Athens. Do you find any similarities with yours? Then discuss your opinion with your partner and report your ideas to the rest of the class. (10΄)

This task boosts the linguistic and interpersonal intelligences.

2 a. In pairs use the following table and try to write your opinion about what a museum is (10΄):



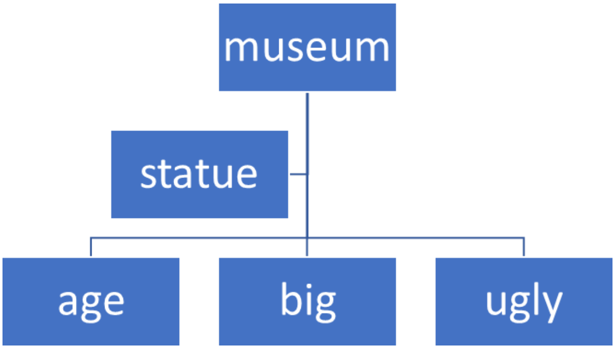
The Frayer (1969) graphic organizer is capitalized on in this task to aid learners to assimilate new concepts and vocabulary. This specific task focuses on another dimension of racism within the museum, whereby the various exhibits are not properly displayed and as a result a big statue of Zeus overshadows a scratched statue of Aristodicus. Hereby, the interpersonal, logico-mathematical, spatial and linguistic frames of mind are practiced.

2b. Match the words with the pictures (10΄)

In this task we provide the necessary lexical bank to students so as to help them to understand the text, prioritizing language in comparison to literature. The linguistic intelligence is also advanced.

Πικράθηκα		πήδαγε
Αρχαία		παιδικές
Αμφορείς		περνούν χωρίς να προσέξουν
Σαλτάριζε		στεναχωρέθηκα
Προσπερνάνε		σημάδια από ξύσιμο
Αλέτρι		μικρή χαραματιά (αμυχή)
Χαρακιές		βάζα με δύο χερούλια
Γρατσουνιές		γεωργικό μηχάνημα για όργωμα
Παιδαριώδεις		παλιά

3. Try to complete the chart concerning the Archaelogical museum in Athens (exhibits, dates, description) (15΄):



The Novac's (2010) concepts maps are implemented in this task to delineate the racism in the museum and promote the intrapersonal, spatial, logico-mathematical and linguistic intelligences.

Self -assessment activity 3-2-1 (Tomlinson & Moon, 2013) (5΄):

Write down

3 things I learned today about discrimination	2 ways I can use to eliminate discrimination	1 part that I did not understand well

This task constitutes a synthesis of all the tasks so far and serves as self-assessment boosting, at the same time, the learners' linguistic and logicomathematical intelligence.

The differentiated required product (15΄):
The students are assigned various products according to their level and type of intelligence.

1. Imagine that you are Astradeni. Write a note to your teacher describing how you felt. (Intrapersonal, linguistic intelligence-more able learners).
2. In groups of 4 prepare a drama with the following characters: the teacher, Astradeni, Sakinos, the students. Act out the play. (Kinestaetic – less able learners).
3. Listen to the song "Count on me" by Bruno Mars (2010). What is it about? (Musical- less able students).
4. Draw a picture of Astradeni. Is she happy or sad? (Spatial-low performers)
5. Draw a picture of the teacher. What does she look like? (Spatial- low performers)

4.2.3 Students' questionnaire

The research under discussion was a small scale one and, thus, there was not enough time to implement qualitative tools such as student observation, a student's or teacher's log. In this perspective the researchers opted for the use of a questionnaire (Appendix, III) with the aim of highlighting the participants' stances towards the efficacy ofthe Differentiated lesson to improve the participants' diverse ways of being smart. In this vein, a preliminary teaching session (45 minutes- see section *4.2.1*) intended to familiarize the learners with the various frames of mind (Appendix II) and then the intervention lasted two teaching hours. After attending the differentiated lesson, the students were called upon to fill in the questionnaire so as to air their attitudes towards the contribution of DI to the advancement of their MIs.

4.2.4 Data analysis

The quantitative analysis of the findings was carried out through measuring the participants' responses to the questionnaire items on a percentage scale monitoring the frequency and percentages of the answers. The main aim was to gauge the respondents' capacity to ponder on the enhancement of their multiple intelligences and judge their ability to monitor their cognitive development.

5. Presentation and Discussion of results

This section introduces and analyses the findings of the research with a view to probing the verification of the research questions or lack thereof, seeking for convincing justifications, at the same time (Table 1).

The differentiated lesson helped you to learn better because you….		***Strongly Agree***	***Agree***	***Neither Agree nor Disagree***	***Disagree***	***Strongly Disagree***	***Total***
1. Could work alone (Intrapersonal Intelligence)	N	20	4	1	-	-	25
	%	80	16	4	-	-	100,0
2. Worked with your fellow students in pairs or groups	N	18	2	5	-	-	25
	%	72	8	20			100,0

(Interpersonal Intelligence)							
3. Improved the use of language-linguistic knowledge (Linguistic Intelligence)	N	24	1	-	-	-	25
	%	96	4	-	-	-	100,0
4. Learnt through the use of pictures (Visual- spatial Intelligence)	N	20	3	2	-	-	25
	%	80	12	8			100,0
5. Participated in Role playing (Kinaesthetic Intelligence)	N	18	5	2	-	-	25
	%	72	20	8	-	-	100,0
6. Made classifications-improved your critical reasoning (Logical-mathematical Intelligence)	N	20	5	-	-	-	25
	%	80	20	-	-	-	100,0
7. Were helped by music to learn (Musical intelligence)	N	16	7	2	-	-	25
	%	64	28	8	-	-	100,0
8. Showed empathy to other creatures (Naturalistic Intelligence).	N	24	1	-	-	-	25
	%	96	4	-	-	-	100,0
9. Used differentiated activities which boost all Multiple Intelligences	N	23	2	-	-	-	25
	%	92	8	-	-	-	100,0

Table1: Students' stances regarding the efficacy of Differentiated Instruction to advance their Multiple Intelligences

The findings revealed that the learners attribute high importance to the efficacy of DI in relation to the improvement of their MIs. The overwhelming majority of the learners' (96%) valued the amelioration of their linguistic and naturalistic intelligence in the sense of sympathizing with diversity. The advancement of all MIs within the DI framework gained very high approval (92%), while three items reached 80% endorsement (intrapersonal, visual-spatial and logicomathetical). Both Interpersonal and kinesthetic Intelligence received equal approval at 72% while the musical one gained the lowest acknowledgement even though it reached a high percentage (64%).

As mentioned in section 4.1 the differentiated activities of the lesson, as well as the required product were designed with the aim of exploiting the totality of the participants' frames of mind. In this sense, it can be said that the MIs were accommodated in all stages sufficiently.

To this end, the six types of MIs (linguistic, interpersonal, interpersonal, spatial, logico mathematical and naturalistic) were addressed in the activities and the self-assessment, whereas the required product added the musical and kineasthetic ways of being smart. Moreover, through the DI lesson, the participants learnt about various types of discrimination (cultural isolation, everyday life, village-city life, way of exhibiting statues in a museum) and they unfolded consciousness of otherness (bullying, Zeus, Aristodicus). In this perspective, it can be supported that the first research question was corroborated.

Moreover, it can be deduced that the second research question was also substantiated, since the respondents valued highly the contribution of the DI lesson to the practice of their MIs (Table 1).

Our findings are in line with the ones of other researchers (Batika, 2018; Kafki, 2016; Kourtesaki, 2016) who unearthed the efficacy of DI to ameliorate the learners' writing performance and lexical repertoire, in a dissimilar setting, though, that is the advancement of MIs in the EFL classroom. It can be said that our diverse focus comprises the novelty of our research and our contribution to the paradigm of Differentiated Instruction.

6. Conclusion

With the view of implementing trailblazing methodologies in theSL/FL classroom, the present study tried to shed more light on the efficacy of DI to fend for the learners' diverse frames of mind and promote awareness of otherness in teaching Greek as a SL.

The implemented lesson, that is the activities, self-assessment and product, was differentiated in relation to the participants' learning style. Its main target was the promotion of the various ways of being smart along with involving all learners in an inclusive framework in an attempt to raise awareness of diversity and respect of otherness. The use of cooperative and diverse activities resulted in the achievement of the aforementioned goals.

The accrued data supported the improvement of the students' MIs and augmented their ability to accept otherness as well as cherish a literary text. Moreover, the students themselves were empowered to gain insight into their own progress. Seen in this light, limited as they were, the collected data pinpointed the significance of using DI while teaching Greek as a SL.

The major limitation of the present study is the lack of use of digital tools which would appeal to the students' interests, rendering the lesson, at the same time, more challenging and contributing to better assimilation of the main concept of racism. The interactive and multifaceted component of the various digital tools enables them to support DI and promote the various MIs.

Another limitation is that the number of participants does not allow us to draw generalizable conclusions regarding the efficacy of DI to promote the learners' MIs, aid them to identify discrimination and capitalize on a literature text. A larger scale study incorporating more lessons, more participants and multiple research tools, namely, teachers' and learners' logs, students' semi structured interviews to mention but a few, would have generated more valid results.

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Appendix I

Η Αστραδενή στο σχολείο]

Το ακόλουθο κείμενο είναι απόσπασμα από το μυθιστόρημα «Αστραδενή» της Ευγενίας Φακίνου (Κέδρος,
1982). Κεντρικό στοιχείο της πλοκής είναι η ζωή στην Αθήνα ενός μικρού κοριτσιού – μαθήτριας του δημοτικού
– που μεταναστεύει από τη Σύμη.

Σήμερα στο σχολείο πολύ πικράθηκα. Και την περίμενα πως και πώς αυτή τη μέρα. Γιατί σήμερα θα μας έδινε διορθωμένες τις εκθέσεις μας. Η δεσποινίς, λοιπόν, αφού μπήκαμε μέσα, μοίρασε ολονών τα τετράδια. Μόνο σε μένα δεν το ’δωσε.

«Έχω», λέει η δεσποινίς, «εδώ τρεις διαφορετικές εκθέσεις που θέλω να τις ακούσει όλη η τάξη. Η μία είναι της Χατζηπέτρου, η άλλη του Σακίνου και η τρίτη της Πετροπούλου».

Πρώτα λοιπόν, η δεσποινίς μας διάβασε του Σακίνου. Αυτός είναι ο αταξιάρης ο Γιώργος, ο ξάδελφος του Κυριακού. Είχε γράψει πέντε σειρές όλες όλες. Έλεγε: «Σήμερα πήγαμε στο Μουσείο. Είχε μέσα κάτι αρχαία πράγματα. Εμένα μ’ αρέσουν τα διαστημόπλοια και οι πύραυλοι. Αλλά ακόμα δεν έχουν φτιάξει μουσείο για πυραύλους. Όταν θα φτιάξουν, θα πηγαίνω με τις ώρες». «Λοιπόν», του είπε η δεσποινίς, όταν τέλειωσε το διάβασμα, «ως πότε θα μας κάνεις τον έξυπνο; Είναι ελληνικά αυτά; Είναι καν έκθεση αυτή; Πες στη μητέρα σου να ’ρθει που τη θέλω». Θα σας διαβάσω τώρα την έκθεση της Χατζηπέτρου, μας είπε.

(Τρέμουν τα χέρια μου από την αγωνία … Παγώνουν τα δάχτυλά μου …)

«Είναι η πρώτη φορά που πήγα σε τόσο μεγάλο Μουσείο. Είχε ωραία παλιά πράγματα μέσα. Είχε κολιέ και βραχιόλια που φορούσαν οι αρχαίες κυρίες, είχε και όπλα και μάσκες που φορούσαν οι αρχαίοι πολεμιστές. Αγάλματα και τεράστια βάζα που τα λένε αμφορείς.

Δυο πράγματα θα θυμάμαι σ΄ όλη μου τη ζωή από το μεγάλο μουσείο της Αθήνας. Το παιδί πάνω στο άλογο και τον Αριστόδικο. Δεν μπορώ να πω, ποιο απ’ τα δυο μου έκανε πιο πολύ εντύπωση. Το παιδί πάνω στ’ άλογο, νόμιζες ότι θα έδινε μια στ΄ άλογό του κι αυτό θα σαλτάριζε μακριά απ’ τα κάγκελα και τα μουσεία. Κι ότι ελεύθερο θα έτρεχε σ’ όλη την Ελλάδα. Θα ανέβαινε βουνά, θα κατέβαινε πεδιάδες, θα πήδαγε ποταμάκια κι όλο θα έτρεχε, χωρίς να σταματήσει ποτέ. Νομίζω ότι το παιδί και το άλογο είναι οι πιο φυλακισμένοι άνθρωποι που έχω δει στη ζωή μου …

Κι ο πιο αδικημένος ο Αριστόδικος.

Κανένας δεν τον κοιτάει, κανείς δεν του δίνει σημασία. Όλοι τον προσπερνάνε, για να σταθούν πέντε μέτρα πιο κει, στο άγαλμα του Δία ή του Ποσειδώνα. Όλοι βλέπουν το τεράστιο άγαλμα και κανείς, μα κανείς δε βλέπει τον Αριστόδικο. Ούτε κι εγώ ήξερα ότι τον λέγαν έτσι. Μου έκανε όμως εντύπωση που το στήθος και το πρόσωπό του ήτανε όλο γρατζουνιές και χαρακιές. Διάβασα τότε το χαρτάκι που έλεγε, ότι βρέθηκε πριν σαράντα χρόνια στα Μεσόγεια της Αττικής κι ότι οι χαρακιές στο στήθος και στο πρόσωπο είχανε γίνει από το αλέτρι του γεωργού. Γι' αυτό λέω ότι τον αδικήσαμε. Τον αδίκησαν αυτοί που τον βάλανε δίπλα σ' αυτόν τον υπέροχο Δία. Αλλά τον αδικήσαμε κι εμείς που δεν του ρίξαμε ούτε ένα βλέμμα. Γι' αυτό του αφιερώνω αυτή την έκθεση».

«Είσαι ένα υπερφίαλο1 πλάσμα, Χατζηπέτρου» είπε η δεσποινίς. «Ποιος σου δίνει, νομίζεις, το δικαίωμα να λυπάσαι ένα έργο τέχνης; Άσε, τις παιδαριώδεις φλυαρίες για το προηγούμενο άγαλμα του παιδιού και του αλόγου … Δεν ξεύρω τι είδους εκθέσεις γράφατε στο νησί σου, αλλά καιρός είναι να μάθεις να γράφεις πραγματικές εκθέσεις».

Appendix II

Multiple Intelligences

Eight ways to learn new things. Tick the statements that show the way you can learn.

I am fond of reading books
I am fond of telling stories
I like writing stories
I like doing activities
I like telling jokes
I am fond of playing word games.
I enjoy learning languages
I enjoy filling in crossword puzzles
I enjoy doing experiments at the school lab
I like maths
I like comparing and contrasting things
I prefer to work alone

I prefer to work with other students
I like sports
Pictures help me understand a story more easily
I like mysteries
I like pantomime
I like acting out a story
I like gym
I enjoy dancing
I can learn better when I touch things
I enjoy listening to music

I like singing

I enjoy learning about animals
I am fond of learning about plants
I like to meet people of other cultures

Appendix III

The students' questionnaire

Introduction

Gardner (1999) claimed that rather than have a unique Intelligence, our brain comprises several types of Intelligences with each one of us exhibiting a combination of them. In this light, every lesson must accommodate all types of Intelligences so as all students can gain not only knowledge but various dexterities, as well.

Answer the following questions so that we can find out which types of intelligences are developed in a Differentiated Instruction lesson

Your attitude about a Differentiated Instruction lesson

Please read the following statements carefully and mark with a ✓ (only one box) the one that best expresses your opinion.

A Differentiated Instruction lesson helps you to learn better because you….

1. Work alone (Intrapersonal Intelligence)	*Strongly Agree*	*Agree*	*Neither Agree nor Disagree*	*Disagree*	*Strongly Disagree*
2. Work with other students in pairs or groups (Interpersonal Intelligence) Listen to songs, music, rhythm (Musical Intelligence)	*Strongly Agree*	*Agree*	*Neither Agree nor Disagree*	*Disagree*	*Strongly Disagree*
3. Improve your knowledge of language (Linguistic Intelligence)	*Strongly Agree*	*Agree*	*Neither Agree nor Disagree*	*Disagree*	*Strongly Disagree*
4. Learn through pictures (Visual-Spatial Intelligence)	*Strongly Agree*	*Agree*	*Neither Agree nor Disagree*	*Disagree*	*Strongly Disagree*
5. Participate in role play (Kinaesthetic Intelligence)	*Strongly Agree*	*Agree*	*Neither Agree nor Disagree*	*Disagree*	*Strongly Disagree*
6. Make classifications-improve your critical reasoning (Logical-mathematical Intelligence)	*Strongly Agree*	*Agree*	*Neither Agree nor Disagree*	*Disagree*	*Strongly Disagree*
7. Music helps you to learn (Musical Intelligence)	*Strongly Agree*	*Agree*	*Neither Agree nor Disagree*	*Disagree*	*Strongly Disagree*

8. Show empathy to other creatures (Naturalistic Intelligence).	*Strongly Agree*	*Agree*	*Neither Agree nor Disagree*	*Disagree*	*Strongly Disagree*
9.Use of differentiated materials promotes all Multiple Intelligences	*Strongly Agree*	*Agree*	*Neither Agree nor Disagree*	*Disagree*	*Strongly Disagree*

SESSION 10
(Educational Sciences- Didactics of languages and literature)

READING SKILLS AND STRATEGIES: A PROGRAM TO IDENTIFY READING STRATEGIES IN ELEMENTARY SCHOOL STUDENTS

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Abstract

Reading is a complicated skill, as its realization requires the activation of various mental and linguistic processes, with its main components, being the decoding, understanding, and interpretation of a text (Penekelis & Griva, 2008, p 188). Reading is one of the four important aspects of language skills in school as it is the main part of the school Curriculum. Reading strategies are steps that a reader employs to decode the text, to comprehend the word, and also to understand the meaning of the text (Afflerbach, Pearson, Paris, 2008, p 364).

The purpose of the present study is to identify the reading strategies used by 6th-grade primary school students from two schools in the Thessaloniki area. Specifically, the study aims at a) recording reading strategies employed by primary school students at the pre-reading stage, b) identifying the cognitive and metacognitive strategies used by primary school students during the main reading stage, c) mapping strategies used by students in the post-reading stage and, d) identifying the variables that affect the choice of certain reading strategies.

The above-mentioned objectives will be achieved through the international literature review and the research conducted from November to February 2022-2023. 35 Greek-speaking students and bilingual students participated in the study. The data collection was carried out through a questionnaire and the think-aloud process. The data were analyzed quantitatively and qualitatively. The results revealed that monolingual and bilingual students use a variety of cognitive and metacognitive strategies, but it appears that they lag in the flexible use of reading strategies. This also showed the need for creating a learning environment that motivates students' training in the strategies used.

Key-Words: *Autonomous learning, Primary school students, Reading Skills, Reading Strategies, Study.*

1. Introduction

The importance of reading is evident both in the school context, as it is one of the four important aspects of language skills that run through the entire curriculum, and in the context of society, as we live in the age of information and the rapid development of technology, where the individual has infinite possibilities to access knowledge (Γρίβα & Κώφου, 2020· Kapucu & Özcan, 2022· Kosimov, 2022· Shaila & Trudell, 2010· Shibab, 2011). Based on the above, it becomes clear that schools should contribute to the creation of critically thinking citizens and critical readers. However, reading is a well-conceived, complex, multilevel, and active process, as it requires the activation of a variety of cognitive and linguistic processes (Baki, 2020·Πενέκελης & Γρίβα, 2008· Selim & Islam, 2022). Learning strategies can help students master their reading skills and contribute to the achievement of independent learning and the creation of critical readers (Γρίβα & Κώφου, 2020· Kosimov, 2022· Larking, 2017). Reading strategies can be seen as deliberate attempts to control and the flexibility of modifying the reader's attempts to decode the text, to understand the words, and to construct the meaning of the text (Afflerbach et all. 2008, p 365). It is also important to note that reading strategies are divided into direct strategies (which lead to direct learning and use of the learning material) and indirect strategies (which contribute indirectly to learning) (Γρίβα & Κώφου, 2020, p 43). Reading strategies although classified into cognitive and metacognitive strategies are more complex than learning strategies, as the purpose of which a strategy is used or the effect it has is what classifies a strategy into one category or another, or many different reading techniques into one type of strategy (Γρίβα & Κώφου, 2020, p 67).

In this way, it is necessary and imperative in today's schools, the creation of a creative learning environment by the teacher that motivates the training of students in the use of strategies, with the ultimate goal of not only understanding the content of a text but also structuring its interpretation.

The main objectives of this study are (a) to record the reading strategies used by primary school students in the pre-reading stage, (b) to identify the cognitive and metacognitive strategies used by primary school students in the main reading stage and (c) to identify the strategies used by primary school students in the post-reading stage.

2. Study

2.1 Aim and Objectives of the study

The present study aims to detect the strategies used by Greek-speaking and bilingual students in primary school. The sub-objectives of the research are a) to record the reading strategies used by the students in the pre-reading stage, b) to identify the cognitive and metacognitive strategies used by primary school students in the main reading stage and, c) to identify the strategies used by the students in the post-reading stage.

2.2 participants

35 Greek-speaking and bilingual students of the sixth grade of primary school from two schools in the Thessaloniki area participated in this study. Specifically, the percentage of participants who took part was 57% for girls and 43% for boys (*Figure 1)*. For the participation of male and female students, there was a signed declaration from the parents, while students with learning difficulties and children who did not complete the questionnaire were excluded from the process.

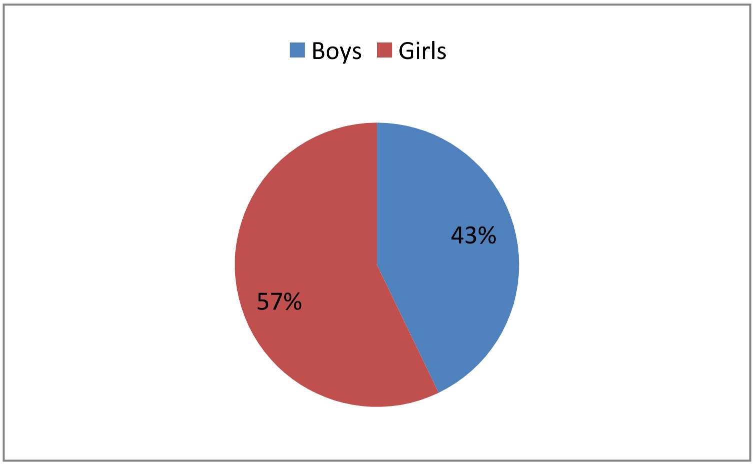

Figure 1. Percentage of students by gender.

2.3 Research Tools

2.3.1 Questionnaire to record reading strategies

A questionnaire was used as a tool to record the students' linguistic and reading profiles, as well as to investigate the strategies used by students in the pre-reading, while reading, and post-reading stages of reading a text. Specifically, the questionnaire contained three subscales, in the form of a three-point Likert scale, and investigated the frequency of using certain reading strategies in the pre-reading, reading, and post-reading stages of reading a text. The three subscales were adapted and modified for primary school age groups, based on the *Pre-reading Comprehension, interpretation, and Critical Approach Strategies* scale and the *Comprehension, Interpretation, and Critical Approach Strategies Scale* of Griva and Stamos (2020), which are characterized by their consistency and validity.

2.3.2 Think-Aloud Protocol Analysis

The second tool used to carry out the research process was the Think-Aloud protocol analysis. Specifically, it is a process of assessing one aspect of the learning process by identifying the movements and strategies used by the student during reading. This is an interesting method for identifying and evaluating students' reading or written expression strategies (Γρίβα & Κώφου, 2020· Meyers, Lytle, Palladino, Devenpeck, Green, 1990· Jahandar, Khodabandehlou, Seyedi, Abadi, 2012). Unlike written assessment questions or traditional interviews, in the Think-Aloud protocol analysis, the subject must describe his/her thoughts in real-time without any feedback from the researcher, instead of explaining afterward or in a subsequent dialogue with the researcher (Reinhart, Evans, Luby, Orrelana, Meyer, Wieczorek, Elliott, Burckhardt, Nugent, 2022, p 100). According to previous research, this approach has helped students develop the skills necessary for reading comprehension in an effective way (Kuswardani, 2022· Migyanka, Policastro, Lui, 2005· Sönmez & Sulak, 2018).

The Think-Aloud protocol analysis is a method, that does not lead to the disturbance of thinking, the subject (the student) solves a problem, while the speech is performed almost automatically. For this reason, the data collected is immediate, and the subject does not interpret his thoughts, nor is he required to bring them into a predetermined form as in structured techniques. This method makes it easier for the research subjects, as they can use their language (Jahandar, Khodabandehlou, Seyedi, Abadi, 2012, p 2). Moreover, from the teachers' point of view, the Think-Aloud protocol can be used as an evaluation tool for the students, as through this process, the students' potential and weaknesses during the reading process can be perceived (Chin & Ghani, 2021, p 15). The Think-Aloud protocol is a dual-focus process that helps teachers identify the different learning abilities and strategies that students have and can be used as an assessment tool. At the same time, it can also be used as a teaching technique to strengthen the comprehension of writing for students at all levels of education, i.e by following appropriate steps weak students can be strengthened and improve their language performance (Γρίβα & Κώφου, 2020, p 89).

2.4. Method

Initially, the experimental procedure was divided into two stages. In the first stage, the questionnaire was distributed to 35 primary school students to make a first outline of their linguistic and reading profiles, as well as to investigate the strategies used by students in the pre-reading, while reading, and post–reading stages of reading a text through the three subscales. At this stage, a quantitative analysis of the students' responses was followed.

Thereafter comes the second stage of the experimental process. In the second stage, the Think-Aloud protocol analysis was applied to 10 bilingual students to investigate the reading strategies used by the bilingual students. It is important to note that the bilingual students were selected according to their responses to the questionnaire in the first stage. This stage was divided into four sub-stages.

The first stage is the preparation stage. After distributing a text to the students, the researcher will explain the purpose of the process and point out that the focus of the whole process is on how to manage and solve problems, not on ensuring a good grade in the form of a test. In addition, the researcher will explain in detail to the students the procedure for being a follower and will determine the task that the students will have to carry out. In the preparation stage, the following questions are asked by the researcher to the students:

- What does the text refer to?
- What did you understand?

The second stage is the pre-reading stage. The researcher asks the student to read the text quickly once and he/she can read it in the way he/she likes. In this stage, the following questions are asked by the researcher to the students:

1. What did you think of the text?
2. Did you have difficulty understanding the text?
3. What was the most difficult part?

The third stage is the process of reading and Think- thinking-aloud Protocol Analysis. The researcher encourages the student to read the text, sentence/sentence, paragraph by paragraph carefully. The student, as he or she reads, can do whatever he or she wants to do to aid in understanding the text. In addition, the student can talk to the researcher about the difficulties he or she encounters and describe his or her thinking and the steps he or she will take to solve the problem her or she is facing. If the student has difficulty verbally expressing his/her thoughts, the researcher can help the student by asking some questions:

1. What helps you most to understand this part/point /paragraph/sentence?
2. I see that you omit these words. Why?
3. I see that you underline these words/this sentence. Why?
4. Why do you underline/circle these words/this sentence?

The fourth and final stage is the post-analytical stage, where reflective interviews are applied. At this point, the researcher asks the students several questions, which relate to an overall assessment of the reading of the text carried out by the students. In the fourth stage, the researcher asks the following questions:

1. Do you think you read well today?
2. What was the most difficult thing for you?
3. What do you think you have read well? What do you think you could have read better?
4. What did you do to better understand the points that made it difficult for you?
5. In general, what makes a text difficult for you?
6. What do you usually do when you read a text to understand it better?
7. Do you think you should improve your reading and comprehension of a text?
8. What would you like to improve?

The students' responses in the second stage of the experimental process were analyzed qualitatively.

3. Results

3.1. Profile of students

Language of communication

According to the students' answers, 63% of the children speak only Greek at home, which is the highest percentage. Subsequently, 26% of students recorded that they speak Albanian at home. In addition, 3% of students answered that they speak the Russian language at home, 3% of students answered that they speak the Armenian Language at home, and 3% of students answered that they speak the Arabic language at home. Finally, 3% responded that they speak both Armenian and Russian at home *(Figure 2).*

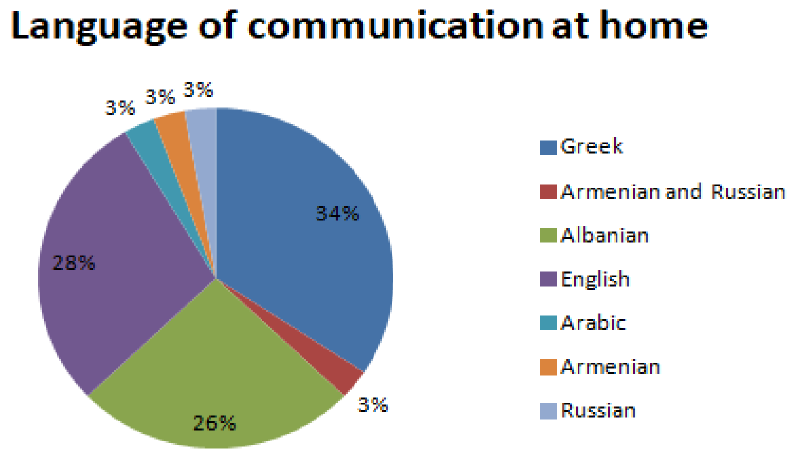

Figure 2. Language of communication spoken by pupils at home (percentage by language).

Language of Reading

Based on the answers recorded by the students in the questionnaire *(Figure 3)*, it is evident that 78% of the students read extracurricular books in Greek, which is the majority of the children. Then, although a small but significant percentage, 11% of the students stated that they read extracurricular books in the Albanian language. Then, 8% of the students stated that they read extracurricular books in

English, while the smallest percentage stated that they read extracurricular books written in Armenian *(Figure 3)*. It is observed that the majority of the students who participated in this study are used to reading extracurricular books in Greek, with a few pupils reading extracurricular books in English as well. Finally, a significant percentage of pupils read extracurricular books in Albanian.

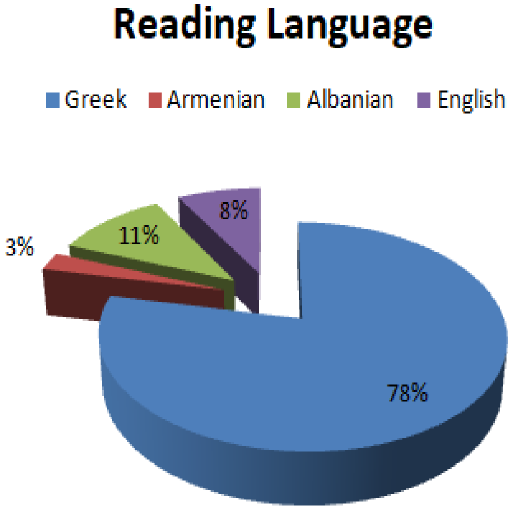

Figure 3. Language of Reading an extracurricular book (Percentage by language).

Frequency of Reading

Based on the answers recorded by the students in the questionnaire, it was found that 35% of the students stated that they read extracurricular books at least twice a week. Then, 29% of students report that they read extracurricular books at least once a week. In addition, 21% of the students stated that they read extracurricular books daily, while 15% of the students stated that they read extracurricular books a few times a month *(Figure 4)*. It can therefore be observed that the most frequent response stated by the pupils was that they read extracurricular books at least twice a week, while the least frequent response stated by the pupils was that they read extracurricular books a few times a month.

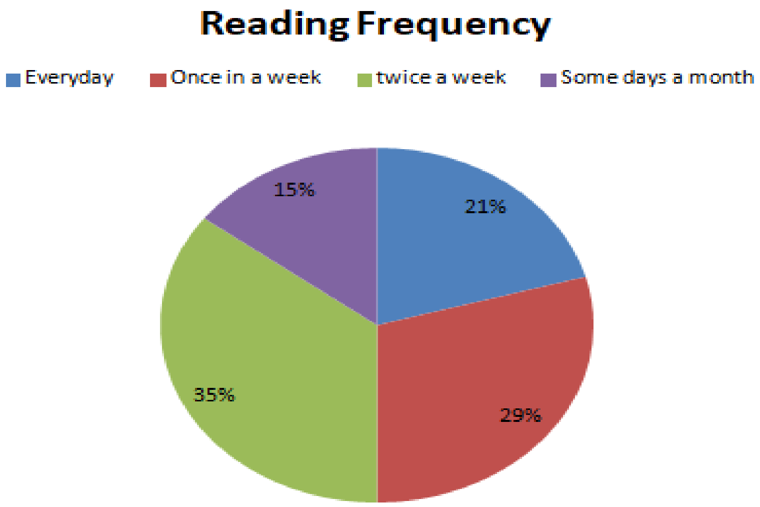

Figure 4. Frequency of Reading Extracurricular Books.

3.1.1. Reading ability in Greek

Based on this subscale, it explores what students believe they are capable of in the process of reading in Greek. As can be observed in the graph below *(Figure 5)*, of interest are the responses given by the students on the three–point Likert scale.

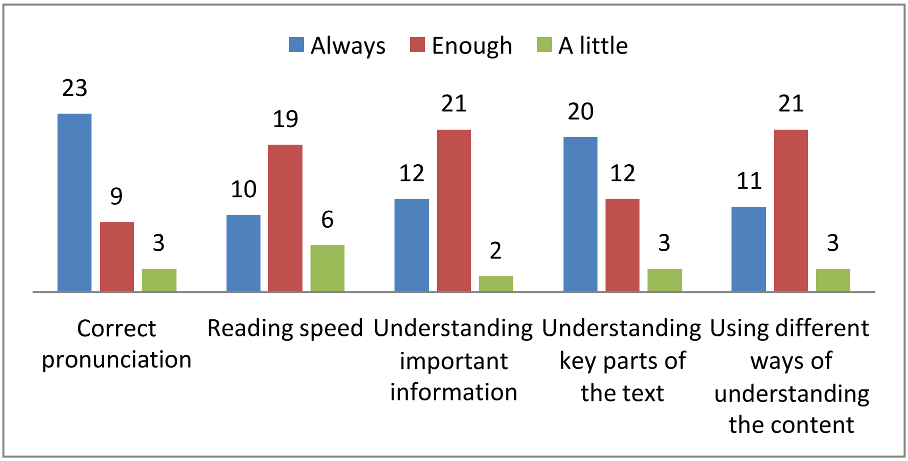

Figure 5. Frequency of occurrence of students' reading skills in Greek

It becomes obvious that the participants in the study put more emphasis on correct pronunciation while reading a text, as most of the children recorded that they always try to have correct pronunciation while reading. Quite a large percentage, also, is that several pupils stated that they always try to understand the main parts of the text they are reading. About an equal number of male and female students stated that they always use a variety of ways to understand the content of the text they are reading, and always emphasize understanding the important information in the text they are reading.

In addition, most students report that they can use different ways of understanding the content to a sufficient extent, while several students report that they can understand important information in the text they read. 19 students stated that they focus to a sufficient extent on the speed of reading a text. 12 students stated that they focus enough on understanding the main parts of a text that they focus enough on reading the text with correct pronunciation.

Finally, as can be seen in *Figure 5*, a very small percentage of students said that they have and practice these skills to some extent. In more detail, a graph is provided showing the percentage of Students who stated that they use these skills a little *(Figure 5.1.)*.

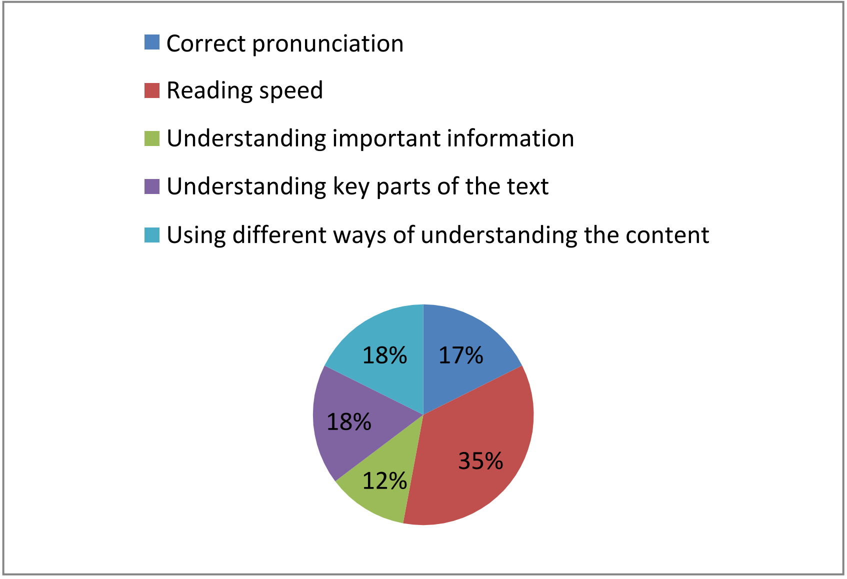

Figure 5.1. Percentage of minimum use of students' reading skills in Greek

A total of 6 students (35%) said that they concentrate very little on the speed of reading a text. Only 2 students (12%) stated that they focus little on understanding the important information in a text they are reading, anegligible number about the overall study sample

3.1.2. Pre-reading strategies

The first subscale of the questionnaire recorded the frequency of use of certain reading strategies at the pre-reading stage. The responses given by the students are interesting and are summarized in the graph below *(Figure 6)*.

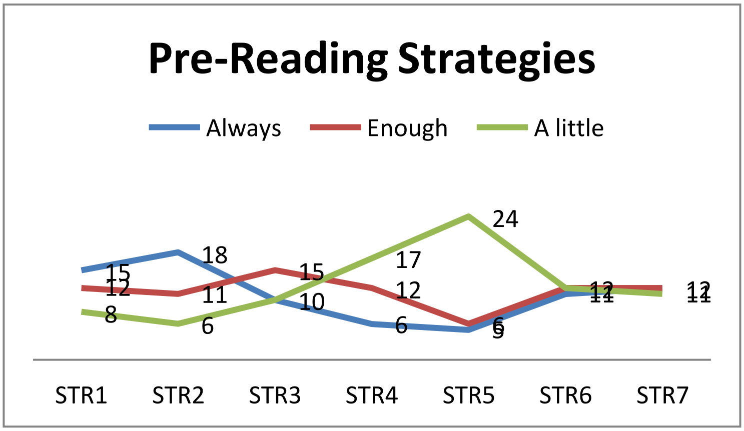

Figure 6. Frequency of use of pre-reading strategies

Based on the above graph, it can be observed that the strategy "I read the title of the text and wonder about the content of the text" (STR2) is the one that is always used most often by the students, while the smallest percentage stated that they always use the strategy "I quickly look for connecting words (e.g also, contrary, however) to organize the text" (STR5). Furthermore, as can be seen in the diagram, it is important to note that most students stated that they used STR5 a little, while at the same time, few students stated that they used STR2. In addition, most of the participants stated that they used the strategy "I take a look at the whole text and then look at the pictures to understand what the text is saying" (STR3) to a certain extent, while at the same time, fewer students stated that they use STR5 to a certain extent.

Interestingly enough, in the strategy "I set specific goals for how I will read and what I will pay attention to" (STR7), there is an equal statement, as 34% of the students use it always, 34% of the students use it enough, while the remaining 32% of the students use it a little. The same applies to the strategy "I only pay attention to the important information in the text" (STR6), where again an equal statement is observed, as 32% of the students always use it, 34% of the students use it enough, while the remaining 34% of the participants stated that they use it a little. In contrast, are the views of the students' opinions regarding the strategy "I look at the pictures and wonder about the content of the text" (STR1), as 23% responded that they use this strategy a little, 34% responded that they use this strategy enough, while 43%, which is the highest percentage in the given strategy, responded that they always use this strategy.

The graph below shows the students' preferences regarding the frequency of using certain reading strategies during the pre-reading stage *(Figure 7)*.

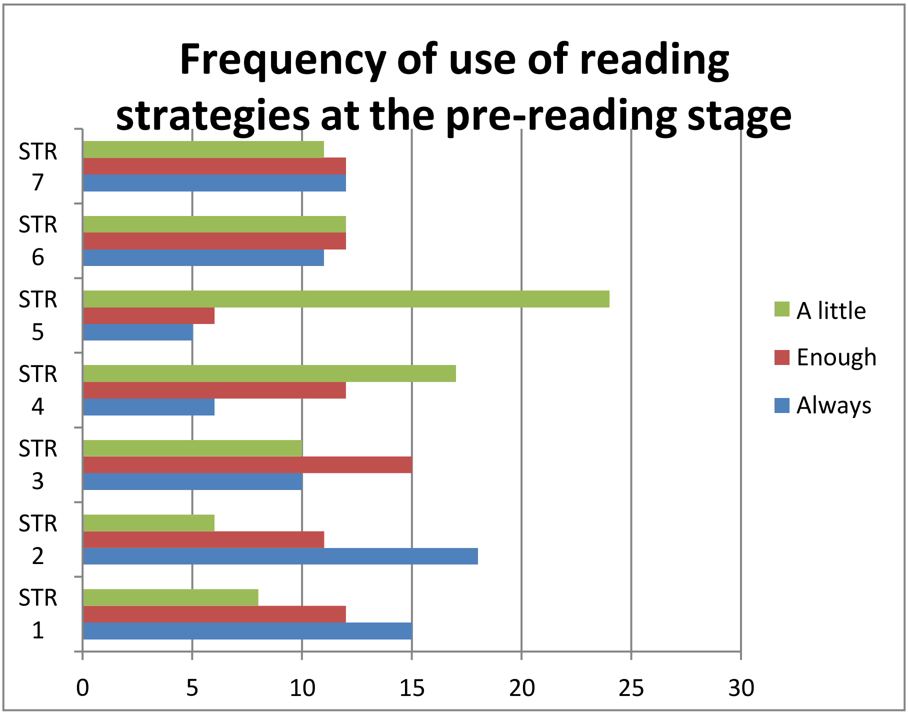

Figure 7. Detailed table of preferences in terms of frequency of use of reading strategies at the pre-reading stage.

It is therefore clear that the strategy “I read the title of the text and wonder about the content of the text” (STR2) is the most common, as most participants reported that they always use it. In contrast, the strategy “I quickly look for connecting words to organize the text” (STR5), is less used by the majority of participants. In addition, a large number of male and female students stated that they use the strategy “I take a look at the whole text and then look at the pictures to understand what the text is saying” (STR3) quite a lot.

3.1.2.1. Table of pre-reading strategies

For a fuller understanding of the reading strategies mentioned above (*Table 1)*, a table of reading strategies used in the pre-reading stage is summarized.

Code	Conceptual Clarification
STR1	«I look at the pictures and wonder about the content of the text»
STR2	«I read the title of the text and wonder about the content of the text»
STR3	«I take a look at the whole text and then look at the pictures, to understand what the text says»
STR4	«I am quickly looking for information about the purpose of the text»
STR5	«I quickly look for linking words (e.g. also, contrary, however) to organize the text»
STR6	«I only pay attention to the important information in the text»
STR7	«I set specific goals for how I will read and what I will pay attention to»

Table 1. Coding/conceptual clarification of reading strategies at the pre-reading stage.

3.1.3. Strategies while reading a text

The second subscale of the questionnaire refers to the frequency of using certain reading strategies while reading a text. In the graph below *(Figure 8)*, the overall responses of the students are listed in terms of the frequency of using reading strategies while reading a text.

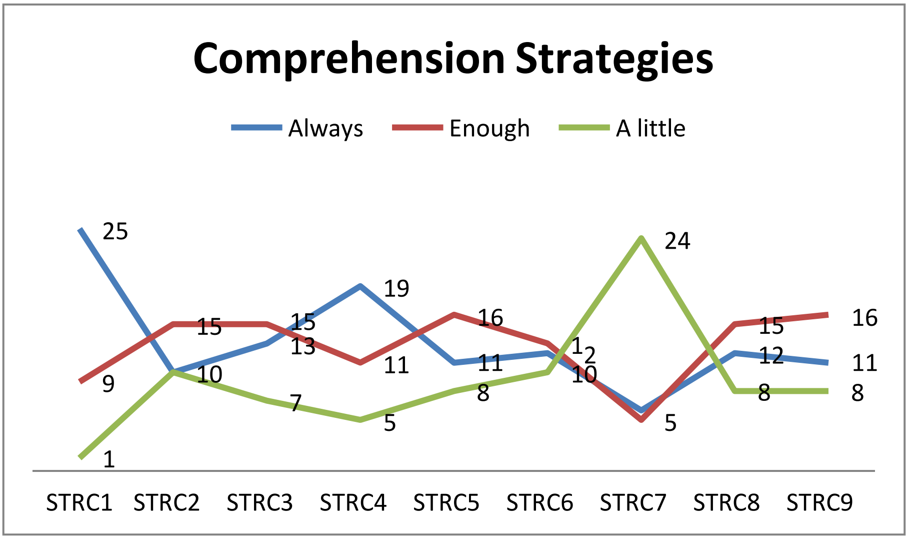

Figure 8. Frequency of using reading strategies during the main reading stage.

Most students said that they always use the strategy "Re-read what I don't understand" (STRK1). In contrast, a few male and female participants stated that they always use the strategy "I take notes as I read to understand what I read" (STRK7). However, several students stated that they use the strategy STRK1 a little. However, as can be observed in the graph below *(Figure 9)*, it is easy to understand that although several students stated that they use the STRK7 strategy a little, an equal number of students stated that they always use the STRK7 strategy enough.

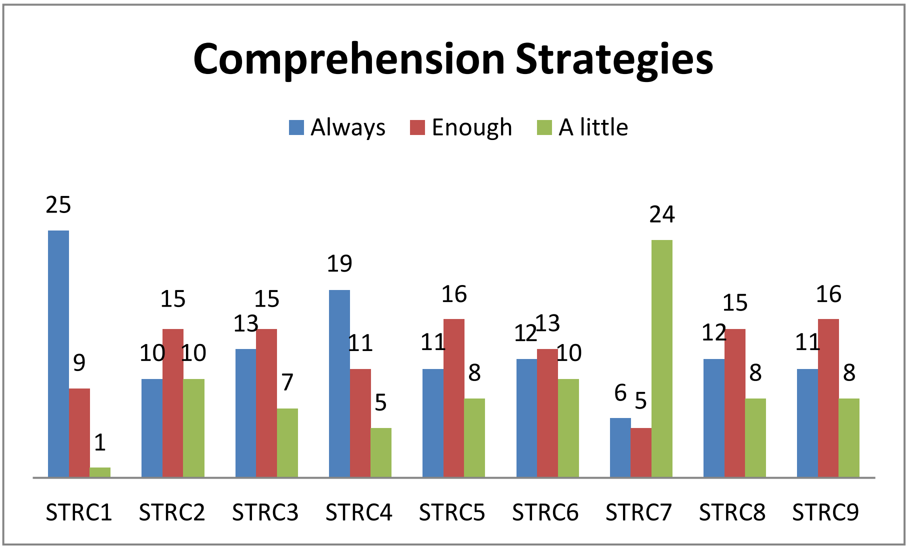

Figure 9. Frequency of using reading strategies for text comprehension.

It is important to mention that the strategies, "I underline or circle key information/word-phrases in the text" (STRC2), "In my mind, I put the information in order as it is presented in the text" (STRC3), "I change the way I read the text when I cannot understand it (e.g. I read the text more slowly" (STRC5), "I say in my own words the part I am reading to understand it better" (STRC8) and "I try to understand the unfamiliar words that seem important in different ways (e.g. looking them up in the dictionary, on the internet, from the surrounding words or phrases" (STRC9) are used to a considerable extent by several students. At first sight, this is an important element as it is evident that the students who participated in the research use a variety of reading strategies to understand a text. In addition, a few students stated that they use the STRC7 strategy to a considerable extent. Most students stated that they always use the strategy STRC1 "I re-read what I don't understand" (STRC1), while several students stated that they always use the strategy "I use my imagination and create pictures in my mind about what I read" (STRC4).

3.1.3.1. Table of reading strategies when understanding a text

For a fuller understanding of the reading strategies mentioned above, a table of reading strategies used during the reading stage of a text is summarized (*Table 2).*

Code	**Conceptual Clarification**
STRC1	«I'm rereading what I don't understand»
STRC2	«Underline or circle information/keywords/phrases in the text»
STRC3	«In my mind, I put the information in order, as presented in the text»
STRC4	«I use my imagination and create images in my mind for what I read»
STRC5	«I change the way I read the text when I cannot understand it (e.g. I read the text more slowly»
STRC6	«To understand the points that are difficult for me, I look at the surrounding words or phrases»
STRC7	«I take notes as I read to understand what I read»
STRC8	«I put in my own words the piece I am reading to understand it better»
STRC9	«I try to understand unfamiliar words that seem important in different ways (e.g. looking them up in the dictionary, on the internet, from surrounding words or phrases»

Table 2. Coding/conceptual clarification of reading strategies at the reading stage.

3.1.3. Text interpretation strategies

This subscale records the responses given by students as to the frequency of using certain strategies to interpret a text.

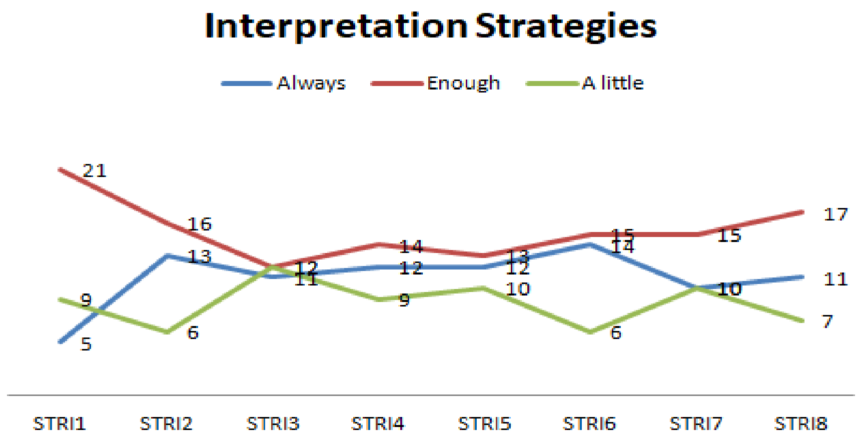

Figure 10. Frequency of using text interpretation strategies

In the above graph *(Figure 10)*, it can be observed that about 18 students stated that they always use the strategy “ *I re-read the text and pay attention to its features, such as its length and organization (e.g. prologue, main body, epilogue, paragraph elements, sections into which the text is divided)*” (STRI2), while an equal number of male and female students stated that they always use “Based on what I know/based on my experiences, I try to interpret the text” (STRI1). The strategy “I look for information about the objectives I had set at the beginning” (STRI5), seems typically to be always used by a very small number of male and female students, while the majority of male and female students stated that they use this strategy a little. The STRI2 strategy, seems a very small number of male and female students choose to use it a little. However, a significant number of male and female students use it always or quite a lot. In addition, in the strategy “*As I read, I decide what to pay attention to and what to overlook in the text*” (STRI3), it seems that at least 15 students indicated that they use this strategy quite a bit while 10 students indicated that they use this strategy a little and 10 students indicated that they always use this strategy.

It is important to mention that the strategies *“Sometimes I stop to think and interpret the meaning of what I read”*(STRI6) and *“I read from the beginning and from the end to draw my conclusions”* (STRI7), are evenly distributed terms of frequency of use. As can be seen in the graph below *(Figure 10.1)*, 43% of the students stated that they use this strategy enough, while 17% of the students stated that they use this strategy a little. 40% of the students stated that they use this strategy Always.

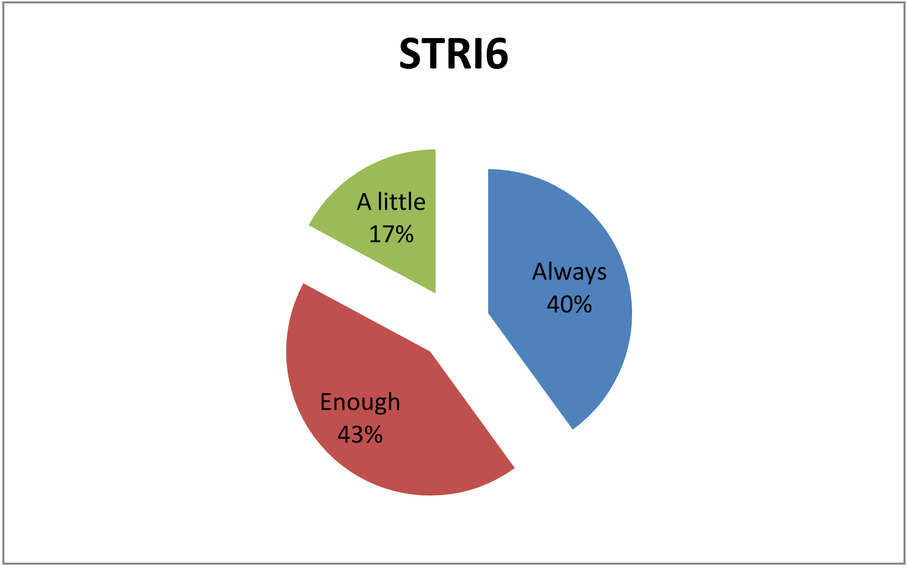

Figure 10.1 Frequency of use of the STRE6 strategy "Sometimes I stop to think and interpret the meaning of what I read".

On the other hand, 28% of students stated that they always use the STRI7 strategy, 43% of students stated that use this strategyenough, while 29% of students stated that they use this strategy a little*(Figure 10.2)*.

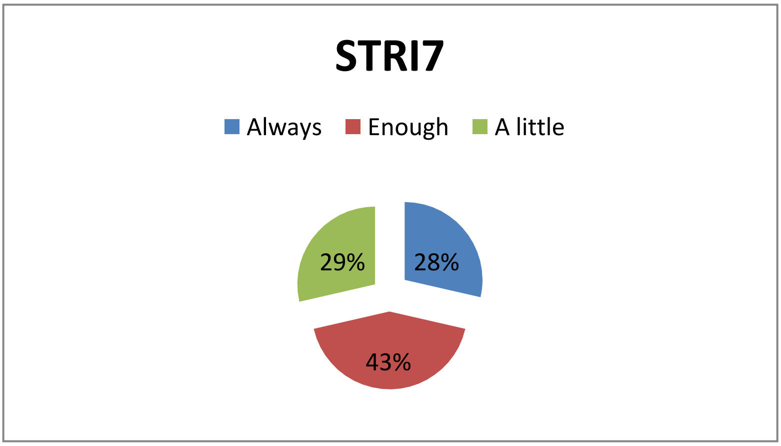

Figure 10.2 Frequency of using the STRI7 strategy "I read from the beginning and from the end to draw my conclusions".

3.1.3.1. Table of reading strategies when interpreting a text

For a fuller understanding of the reading strategies mentioned above, a table of reading strategies used in the post-reading stage is summarized (*Table 3*).

Code	Conceptual Clarification
STRI1	«Based on what I know/ based on my experiences, I try to interpret the text»
STRI2	«I reread the text and note its features, such as its length and organization (e.g. prologue, main body, epilogue, paragraph elements, sections into which the text is divided»
STRI3	«As I read, I decide what to notice and what to overlook in the text»
STRI4	«Checking whether the assumptions I had made about the text are right or wrong»
STRI5	«I am looking for information about the goals I had set in the beginning»
STRI6	«Sometimes I stop to think and interpret the meaning of what I read»
STRI7	«I read from the beginning and from the end to draw my conclusions»

Table 3. Coding/conceptual clarification of strategies in the post-reading stage.

3.1.4. Think-Aloud Protocol

In the second stage of the research process, a total of 10 children participated, selected from the data obtained from the questionnaire (stage 1), based on their bilingualism. It is important to mention that 3 students were absent during the process of implementing the Think-Aloud protocol. In the graph below *(Figure 11.)*, the students are distributed by gender of the students who participated in the second stage of the study, while in Figure 11.1 they are distributed by the criterion of bilingualism.

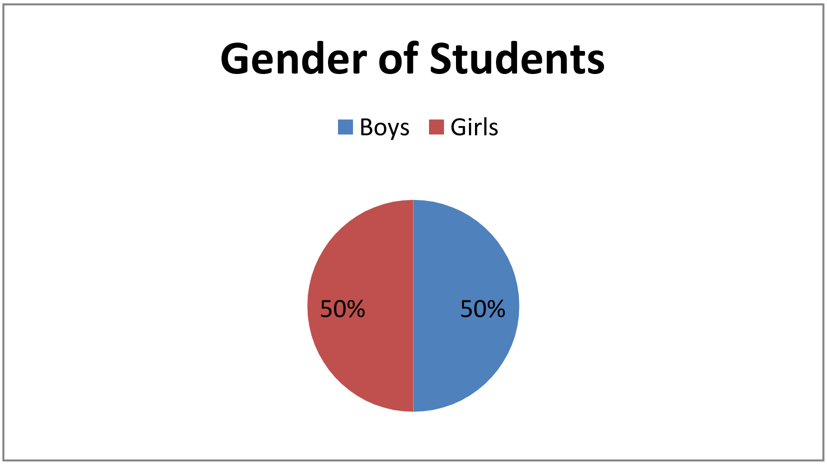

Figure 11. Percentage of the gender of students by sample.

Based on Figure 11, it is evident that the number of male and female students is equal in terms of gender, as out of 10 students who participated in the Think-aloud protocol, 5 students were girls and 5 students were boys.

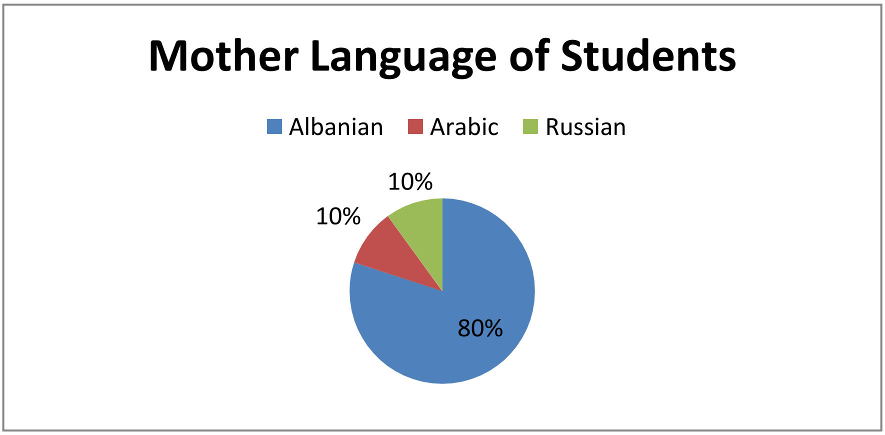

Figure 11.1 Percentage of mother tongue use by sample.

According to Figure 11.1, it is observed that 80% of the students who participated in the Think-Aloud protocol spoke Albanian at home, while 10% spoke Arabic at home and 10% spoke Russian at home.

3.1.4.1. Strategies at the pre-reading stage

At the pre-reading stage, the strategies “Use of picture” (80%), “Skimming” (70%), and “Use of title to predict content” (50%) were prominent. However, the vast majority of bilingual students used the above strategies in combination. It is important to note that male and female students made additional use of strategies but at a lower rate. Table 4 presents the codes representing the strategies that emerged from the Think-Aloud protocol that relate to the pre-reading stage.

Student 5 says “ To the refugees from Ukraine who come to Greece…I understood it from the title and the text”, but then student 5 says, “I think this next teaches us a lesson that they (the refugees) are also having a hard time and have more sorrow than us who say things”. It is observed that student 5 makes use of the strategies “Use of image” and “Use of title to predict content”, while he then proceeds to use the strategies “Linking to prior knowledge” and “Emotional Understanding”. Student 1 mentions “About the war in Ukraine and the refugees. Because he was writing about the war that was going on where they were throwing bombs at the houses and because they were afraid of losing their lives and they came to Greece to settle…pictures helped me a little bit too”. It is observed that student 1 makes use of the strategies “Skimming” and “Using a picture”. Student 6, makes use of the strategies “Using the title to predict the content” and “Using images”, as she says “To the refugees who come to Greece from Ukraine… I understood it from the title and the text”. Student 7 makes use of the strategies “Using the title to predict the content”, “Skimming” and “Using an image”, as he states “I understood that it says about the refugees coming from Ukraine to Greece because of the war… I understood it from the title and the text inside, and the image helped me a bit because it seems that they are out on the street”. Student 8 also makes use of the strategies “Skimming”, “Using a title to predict content” and “Using a picture” as he states “About the war going on in Ukraine…from the text, from the title and the pictures”. Student 2 and student 3 make use of the strategies “Using a title to predict content” and “Using a picture”. Specifically, student 2 mentions “In the war, refugees were coming to Greece… I thought of it from the title and the pictures show that they are happy”, while student 3 mentions “It is about the people in Ukraine who left because of the war and came to Greece… I thought of it from the title, and the pictures helped me a little bit because they are both happy”. Student 9 only makes use of the “Skimming” strategy as she states “It tells about a family, it talks about the war in Ukraine… She was saying it in one paragraph, in the last one”.

Interestingly, student 10, who from the pre-reading stage evaluates the validity of the text and makes use of the strategy of “Linking with prior knowledge to understand the text, after having used the strategy “Skimming”, as he says “Based on what I have heard, that is, if the text is true, based on what I have heard I can understand it more easily”. Finally, student 4 makes use of the strategies “Using pictures”, “Skimming” and looking for help” as she states “Many people came to Greece because there was a war in Ukraine… I read the text, I understood from the pictures that a girl is with her mum and they came to Greece, they are both happy”. Student 4 makes use of the strategy “Seeking help” to address the limitations she had in oral language. Specifically, student 4 was conversing in Mother Language with student 2 to answer the questions posed by the researcher.

Categories and codes for the thematic axis “Strategies at the pre-reading stage (*Table 4*).

Categories	Codes/Conceptual definitions	Total References
Cognitive strategies	QUEM= Quickly extracting meaning (Skimming)	7
	UTPC= Using the Title to Predict Content	5
Memory strategies	UOICP= Use of Image for Content Prediction	8
Compensatory strategies	SHOOLR= Seeking Help to Overcome Oral Language Restrictions	1
Metacognitive strategies	LIPRK= Linking to Prior Knowledge	2
Social strategies	UNTHFO= Understanding The Thoughts and Feelings of Others	1
Total		24

Table 4. Reading strategies that emerged during the pre-reading stage (Think-Aloud Protocol).

3.1.4.2. Strategies at the main reading stage

At this stage, students used a variety of reading strategies, but the one that stood out the most was the use of the “Re-reading” strategy (70%). It is important to note that students make combined use of the “Re-reading” strategy with other strategies.

Student 1 states “To Read it several times. The first time I might read it and not understand it, the second time I might understand something, and the third time I might understand it all”, student 2 says “To read it several times. The first time I may read it and not understand it, the second time I may understand something, and the third time I understand it all”, student 3 reports “It helps me to read it several time to understand it very well”, student 5 reports “I read it once and if I don’t understand it I read it again”, student 7 reports “It helps me to be quiet to concentrate to read the text, when I don’t understand something I read it again”, student 8 reports “It helps me to read the text 2-3 times… I understood the text because I read it more times”, student 9 reports “If I don’t understand it, what I do is to re-read it until I understand it”.

In addition to using the “Re-reading” strategy, student 1 also uses the “Scanning” strategy to find keywords that “Unlock the text”, as he says “Some words help me understand the text. They are the most important ones. Based on what I’ve read, I think they (the words) speak to the topic”. In the last paragraph, student 1 makes use of the strategy “Asking questions to himself” as he states “I thought, why would they make this war?... I understood a lot of the sentences because they make sense. For the outbreak of the war, which was a very strong shock for them, for the Russian bombing”. Student 9 makes use of the “Scanning” strategy to find keywords, as she stated “Some words helped me to understand the text”, then student 9 proceeds to use the notes “Notes” strategy by recording a title for each paragraph, as she stated, “I am trying to find a title for the paragraph, beginning of the war”. Student 7 first makes use of the “Scanning” strategy and then proceeds to use the “Re-reading” strategy, as he mentions “At first I read it quickly to find unknown words and then I read it once more… I read the text carefully and paid attention to the most important words”.

Student 3 uses the “Underlining” strategy in combination with the “Scanning” strategy, as she states “(Underlined a word) it helps me because it says that there were a lot of people who left Ukraine and came to Greece… and I did it so I know”. Student 10, in order to understand the text, makes use of the strategy “Linking with pre-existing knowledge”, as he states the truth is that I saw this particular paragraph from the news, which said that many people from Ukraine put up in places allocated by the municipality and others can stay with their relatives if they have them”. Finally, student 5 makes use of the “Self-control” strategy, as he adjusts the speed of his reading according to the difficulty of the text, as he states “When it is difficult I read it slowly to understand the unknown words, when it is easy I read it quickly”. Next, student 5 makes use of the strategy of “Guessing” as he states “The beginning helps to get into the meaning a bit, then I think about what the paragraph says and then I read the whole thing". The same is true for student 9, who states "One sentence helps me, the first sentence of the paragraph, I think about what it say next, and then I read the whole thing", then student 9 states that she makes use of "Skimming" strategy, as she states "Sometimes I read the first sentence and then the last sentence (of the paragraph). I usually do this when I am in a hurry to read the text".

But then, student 9 makes use of the strategy of "Selective attention", as she states "Sometimes I skip some words when they are not very important. When I have to read it faster I read the most important ones".

It is also interesting to note the strategies used by the students when they are faced with an unfamiliar word and cannot understand it. Bilingual students make more use of the strategies of "Underlining" and "asking for help" to understand the meaning of an unfamiliar word. However, some students use other reading strategies to understand the meaning of an unknown word.

Student 1 makes use of the strategy of "Underlining", and "Searching for help", while he also suggests the use of the strategy of "Using a dictionary", as he states "When I have an unknown word, I underline it and ask the teachers or at home I will open a dictionary", student 5 reports "I read it and underline the unknown words so that I can remember them and ask someone", student 3 reports "I underline the unknown words so that I can ask the lady later", Student 8 reports "I underline the unknown words and ask the teacher". Also, student 8 makes use of the strategy "Paraphrasing difficult or unknown word" as he reports "I did not understand some words so I skipped them and read the rest of the sentence", but then student 8 makes use of the strategy "Extracting meaning from the context" as he reports "when I find an unknown word I read the surrounding words". The same is true for student 2 as he suggests as an alternative the use of the strategy "Extraction of meaning from context" as he states "I would ask someone…or find the meaning of the word by looking at the words around". To understand an unfamiliar word, student 9 makes use of the strategies "Re-reading" and "looking for help", while she suggests "Using a dictionary" as an alternative, as she states "When I don't understand a word, I read it several times and ask someone or look it up in the dictionary". Interestingly, student 10 makes use of the strategy of “Structural Analysis”, while he also suggests the use of the strategy “Use a dictionary”, with the ultimate aim of understanding the unknown word, as he states “Collectives, I think it has the word collection in it… or I would open the dictionary…”. To understand the meaning of an unknown word, student 4 makes use of the mental dictionary she has in her mother language, and at the same time, she makes use of the strategies “Seeking help”, and “Notes”, as she states “When I don’t understand a word I write it down. A word I know in Albanian I can understand it in Greek, or I can ask someone who knows both Greek and Albanian and I write it in Greek and learn it in Albanian”.

Most students did a silent reading (100%). Student 1 reports “To not disturb others, I am more relaxed”, student 4 reports “To not disturb others when they are reading”, student 6 reports “To not disturb others, it helps me concentrate more”, and student 8 reports “When I read it from my mind, it helps me understand it better, I am more concentrated”.

Categories	**Codes/Conceptual definitions**	**Total References**
Cognitive Strategies	RERE= Re-reading	7
	USEOFDI= Use of Dictionary	3
	QOVUNW= Quoting or avoiding an unknown word	1
	STRA= Structural Analysis	1
	NESONOSF= Notes in either systematic or non-systematic form	2
	EXMFC= Extracting meaning from context	2
	SCANI= Scanning	4
	UNDERL= Underline	4
	SKIMMi= Skimming	1
	SELATTE= Selective attention	1
Compensatory strategies	SHOOLR= Seeking help to overcome oral language restrictions	5
Memory strategies	LIPRKN= Linking to prior knowledge	1
	ASHIMQ= Asking himself questions	1
	SELCH= Self-Check	1
	SPECULA= Speculation	2
Total		36

Table 5. Reading strategies that emerged during the main reading stage (Think-Aloud Protocol).

3.1.4.3. Retrospective interviews- post-reading stage

In the post-reading stage, which is the last stage of the Think-Aloud protocol, retrospective interviews are conducted with each student. The questions are specific and aimed at the post-reading process to reflect on how they read. Below are listed in numerical order the questions asked of the students:

1. Do you think you have read well today?
2. What was the thing that made it most difficult for you?
3. What do you think you read well, what do you think you could have read better?
4. What did you do to better understand the points that made it difficult for you?
5. In general, what makes a text difficult for you?
6. What do you usually do when you read a text to understand it better?
7. Do you think you should improve your reading and comprehension of a text?
8. What would you like to improve?

At this point, the vast majority of students reported that they did well reading and comprehension of the text (90% said they read well and 10% said they read moderately). However, the students stated that they had difficulties at the micro level, particularly with word difficulty (40%), unknown words (40%) and foreign words (20%). At the macro level, the students through their reading comprehended the text, although the students used the "Re-reading" strategy to understand some paragraphs that were difficult for them. Most of the male and female students stated that they found the 3rd and 4th paragraphsdifficult (40%), the 2nd paragraph (20%), and 40% of the male and female students stated that they found the 2nd and 3rd paragraphsdifficult. As mentioned earlier, the vast majority stated that they used the "Re-reading" strategy (80%) to cope with difficulties, while the remaining 20% stated that they used the "self-control" strategy, adjusting their reading speed whenever they experienced difficulties.

Also, students said that a text becomes difficult to read when it has many unknown words (70%), when it has no pictures (10%), and when the length of the text is long (20%). 80% of students said that it would improve their reading and comprehension of a text, while 20% of students said that it would not change their reading and comprehension of a text. Finally, of 80% of the students said that it would improve their reading speed (30%), improve their pronunciation of words-prosody (20%) and the remaining 30% said that it would enrich their mental vocabulary by learning new vocabulary.

4. Conclusion- Discussion

The present study attempted to detect the strategies used by Greek-speaking and bilingual students in primary school. Specifically, the research aimed to record the reading strategies used by the students during the pre-reading stage and to identify the cognitive and metacognitive strategies used by the primary school students during the main reading stage. At the same time, an attempt was made to record the strategies used by bilingual students during the pre-reading stage, while identifying the cognitive and metacognitive strategies used by bilingual students.

Through the analysis of both the quantitative data collected from the questionnaire and the qualitative data collected from the Think-Aloud protocol, it emerges that the students of the sixth grade make use of a variety of cognitive and metacognitive strategies during the pre-reading and mainly reading stage, but they seem to lag in the flexible use of reading strategies.

Specifically, based on the analysis of the quantitative data collected from the questionnaire, it emerges that students, both Greek-speaking and bilingual, in the pre-reading stage make use of the title, and the pictures, while at the same time they take a quick look at the whole text with the ultimate aim of being informed about the content of the text. In the main reading stage, the students, both Greek and bilingual, always used re-reading, imagination, and the creation of mental images and context to understand the content of the text. Moreover, the students, Greeks, and Bilinguals always used their experiences to understand and interpret the content of the text, while they stated that they always focused on the features of the text.

Based on the analysis of the qualitative data collected from the Think-Aloud protocol, confirms the use of the above strategies by the bilingual students, as in the pre-reading stage, they made use of the pictures, and the title while taking a glance at the text to predispose the content of the text. In the main reading stage, it was observed that bilingual male and female students utilized re-reading while approaching the text based on their own experiences to understand and interpret the content of the text. In the last stage, the reflective interview stage, most bilingual male and female students identified the difficulties they faced in both reading and understanding a text and suggested solutions to solve their difficulties.

The results of this study are consistent with the results of previous research, according to which strategies have been documented to help improve language skills (Γρίβα & Κώφου, 2020· Hassein, Khodaei, Sarfallah, Dolatabadi, 2012· Herman, Perkins, Hansen, Gomez, 2010· Hoover & Gough, 1990· Sabouri, 2016). Since we consider reading as a problem-solving process in which the reader adopts and applies a variety of strategies, students should become familiar with the appropriate, effective, and flexible use of strategies to overcome difficulties, read effectively, understand and interpret the meaning of the text (Γρίβα & Κώφου, 2020· Γρίβα, Σέμογλου, Μπουνόβας, Κοσσυβάκη, 2009· Larking,2017· Πενέκελης & Γρίβα,2008· Rubin,1975· Green & Oxford· Khaldieh, 2000· Jusoh & Abdullah, 2015· Wharton, 2000). To achieve this, however, a prerequisite is the creation of a creative learning environment that motivates the training of students in the use of strategies, with the ultimate goal of not only understanding the content of a text but also the structuring of its interpretation (Γρίβα & Κώφου ·Kosimov,2022·Sahiruddin, Junining, Ubaidillah, Len, 2022· Shaila & Trudell,2010· Shibab,2011). In this environment, which the teacher must create, students should practice the effective use of reading strategies in various textual and intertextual genres, primarily in print and secondly in electronic form (Azzmuddin, Nor, Hamat, 2017·Kymes, 2007· Leu, Kinzer, Corio, Cammack 2004· Jusonh & Abdullah, 2015).

Research limitations for future research

First of all, it is important to mention that the present study was conducted among 35 students in the sixth grade of primary school. Based on this, the results of the survey cannot be generalized because the sample is not representative due to the small number of students. In addition, it was observed that conducting the Think-Aloud protocol was a time-consuming and difficult process and this may be because the students were not familiar enough with this process. In addition, despite the validity of the questionnaire, and particularly the three subscales used to detect the students’ reading strategies, it did not present safeguards to disclose the reliability and clarity of the student's responses.

For these reasons, more bilingual male and female students could be included in a future study to gather a larger database and produce more reliable results. Also, the administration of the questionnaire should be administered in two phases to ensure the reliability and clarity of the student's responses, while providing students with opportunities to practice externalizing their thoughts before implementing the Think-Aloud protocol to ensure better results.

Finally, some suggestions for future research would be to investigate the online reading strategies used by students in a non-linear hypertextual medium. Also, a final suggestion for future research would be to investigate the use of strategies by bilingual students after a strategy instruction program has been conducted to highlight practices that assist students in adopting a wider range and flexible use of reading strategies.

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SESSION 10
(Educational Sciences- Didactics of languages and literature)

VIEWS OF PRIMARY SCHOOL TEACHERS ON THE ROLE OF EUROPEAN LANGUAGES AND SUGGESTIONS FOR IMPROVING MULTILINGUALISM IN THE EDUCATIONAL CONTEXT

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Abstract

This research provides information concerning the views of teachers in primary education, focusing on their views about the role of European languages in Greek and European context. In addition, the paper aims to highlight the role that various European languages have in Greek public education system, the axes that consider these languages useful to be taught to the lower levels of education and which other foreign languages primary school teachers promote to be taught in the Greek educational system generally. Moreover, the present paper analyzes the primary school teacher's views on improving language diversity in education, expanding the existence of language diversity in primary and secondary education, regarding the didactic usage of immigrant students' languages. The purposes of the paper will be achieved by the research process conducted during the 2020-21 school year, in which 44 teachers participated through individual semi-structured interviews that analyzed qualitatively. The results showed that the majority of teachers strongly support the usage of European languages in the Greek educational context, especially English, as it is considered "lingua franca" and has tremendous impact worldwide. Regarding the improvement of multilingualism, the majority of teachers reported that they have positive attitudes about teaching school subjects in a foreign language by taking advantage of the mother language of students with an immigrant background. Regarding the type of multilingualism, the teachers are in favor of increasing the language repertoire by entering Spanish and Italian language courses in primary education and continuing them to the next level of education.

***Key-words**: education, language policy, multilingualism, views*

Language policy and multilingualism in Greece

After Greece's accession to the European Union, the value of multilingualism began to be realized. Moreover, increased immigration and the development of Greece's relations with the Balkans, opened the way for multilingualism in the political scene (Griva, Chostelidou & Panteli, 2012, p.400). The aim of the EU is to blunt the concept of the nation-state and promote unification at the economic, monetary and political levels. Despite the strong tourism and contact with other cultures, apart from some loans that have been added from time to time, Greece has a rather conservative approach to language issues, which is evident in its society. On the one hand, there is an emphasis on the advantages of multilingualism and multiculturalism, such as language skills and finding a job and on the other hand, there is a concern about national identity and, more importantly, the weakening of the Greek language among the youth. Moreover, due to the cultures that migrate to Greece, their language is not appreciated and cannot be useddue to the big difference with Greek. It is worth noting that the teachingof the mother language of immigrant children in public schools is hardly implemented, despite the fact that there is funding from the European Union. In general, although Greece has good diplomatic relations with Balkan countries, it has not been influenced or even fascinated by the use of any language other than Greek.

As is the case worldwide, the first foreign language that children learn in Greece is English (Eurobarometer, 2006), which is the “dominant” international language, while German, Italian, Spanish and French are the second choice. English is taught as a compulsory first foreign language in Greek public schools from the third grade, and students must choose to study either French or German as their second foreign language from the fifth grade until the end of high school. State universities provide elective courses in European languages to enable students to acquire appropriate language skills. In any case of multilingualism, some languages function as high varieties with high prestige, while others function as low varieties with low prestige.

Some languages are referred to as minority languages, as they belong to the minority or “weak” languages. Moreover, despite the unchanged use of the Greek language over the centuries and being considered a strong language in Greece and in the wider context of the European Union, it is considered a weak language and one of the least spoken. (Karastogianni, 2014, p. 38).

In Greece, although Greek is recognized as the only official language, there have been some loanwords from past conquests or through television that have been immersed in its constitution:

1) Turkish: the native language of the Greek Muslims of Western Thrace and the only one in which rights to education are recognized under international treaties.

2) Pomak: the South Slavic language of the Muslim Pomaks of Thrace, which is related to Bulgarian.

3) Arvanitic: also known as the Greek-Albanian dialect, historically spoken mainly in the region of Attica, the Argosaronic, Corinth, Argolida and Evia and related to the Tuscan South Albanian dialect.

4) Slavo-Macedonian: the Greek-Slavic dialect, native to many Greeks from the border regions of Western Macedonia.

5) Vlachika: a latin origin language spoken in Thessaly, Epirus and Macedonia, related to Romanian.

6) Romani or Romanes: the language of the Gypsies (or Roma), which is believed to have descended historically from dialects of northern India.

At the same time, among these languages there are also Albanian, Russian, Polish, Bulgarian, Bulgarian, Serbo-Croatian, Romanian, English, Arabic, and Chinese which are very common. In fact, these languages are noticeable in the linguistic landscape of the big cities, since most of the above languages are also used in newspapers published in Greece for immigrants and posted in the main kiosks of the urban centres.

According to the European Union survey "Europeans and their Languages" (2006), 56% of EU citizens (25 Member States) speak a language other than their mother tongue, but 44% admit to not speaking a foreign language. However, 28% know two foreign languages. 38% of EU citizens know English, followed by French and German with 14% each. In Greece, 57% of citizens speak one foreign language, in line with the average, but only 19% speak two foreign languages. 48% of citizens in Greece speak English, 9% German and 8% French (European Commission, 2017).

Research

Aim and Objectives of the Research

The purpose of this research is to investigate the views of primary school teachers on the role of European languages in public education and the teachers' attitudes and suggestions for improving multilingualism and multilingual education.

Participants

44 primary school teachers from Greece participated in the research. 27 were female and 17 were male, coming from different regions of Greece.

Research tool

Semi-structured individual interviews were conducted to carry out the research, where through them, teachers can provide a wider range of opinions or suggestions, but also to make use of, explore and collect a large amount of qualitative data. According to King (1999) "*The personal interview was chosen, which is a qualitative method that is most widely used because of the flexibility it offers in conducting it, and because of the immediacy and familiarity felt by the interviewee*" (Griva & Stamou, 2014, p.146).

In addition, regarding semi-structured interviews as a form of semi-open dialogue, it is an interaction between the interviewer and the interviewee, which takes place in the form of a dialogue, creating a climate of immediacy and familiarity that allows the interviewees to express themselves freely, thus having a deeper approach to the subject (Papara, 2015, p.34). Through 19 open-ended questions, teachers were given the opportunity to express their views and ideas on language policy and management of multilingualism in the educational context.

The first theme of the interview was: "*The role of European languages in public education*", the teachers mentioned what is the role and usefulness of English language, what is the importance of learning a foreign language from the first grade of primary school and what is the contribution of the choice of other foreign languages in primary and secondary education.

The second thematic axis examined "*Teachers' attitudes and proposals for improving the management of multilingualism and multilingual education*", where the interviewees put forward their proposals for the offer of a variety of languages in primary and secondary education, the didactic use of the languages of migrant pupils, the ways of improving multilingualism in the Greek school context and finally express their views on the contribution of European programmes to multilingualism.

Data collection

Data collection lasted 3 months and took place during the months of November to January 2020-2021. Interviews lasted approximately 30 minutes for each participant.

Data Analysis Method

Teacher interviews were a source of qualitative data analysis. Upon completion of the interviews, the transcription stage of all the interviews followed in order to analyse and study what was said by the teachers in order to generate some research data and conclusions. At this stage, everything that was said was faithfully reproduced (even any errors or interruptions on the part of the interviewee). Their processing and analysis was carried out through flat thematic qualitative analysis (Griva & Stamou, 2014, p.148).

The first stage relates to data reduction which involves a sequence of steps to create codes and organise them into categories. Regarding the first level, interpretation and understanding of the transcribed data is carried out and conceptual identifications are assigned which are called codes (Tsiolis, 2018, p.103). It is worth noting that the same code can be assigned not only to one but also to several pieces presenting the same content. Also, according to Griva and Stamou (2014): "*Codes should be related to each other so that they can be included in a common category, while at the same time they should be distinct from each other to avoid overlap(...) Individual codes are 'labels' with some initials and carry a functional definition*".As regards the second level, the resulting codes are used to create the corresponding categories, which will include them. Codes with relevant content are grouped into common categories. All of the above is integrated into a table in which the data is presented in an organised manner.

After rechecking for any similarities in codes and correcting them or including them in a related generic content code, the second stage follows. In particular, on the basis of the categories and codes resulting from the previous stage, the thematic axes are created. This term refers to titles that can be assigned to specific categories. Each thematic axis may contain at least one category. Once they have been created, the data are then aggregated both at the individual level with the so-called individual data tables and at the aggregate level with the so-called comparative data tables. It should be noted that the latter includes all the codes present in each of the individual tables.

Finally, in the last stage, the presentation and interpretation of the data obtained from the tables and the transcripts of the interviews is carried out. Any opposing or complementary views of the teachers are mentioned and in some cases their words are quoted.

Teachers' interview results

The role of European languages in public education

From the qualitative analysis of the interviews, the majority of teachers indicate that English is of a major importance, as it is characterised as an international language due to its everyday usage and communication (11 references). A large proportion of teachers mention that English is useful for finding a job and tourism purposes (8 references), studying (8 references) and technology (8 references). Also, a proportion of teachers consider English to be important not only for finding a job but also for commercial activities and transactions (4 references). Moreover, as far as language learning is concerned, the vast majority of teachers consider that foreign languages should be taught in a more experiential way (33 references). Also, there are several teachers (10 references) who argue that there is more ease of learning foreign languages from bilingual students.

In contrast to what has been said above, some teachers express difficulty in learning foreign languages from the first grade, only from bilingual pupils (10 reports) and from the general population of pupils (9 reports), due to confusion between mother tongue and foreign language.

Regarding the choice of other languages in primary education, most teachers agree that it is legitimate to offer the choice of French and German earlier than the fifth grade (14 references). A large proportion of teachers also consider it useful to introduce Spanish and Italian languages, earlier than the fifth grade of primary school(12 references). Other teachers argue for the introduction of Spanish only because of international communication (3 reports). Other teachers consider it crucial to introduce Russian together with Chinese in primary education (3 references). Also, a number of teachers consider it crucial to introduce Russian in schools (4 references).

Contrary to the above teachers, there are teachers who have a negative attitude towards the choice of other languages in primary education (4 reports), due to the young age of the pupils.

Even fewer reports were collected on the introduction of languages such as: Albanian due to the high percentage of Albanian-speaking pupils (2 reports), Spanish, Chinese and Japanese (2 reports) and Italian, Spanish and Russian due to their importance (2 reports). Finally, the fewest references were collected on the introduction of languages such as Spanish - Italian - Turkish (1 reference), Chinese - Turkish - Russian (1 reference), Italian - Russian - Chinese (1 reference), Albanian - Russian - Italian - Arabic (1 reference), Russian - Italian - Italian - Turkish - Chinese (1 reference), Italian (1 reference), Russian - Serbian - Italian - Spanish - Chinese (1 reference), Russian - Spanish - Italian - Albanian and Scandinavian languages (1 reference).

As regards secondary education, several teachers point out the possibility of choosing between Italian and Spanish (6 references). Also, the same proportion of teachers (6 records), consider that, in addition to Italian and Spanish, it would be useful to teach Slavic languages. Also, a section of teachers mentions the introduction of eastern languages in secondary education as valuable (2 reports). Then, an interesting view is expressed by one teacher, who argues that all languages would be legitimate to offer as an option (1 report). Another interesting view is that another teacher who argues, that emphasis should be placed on the teaching of migrant pupils' mother languages (1 report).

Finally, 1 report is pointed out as long for these languages: Spanish - Russian - English - French - Arabic, Spanish - Chinese, Russian - Chinese, Turkish - Italian - Scandinavian languages, Italian - Russian - Arabic, Chinese - Turkish - Arabic, Spanish - Chinese - Arabic, Spanish - Russian - Chinese, Spanish - Russian - Bulgarian, Spanish - Italian - Chinese, Russian - Chinese - Turkish - Italian, Italian - Russian - Russian - Chinese - Turkish - Bulgarian, Italian - Russian - Chinese - Chinese - Turkish - Bulgarian.

In contrast to all above, there is one report about the negative attitude towards the introduction of languages in secondary education, for reasons of confusion.

Teachers' attitudes and suggestions for improving the management of multilingualism and multilingual education

Concerning teachers' suggestions for offering a variety of languages in primary and secondary education, several teachers consider it important to learn foreign languages in an experiential way (7 reports) and the possibility of expanding foreign languages in education (4 reports). Moving on to teachers' personal assessment of the languages, they would prefer to have at both levels, the majority of teachers consider the teaching of Italian and Spanish in the Greek context important (6 references). Also, a number of interviewees argue that there is the possibility of teaching subjects in a foreign language in the Greek educational context (13 references). Interestingly, some teachers (4 references) have a positive attitude towards teaching subjects in the mother language of migrant pupils.

Continuing the personal investigation of the teachers' views, as to the proposed languages at both levels of education (primary and secondary), from one report receive languages such as Russian - Spanish - English - French, Russian - Chinese, Italian - Spanish - Chinese, Spanish - Italian - Russian, Romanian - Albanian - Bulgarian - Russian, Russian - Chinese - Italian - Spanish, Italian - Russian - Chinese - Bulgarian, Italian - Russian - Chinese - Chinese - Bulgarian.

Regarding teachers' suggestions for the teaching of immigrant students' languages, the majority (27 reports) have a positive attitude. A number of teachers (3 reports) also mention the existence of special classes for teaching specific languages of migrant pupils.

Teachers were given the opportunity to make suggestions on ways to improve multilingualism in the Greek school context. Specifically, the majority of teachers pointed out the improvement of multilingualism by providing better material and technical infrastructure to schools (9 reports). Also, regular teacher-training is another issue raised by interviewees (9 records). Another part of teachers talk about strengthening multilingualism by allowing more foreign languages to be chosen freely from students in the educational context (8 reports).

Also, a part of the interviewees emphasize the adequacy of teaching staff (8 references), while other teachers point out the integration of European and intercultural programmes in the formal and informal education system to improve multilingualism in Greece (7 references). Another issue for improving multilingualism raised by teachers is the change of language textbooks and school's curricula (6 references). Of course, in order to improve multilingualism, teachers claim that an attractive method of teaching foreign languages will improve multilingualism (5 references), also enriching the foreign language curriculum (5 references) and changing the state's attitude towards foreign language learning (5 references) would also contribute to improving multilingualism. Among the flurry of suggestions mentioned by teachers, they point out that increasing the number of hours of foreign language teaching, will improve multilingualism (4 references).

Finally, teachers also referred to the contribution of European programmes to improve multilingualism. The majority of them showed a positive attitude towards their contribution through contact with foreign cultures and languages (27 references), claiming that "*They contribute greatly both to the creation of a European identity and to reinforcing the idea that there is more that unites us than what separates us from our European partners*". In addition, several teachers (7 references) express a positive view of the European programmes also for educational and curricular purposes. Also, some teachers maintain a positive attitude towards the contribution of EU programmes by creating specialized programmes for other foreign languages (3 references). Another part of teachers also consider European programmes important for the recruitment and training of teachers (4 reports).

Conclusions

Conclusions on the role of European languages in public education.

As expected, teachers recognised the fact that English language played the main role, both globally and in Greece, something that is also found in other researches (Diallo, 2005; Griva & Iliadou, 2011). Most teachers acknowledge its designation as a "linguafranca" due to its everyday usage and understanding, which is confirmed by other researches (European Commission, 2004; Truchot, 2002; Tokatlidou, 1999). This is in full agreement with andcomplements their initial positive attitude towards the usefulness of English as a language of general communication (Poumpouris, 2010). Another study that is completely relevant to teacher's views, shows that the majority of Greek students recognized the importance and the necessity of knowing English for occupation reasons (Griva & Iliadou, 2011).

However, they identify shortcomings in terms of its teaching and suggest modernising the teaching of English, improving the logistical infrastructure, increasing the number of school hours of the foreign language, so that students have better learning outcomes.

Regarding language learning from the first grade of primary school onwards (6 years old), teachers show a positive attitude towards teaching more foreign languages in an experiential teaching approach. There is also a divergence in teachers' views regarding bilingual learners. Some cite difficulties in learning foreign languages from the first grade of primary school onwards for bilingual pupils, because they may be lagging behind in learning their mother language (L1) and become confused, while others consider that bilingual pupils have more ease in learning foreign languages, because of their already developed strategies and language repertoire.

As for the personal choices of teachers regarding the possibility of introducing other languages in primary education in the Greek educational system, apart from the expected ones concerning the "strong" European languages other than English, German, French, Italian and Spanish, many teachers would choose Russian, Albanian and Chinese, which can be explained by the increasing trend in tourist arrivals, the proximity of our country with some of thesecountries, and also by the need for commercial and economic purposes , making the knowledge of Russian, Albanian and Chineseuseful. The same views prevail in the introduction of foreign languagesin secondary education, giving particular importance to the introduction of Slavic languages because of their importance. Finally, few teachers showed a negative attitude towards the choice of additional languages in both primary and secondary education due to upcoming confusion among students.

Conclusions on teachers' views and suggestions for improving the management of multilingualism and multilingual education.

According to Dimitriou (2021), the investigation on teachers' views are considered to be of great importance, as they have a direct influence on the educational process and how the language course is implemented in classrooms. With r egard to the idea of offering a variety of languages in primary and secondary Greek education, teachers first mentioned language learning in a more experiential way of teaching. Then, a dichotomy of opinions was observed regarding the teaching of subjects in a foreign language in the Greek reality. Some teachers observe difficulties in teaching foreign language subjects in the Greek educational context due to a lack of resources in education and innovation, infrastructure and training projects. On the contrary, other interviewees observe the possibility of teaching subjects in a foreign language in Greek schools at both levels of education (primary and secondary). Also, some teachers have a positive attitude towards the teaching of subjects in the mother language of pupils with a migrant biography. Regarding the type of multilingualism, teachers are in favor of increasing the language repertoire, mainly by integrating Spanishand Italian languages in primary education and continuing them in thenext level of education.

Regarding the teaching of the languages of migrant students, the majority of teachers express a positive attitude towards the teaching of the languages of students with a migrant background and specifically propose the creation of special classes for teaching the specific languages of migrant students, in order to enhance multilingual education. In the context of the interviews, teachers expressed their suggestions on ways to improve multilingualism in the Greek school context. It is particularly significant that the majority of teachers showed a positive attitude towards multilingualism, a finding which is in line with the similar research of Griva and Chostelidou (2011). Specifically, teachers believe that the improvement of multilingualism will come through the enrichment of the foreign language curriculum and the possibility of increasing foreign language courses at both levels of education. Also, a large number of teachers suggested teacher trainings and the provision of better logistical infrastructure as key pillars for the formulation of a new educational policy that will improve multilingualism in Greece. Another group of interviewees also considered it imperative to recruit and properly staff schools with qualified foreign language teaching staff. Other ways suggested by teachers are the integration of their mother tongue for the pupils with a migrant biography in small classes; changing the foreign language textbooks and school's curricula; increasing the time of teaching foreign languages; and, finally, some of them point out the importance of exchange programmes, aiming to improve the quality of education through the exchange of intercultural and educational experiences, which is also mentioned in other similar researches (Griva & Iliadou, 2011).

To conclude, it can be stated that , the state should strengthen and promote multilingualism, and an important step in this direction(as teachers point out) would be to strengthen the foreign language programme by increasing the number of languages offered; by recruiting qualified teaching staff; and by strengthening the material and technical infrastructure.

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SESSION 10

(Educational Sciences- Didactics of languages and literature)

POETIC TEXT – A STRATEGY FOR FOREIGN LANGUAGE TEACHING AND KNOWING THE "OTHER"

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Abstract

The poetic text represents in itself not only a rich a linguistic resource, but also a useful tool for learning a foreign language. Studying a poetic text can help in students learn a foreign language by developing the language competence and enhancing further reading, understanding and communicating skills. In this paper we will try to take a closer look at the connection between language and poetry in the context of learning a foreign language. In order to explore the poetic text as a 'literary object', one of the most helpful tools is the Internet, the use of which provides countless resources that can be found quite easily. Aided by such resources, the teacher's role shifts into being a companion, or a mediator, guiding the students to several useful sites and resources, giving them space and independence, moving toward a student-centered approach in teaching and learning, always in accordance with their language proficiency. Students will have the opportunity to explore poetic images and figures of speech of poetry written in the foreign language. In this paper we will highlight the influence of a series of interactive didactic activities with the literary text in the center as a tool for the development of communicative and intercultural competences and, at the same time, as a key element towards the discovery of the Other. We will explore how the poetic text helps students not only to discover linguistic devices, but, at the same time, to go beyond the single unit of the text, towards the revelation of a broader vision of the world, taking into account the historical, sociocultural, and economic context, etc. Thus, the text becomes in return an element that explores the society, the era, the culture and mindset of the Other.

Keywords: *poetry, language competence, intercultural, source language, interactive.*

A poem should be palpable and mute
As a globed fruit,
A poem should be wordless
As the flight of birds.
A poem should not mean
But be.

Archibald Macleich

Introduction - Poetry and didactics of a foreign language

Poetic language seems to be a language on its own. In political history, we talk about "state within the state", while in the study of language, when we talk about poetic language we can talk about a "language within a language". In poetry, one plays with symbols, images, stylistic figures, rhythm, rhyme, etc. In addition to the main message, we can pass on more than one message, that is, secondary messages, more or less hidden. Russian literary critic Roman Jakobson, described poetry as ‘organized violence committed on ordinary speech’. Charlotte Melin emphasized that “*widely regarded as the most ‘literary’ of genres, poetry* [has been] *often excluded from language instruction due to the perception that it is archaic, inherently difficult to understand, and permanently lapsed into marginalized status*” (Melin, 2010: 349). The poetic text appears at first glance to be unclear to most of the class, whatever the level of the student, whether in elementary or higher levels such as high school or university. Somehow learning a foreign language (FL) upsets the students’ psychicbalance, puts them in danger, makes them return to childhood (infans in Latin, the baby who does not yet speak), to their imaginary world. Poetry, through its relationship with the substance of language, with the physical and emotional character of language, with its repetitions, repairs the shock of linguistic alterity by offering in some way a compensation of identity. It is thought that the process of collective and individual learning, based on the presentation of relevant poetic texts in the FL classroom, can correct the trauma that can be caused by immersion in a new language. The new language brings the learners back to childhood, it makes them in a way" children", a term used by S. Ferenczi, disciple of S. Freud, from the Latin *infans* which denotes the child who has not yet learned the language. D. Winnicott and M. Klein would go in the same direction. In a foreign language, someone who does not yet speak well, speaks like a child, with many mistakes and approximations. So students will need to work about the phonetic and the structure of the sentences in the FL.

Until recently in the teaching of foreign languages, poetry was present at the end of the chapter as the "icing on the cake" and for those students who were the best. But today poetry is no longer like a monument that should not be approached. It is present in most foreign language methods and occupies an important place due to the possibility it offers to work linguistically in a more refined way and has become an interesting didactic tool for learning a foreign language. And on the other hand, if once the FL students faced poetry only through books, today they have even more diverse sources such as the Internet. Through different platforms, the students can read, listen to a recited poem and find enough material to understand and analyze different poems. We will see how poetry in a foreign language class can pose some difficulties, but on the other hand, its use has undeniable advantages.

The poetic text becomes also a way to enter, to have access to the culture of the Other. The language, the words, the sentences, the intonation become a way to penetrate in the heart of the language. It is the idea that is expressed in “Emigressence” written by the poet Hédi Bouraoui.

J’ai choisi de vivre dans les mots
Au cœur d’alphabets inconnus
Là où les oiseaux chantent
Leur silence immémoriel
Aux quatre coins des cinq continents.

Ainsi les langues me transportent
Sur l’arcane même de mon corps éclaté […] *(Hédi Bouraoui, Transpoétique, éloge du nomadisme, Mémoire d’encrier, Montréal, 2005)*

1. Literary text, poetic text: interest and difficulties

Over the years, literature has had an important place in foreign language teaching. Even in primary school, pupils were taught the literary masterpieces of foreign literature. But in this perspective where writing dominated, the student had a good passive knowledge of the language and in most cases it was difficult for him/her to communicate. With the introduction of methods having a mainly communicative approach, the foreign language will be considered more as a means of communication with the other, not as abstract knowledge. However, there are various difficulties that the foreign language students face, as outlined below.

- Difficulty in understanding the discursive intertext: To read a literary text, means to read the intertext. Modern criticism points out that every literary text is related to other previous and or contemporary texts and that literature is layered and the layers must be recognized to understand the meaning. The phenomenon of intertextuality is related to the literary level of the reader, which is built step by step through his/her readings.
- The other difficulty is the network of connotations. The polysemy that appears in a literary text looks like a fruitless game of connotations, that is, messages to be undone. How can a student approach these connotations when he does not have that intimate proximity to the language as a native speaker?
- In the poetic text, very often linguistic rules are violated for the effect of literary creation and linguistic effects.

So, as we can see, there are many challenges there, but scholars have raised their voice in order to use poetic texts in foreign language classes. The literary and poetic text requires from the reader psycholinguistic activities which are related to the teaching and learning of any language.

Poetic text has also its advantages:

- In general, the poetic text is not affected by current affairs (such as press articles) and deals with almost universal themes (love, death, life, fear...)
- It offers students the opportunity to enrich their vocabulary in a new way by providing a meaningful context that can be used and memorized effectively, because of the rhyme and rhythm that facilitate the teaching/learning of pronunciation.

- It encourages students to develop their creativity where they can simultaneously discover interesting ideas for creative writing.
- It is motivating because it generates strong emotional reactions.
- Its language is written to be spoken, which facilitates, through the rhythm and play of sounds, the learning of pronunciation and intonation. We acknowledge that some poetry can be opaque, especially when rooted in intertextual references, such as allusions to ’books or texts that learners have not read, and so would emphasize that part of the work that even novice language learners can access: its sounds.
- The poetic text in most cases is a short text, therefore, it can be remembered easily.

In fact, the poetic text constitutes a real linguistic laboratory. Through its lexical and syntactic richness, it is a goldmine for teaching. The poetic text, therefore, will turn into a space to be explored in the multiplicity of its meanings and messages.

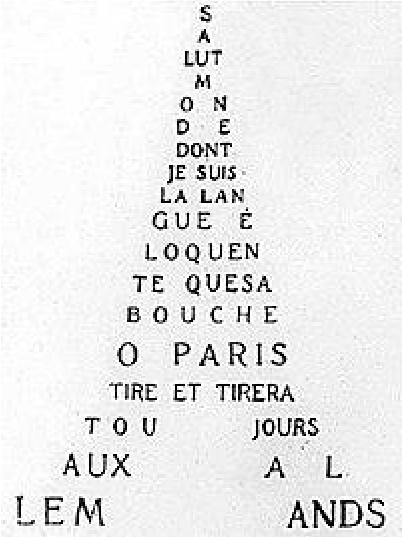
2. Choices we can make according to student’s level of proficiency

Poetry can be studied at all levels of teaching; the teacher can choose the texts, objectives and activities related to each text. We can even use poetic texts since the elementary level, but we need to be certain that they poetic texts are subject to certain criteria:

Choosing form and theme:

For a beginner level, relatively short poems are recommended. And while we present these texts to the students, we can vary the approach: we can listen to the audio poem, as a variation for the students, not always listening to their teacher's voice.

The teacher can emphasize the typography of the texts by presenting the students with different poetic forms and pointing out that poetry does not always have a 'classical' form with verses and quatrains, giving them the model of Apollinaire's calligrams as well in order to see the different ways to present a poetry, in order to view the beauty and the richness of the literature.



As for the topic of the poem, it will depend on the objectives the teacher has set for the class, but either way, the topic will open up to a culture. The selected text will raise questions about the author, the topic covered, the poetic trend of the time, etc. The selection of the topic will also vary depending on the activity planned by the teacher. If the teacher wants to open a discussion, or give the students a task to express themselves in writing, a lexical and grammatical repetition, etc. In all cases student will have the opportunity to expand their knowledge in different ways.

A challenge to be faced according FL level of students

The difficulty level of a poem depends on many factors. The lexicon used is the first element to be considered if we want to bring a literary text for an initial level. Morphosyntactic elements can also pose a major difficulty for a novice audience, the linguistic register as well. At the elementary level, the daily register would be preferred, while for an advanced level we will also use poems where the poet has used elements of the popular language, or even at the other extreme, very elevated language (as in the case of classical poems). Poetic hermeticism is a problem in the case of beginners or those who have limited literary background. At all levels, the teacher should start with realistic texts before introducing his students to more refined texts where the imagination is at a high level. A difficult text will quickly tire the class and bring no benefit, while we can do a lot with a simple text. The teacher will not forget the fact that his/her class is heterogeneous: every student/pupil comes with a very different linguistic and literary background. Each text will be read from these very different approaches. It is important to have a differentiated pedagogy by proposing group work and encouraging those who have more knowledge about the foreign language, culture and literature to share it with others. Contemporary literature texts can be a good choice because they are closer to the students' tastes and deal with more current topics. For poets of the past centuries, a kind of historical and lexical contextualization is needed as well.

3. Objectives we want to achieve

A poem is first of all a cultural discovery and an exchange on a particular subject.

Linguistic objectives

From a linguistic approach, poetry can serve as a basis either for teaching a grammatical issue or as a repetition of a grammatical structure. It can be an opportunity to enrich the vocabulary, discover new expressions, or another language register. The practice of a literary text must be at the same time the practice of target language. Language creates literature and literature supports language. The teaching of one cannot be conceived without the other.

Poetry, as a linguistic expression superior to the common use of the foreign language, could serve as an important pedagogical support in the functioning of its teaching. Although difficult to manipulate, the language of poetry requires different procedures to benefit from it in the learning process. An introduction to various poetic notions related to versification and figures of speech would be essential before dealing with the linguistic side of a given poem. Syntax analysis helps to explore the elements of sentences or strings, and therefore to restore the logical connections between its parts, and finally understand the meaning of their data. Once it is understood from a linguistic point of view, the meaning of the poem is gradually revealed and the poetic images unravel to form the vision of the whole. Once the poetic analysis is produced, students will know how to both enjoy and analyze a poem. This operation would be worth the risk, because its results will be of great benefit to the students as well as to the teacher.

Cultural objectives: poetry and civilization - Discovering the Other

Poetry also enables students to become aware of another culture, different from their own. Reading a poem in a foreign language class is more than just a linguistic approach. It is also a discovery of another culture, a literary current, a writer, an era and a sensibility. At all times poets have described the world around them. The literary text is a place where the myths and rites in which a society is distinguished from other cultures are developed and transmitted. Therefore, poetry helps the foreign language learner to understand the foreign culture. The different interpretations that students will bring are mutual enrichment. The teacher can influence the discovery of changes and the point of view of the *other*, with whom he/she makes contact through the poetic text. The lesson thus turns into a moment of discovery of foreign culture and students are encouraged to see and understand the differences between the foreign culture and their own culture. It would allow them to discover other concepts of the world, other ways of living and thinking. It can invigorate the meeting of mentalities and shed light on the meeting and discovery of themselves through the experience of *the other*. We have seen that a comparison between two or more poems belonging to the students' native language and the target language can give them a cross-cultural experience and an experience of respect for the other, which is sorely lacking in some contemporary societies. In this dialogue of cultures through the teaching of the poetic text, divergences of interpretation should not be perceived as obstacles, but as an enrichment that will enable students to better understand the other. After all, at a time when interculturality is at the center of political, social, educational and didactic debates, we encourage the use a comparative study between two or more poetic texts to provide real reading skills and guide the students towards intercultural dialogue used as a basis in relation to the study of poetry what they have acquired in their own culture. Establishing bridges between cultures makes it possible on the one hand to combine the learning of a language with the knowledge of the culture and on the other hand, the foreign culture with the native culture.

4. The four language competencies

Studying poetry in foreign language class helps develop four language skills, as described below:

Understanding the audio document

This skill is developed when the teacher chooses to either read the text or have the students listen to it as an audio document, by an actor, etc. After listening, students are invited to answer questions about the text and aesthetic values. Beginner level students can work with paraphrasing, synonyms-antonyms, figures, images, drawings, etc.

Reading comprehension

Reading strategies will be different according to the type of poem and according to students' proficiency level. The teacher will use different types of reading: diagonal, close reading (detail, selection), or partial reading. Step-by-step disclosure is also a valuable technique for poetic text. When possible, another text by the same author (in prose, novel, essay, novella...) or a text from the same historical period by another poet that proposes a vision opposite to the one presented can also be proposed in the poem being studied. Intertextuality makes it possible to highlight some essential aspects of the same author or the same era.

Speaking

For some scholars, memorizing a poem is important. This enables the student to remember the pronunciation and to fix the intonation, as well as to remember the sentence structures in the foreign language. Any possible exchanges during and after the presentation of the poem enable the development of this competence: the staging of the situation, the topic, the lexicon or the grammatical issue studied can be proposed after reading the poem.

Writing

In the mentioned activities, we are very far from the discovery of making art, literature. Scholars tend to encourage writing by reusing formal structures used in poetry. In many cases, students can break down the text to reconstruct it again. They can also create, by transforming the poem and creating a poem of their own. This leads to the transition from linguistic competence to discursive competence and students are being transformed from readers to creators. The poetic text, like any literary text, mixes reality with the imaginary, and it is precisely in the gap between the two that the intercultural awareness so advocated in the teaching of a modern language can develop. Reading poetry is, on the one hand, a linguistic activity: the poem prompts readers to think about language through sound and integrate it into that formal space where the most scrupulous attention is paid to language, where the focus of (and on) language is most alive. It is therefore the place where work on form and "substance", ideas and images, come together in the most decisive way. It invites students to work indirectly on themselves, their story, and their articulacy.

Conclusions

Literature is a part of the language used by many teachers in the process of teaching and learning of a foreign language. Poetry has many benefits for both students and teachers in developing students' language skills. The teaching and learning of poetry is beneficial depending on the poems chosen and the approaches used in the classroom. It is suggested that the FL teachers use poems as reading material in class, as the chosen poems must be suitable for the students according to their age, understanding and interest. Reading and studying poetry in the target language is really motivating and rewarding for FL students. Reading and learning poetry will bring benefits for students of different proficiency levels. Poetry will give students the opportunity to learn new vocabulary, work on pronunciation and improve grammatical and syntactic skills. Accessing poems with the support of online materials will provide students with an authentic foreign language experience and will motivate and encourage them to develop their skills and yield better outcomes.

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SESSION 11
(Educational Sciences- Didactics of languages and literature)

FOREIGN LANGUAGE LEARNING MOTIVATION IN ACADEMIA

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Abstract

Every individual aiming to learn particular foreign language (FL) is motivated by certain factors such as culture or customs of a country, or due to a personal goal striving to achieve. Motivation is an internal factor that encourages or initiates, organizes, directs and determines the intensity and duration of learning activities, and plays a particularly important role when it comes to learning a foreign language. The paper provides an insight of the foreign language motivation of the higher education academic staff, particularly investigating two types of motivation in learning or improving a foreign language. The instrument used in the research was an adapted version of Attitude/Motivation Test Battery by R. C. Gardner, aimed for speakers of English as a foreign language that is mandatory and the most widely used foreign language in academia. The participants included in this research are academics from several public and private universities in the R. of North Macedonia. According to the results, the study provides analysis of the level of motivation from instrumental and integrative aspects regarding the foreign language learning, which in future might significantly influence on raising the awareness and increasing the motivation about foreign language learning (FLL) as well as on the improving of the language users' proficiency.

***Keywords**: Academia, foreign language learning, instrumental motivation, integrative motivation, motivation*

Introduction

English language is one of the few FLs that are increasingly affecting humans and their everyday lives, as it has become a necessity for every individual, regardless of the actual reason. The aim oflearning and then acquiring certain knowledge of a foreign language can be driven by many factors; however, it is highly believed and proven that motivation is the top most significant or moreover the internal factor that encourages or initiates, organizes, directs and determines the intensity and duration of learning activities, and plays a particularly important role when it comes to learning a foreign language. Motivation has played a central role in number of empirical research and theoretical work in the context of foreign language learning, and according to MacIntyre "…it represents one of the most appealing, yet complex variables used to explain individual differences in language learning" (MacIntyre et., al. 2001, p. 462)

Foreign Language Learning Motivation

Motivation in foreign language learning has been a significant area of interest to many researchers for almost half a century, considering the fact that it is a substantial part of the affective factors along with the learner's anxiety and self-confidence, a set of three determining factors for successful foreign language acquisition. According to one of the most influential researchers on the topic, Zoltan Dornyei, motivation is still considered an enigma "for which numerous studies could not provide a universal definition" (Takać & Berka, 2014, p. 78). Robert c. Gardner and Wallace E. Lambert, amongmany others are the scientists that profoundly studied motivation from many standpoints and have discussed how attitudes towards a target language and culture can affect the motivation to learn and acquire a FL. Considering the fact that these two scholars advocated a social-psychological approach that focused on the social context and relations between language communities, measured by the peoples' social attitudes, their work resulted in the arousing of the **instrumental-integrative** dichotomy, which reflects the purpose of the FLL motivation to any age group of learners and users (Gardner& Lambert cited in Brown 2001). In terms of further research on the topic Gardner and McIntyre (1991) later provided an additional explanation regarding the difference between the notions *orientation* and *motivation*. Orientation refers to reasons for learning a second language, and motivation refers to efforts to learn the language.

Motivation in Adult vs Young Language Learners

According to Lenneberg's Critical Period Hypothesis (1967) young and adult learners differ in terms of brain maturity, which results in differences in language acquisition. The hypothesis suggests that language acquisition is easier and more natural for young learners due to their (young) brain's flexibility which refers to the fact that once the aforesaid (critical) period (around puberty) is over, it becomes challenging for them to acquire a foreign language impeccably, or at its best. It is good to note that since young learners can master pronunciation faster than adults as they are in need of more communication and naturally use the language more, it is significant to mention that adults are at some point in advance with the grammar acquisition which is a result of the mother tongue interference that they have mastered long before the young learners. Adult and young FL learners significantly differ as a category of learners, despite their prior knowledge and skills of FL acquisition and achievements, as claimed in many research studies by now. According to Gardner (1982) **young learners'** or **student's motivation** is comprised of 3 elements such as: *effort* (the time spent studying and the drive of the learner), *desire* (the yearning to become proficient in the language) and *affect* (the emotional reactions of the learning towards studying). On the other hand, according to Cyril Houle (in Gordon & Howard., R.D. 1993) **adult's motivation** is divided into 3 learning orientations such as*: goal-oriented; activity-oriented* and *learner-oriented.*

Motivation regarded as the learner's orientation emphasizing the goal of acquiring a second/ foreign language, is fully influenced by a number of factors. These factors affect the motivation of the aforesaid groups of learners, regardless of the type of motivation present. However, there has been a lack of empirical data and attention paid on research about the adult motivation in the area of foreign language learning.

Based on the assumption and some current studies it is claimed that adult learners decide to learn for pragmatic reasons, i.e. due to the need to know or be proficient in English language, which categorizes them to be instrumentally orientated/motivated. Since one might presume that the instrumental should be a total opposite of the integrative motivation, a high level of instrumental may indicate that the integrative motivation should be less represented or not present at all. It is highly believed that in modern conditions of life and work, adults should have acquired a solid command and knowledge of English within their workplace and living environment, in order to be able to facilitate their daily private and professional obligations. According to Dörnyei (1994), some previous research has shown that integrative motivation is crucial for the younger population rather than for the adults. Analyzing the needs for proficiency of English, it is clear that adults initially opt to attend language courses for professional reasons, whereupon the globalization processes which have made English a global language, play a significant role in determining the reason i.e. the necessity of a potential employee to excel in a foreign language (English) as an asset among the other professional skills.

Gardner-Lambert's Aspects of Integrative and Instrumental Motivation

Integrative motivation implies to learning FL in order to get closer to the target community and culture, but it also implies to respect, openness and closeness to the target language and culture, and sometimes also entails integration into the social environment of another speaking area as well as the aspiration for FL learners to become similar to native speakers. In contrast to the integrative, instrumental motivation is manifested by learning and acquiring the language for practical reasons i.e. for career advancement, to get good grades in subjects/exams, for receiving a scholarship or obtaining a certificate in certain language exam etc.., (Gardner, 1985).

Integrative motivation appears when the need of the FL acquisition is associated with the effort invested with the goal that is intended to be achieved through the desire to learn along with a positive attitude toward the language and the context in which it is spoken. Excluding these factors, an integrative orientation represents a goal that lacks motivation. As from many research studies on the topic it is said that the learners who choose integrative motivation instead of instrumental, as an option of their motivation for language learning, show a higher level of motivation intensity (Dörnyei& Schmidt, 2001).

Other aspects of Instrumental and Integrative Motivation

Zoltan Dörnyei (1994) reveals that there is an integrative motivational component that includes an instrumental orientation, for example the desire for acquisition due to pragmatic reasons. Therefore, he makes an attempt to refute Gardner and Lambert's theory on instrumental-integrative dichotomy that prevails on the topic of learning a foreign or second language motivation (Gardner & Lambert, 1972). Occasionally, instrumental and integrative motivation can appear with different intensity - the instrumental perhaps due to its utility i.e. the practical reasons to achieve a goal (good grade, better job) and the integrative due to learners' urge towards being integrated and belong in a certain group or society. Yet, student can be integrative and instrumentally motivated at the same time because one type of motivation does not exclude the other, although one of them often appears to be predominant.

Lamb (2004, p. 32) points out that "integrative and instrumental motivation are difficult to distinguish as distinct concepts: contacts with Westerners, computer usage, understanding of pop poets, studying abroad, travel, career advancement – all of these pursuits are interrelated, and are also associated with English as an integral, central part of the process of globalization which transforms societies and has a crucial impact on the lives of people".

Considering the fact that motivation in general is an internal factor that encourages or initiates, organizes, directs and determines the intensity and duration of learning activities, and plays a particularly important role when it comes to learning a foreign language, the authors' aim was to provide an insight of the foreign language motivation of the higher education academic staff on a state level, particularly investigating the presence and the level of the integrative and/or the instrumental motivation in learning/improving a foreign language.

Methodology

As for the purpose of this research, the authors used an adapted i.e. customized version of Gardner's (1985) Attitude/ Motivation Test Battery – AMTB. According to Y. Hashimoto (2002, p.30) such adaptations have been used in a number of studies investigating foreign/second language learning motivation, such as by Baker & Macintyre, 2000; Gardner, Day, & Macintyre, 1992; Gardner, Lalonde, Moorcroft, & Evers, 1987; Gardner & Macintyre, 1991; Gardner & Macintyre 1993; Gardner, Tremblay, & Masgoret, 1997; Gliksman, Gardner, & Smythe, 1982; Masgoret, Bernaus, & Gardner, 2001;

Tremblay & Gardner, 1995). The AMTB is made up of over 130 items, and its reliability and validity have been supported (Gardner & Gliksman, 1982; Gardner & Macintyre, 1993). The designed adapted version of Gardner's AMTB was aimed for speakers of English as a foreign language which is mandatory and the most widely used foreign language in academia.

Participants

The survey involves 72 academics particularly teaching assistants, professors, researchers, adjunct professors etc., from several public and private universities in the Republic of North Macedonia. The participants' level of English proficiency has not been examined with proficiency pre-test, as the study relies on the higher education requirements of B2-C1 level of proficiency of all academic staff members as a prerequisite for employment.

Instrument

As for the purposes of this study, in order to asses and classify the respondents' type of motivation, the authors of this paper used the adapted version of Attitude/Motivation Test Battery (AMTB) developed by Gardner in 1985, aimed for assessment of various variables based on the socio-educational model. Gardner's questionnaire initially is comprised of more than 50 items organized in sections, out of which 4 statements are dedicated on the integrative and 4 on the instrumental orientation in terms of FL learning. The authors decided to adapt the original items into 20 statements separated into Part A - statements concerning *instrumental motivation* and Part B - statements concerning *integrative motivation*. The anonymous questionnaire was designed in Google Forms and sent to academic staff members from all public and several private universities in the R. of North Macedonia. The responses contained a 5-point Likert scale ranging from 1 to 5 i.e. Strongly disagree to Strongly agree. The purpose of the survey was clarified to the respondents prior to the distribution of the questionnaire (it is customized exclusively to investigate the motivation for learning or improving a foreign language of academic staff in Macedonia) and the respondents were given approximate time of 2 weeks to submit their response.

Data collection analysis

The data collected from the questionnaire was statistically analyzed, presenting interpretation of the scores in 5 tables (see also Appendix 1 and Appendix 2) and 1 chart.

Table 1. Interpretation of the mean score of the motivation level

Scale	**Mean range**	**Level of motivation**	**Score range**
1	Strongly disagree	Lowest	1.00-1.50
2	Disagree	Low	1.51-2.50
3	Neutral	Moderate	2.51-3.50
4	Agree	High	3.51-4.50
5	Strongly agree	Highest	4.51-5.00

Table 1 presents that the mean score of each statement indicates the respondents' motivation level, precisely, the higher the mean score the higher the motivation level and vice versa. The mean score ranges from 1.00 as the lowest to 5.00 as the highest.

Table 2. Type of mean score related with the motivation level

Type of mean score	**Mean value**	**Motivation level**
Instrumental	4.025	High
Integrative	4.118	High
Overall mean score of both types	4.084	High

According to the data presented in table 2, the instrumental motivation with a value of 4.025 appears to be lower when compared with the integrative mean score of 4.118. Additionally, the overall mean score from both types of motivation appears to be at a high level with a value of 4.084, along with the high level marked by both, the instrumental and the integrative motivation. The only apparent difference is the prevalence of the integrative motivation level with a slight surpass and a value of 0.93.

Table 3 (see Appendix 1) presents the mean score of the statements aimed to investigate the instrumental type of motivation. According to the demonstrated scores, the average motivation level appears to be high with the overall mean score of 4.025, whereas the lowest value is 3.43, which is the only question that falls into the moderate level. The rest of the responses are at a high level.

Table 4 (see Appendix 2) presents the mean score of the statements aimed to investigate the integrative type of motivation. According the demonstrated scores, the average motivation level appears to be high with the overall mean score of 4.118, whereas the lowest value is 3.81 which as a total with the overall score belongs to the high level of motivation.

The mean score from Table 3 and Table 4 are presented in Chart 1 below:

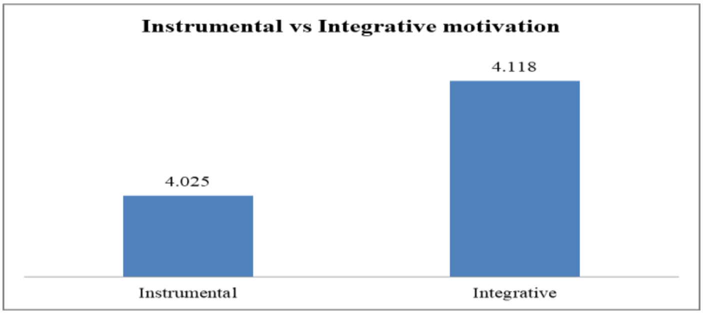

Chart 1: Instrumental *vs* integrative motivation mean score

Table 5 as given below sheds light on the statements with the highest and the lowest score from both types of motivation. The statements indicating **instrumental motivation**, related to learning/improving English for better academic work positions abroad and participation in international academic events/ seminars/ conferences represent similar value i.e. the highest scores such as 4.40 and 4.35. The lowest score however, in terms of instrumental motivation is shown in the statement *"I like to learn/improve my English because I need English language* *to get certified with FCE, IELTS, TOEFL",* with a mean value of 3.43 which is categorized as a moderate motivation level. As seen in Table 5, the mean scores indicate that **integrative motivation** slightly prevails. The highest mean score of 4.37 is found in the part related to the importance of learning English for study visits or mobility. On the contrary, the lowest mean score of 3.81 is associated with the significance of learning English for integrating with foreign cultures. This score falls into the high-level category.

It is significant to point out that the highest mean score belongs to the instrumental motivation section for Q4. *"I like to learn/ improve my English because it will be useful in getting better academic work position abroad"*, which is marked with the highest score given in percentage but also with a total number of 40 "strongly agree" and 25 "agree" responses which makes a total of 65 out of 72 participants. Analyzing this statement and its highest score indicates the conclusion that Macedonian academics are instrumentally motivated as much as they are and integratively motivated i.e. they would improve their English only if they get an opportunity to work abroad or if they are offered a better academic position etc.

As seen in Table 5 - statement 4 and 7, it is also important to note that even though the instrumental motivation appears with a score of 4.40, which is above the highest value of the integrative motivation yet the overall mean score sets the instrumental to be slightly below the integrative motivation. However, considering the overall mean score of both types of motivation it is obvious that the respondents are *instrumentally* and *integratively motivated* almost at the same level.

Table 5. Statements with highest and lowest mean score

Statements	**Type of motivation**	**Highest mean score**	**Lowest mean score**
Q4. it will be useful in getting better academic work position abroad	Instrumental	4.402778	/
Q7. It will enable me to participate in international academic events/	Instrumental	4.402778	/

seminars/ conferences			
Q2. I need English language to get certified with FCE, IELTS, TOEFL	Instrumental	/	3.430556
Q17. it will help me during a study visit/ mobility	Integrative	4.375	/
Q16. I need English language to integrate with foreign cultures.	Integrative		3.819444

Conclusion and discussion

This research confirms that people are motivated for different reasons and that both types of motivation can be present simultaneously. Integrative motivation is associated with the desire to achieve positive change, personal growth and development, while instrumental motivation is associated with achieving a specific goal. This difference is somewhat related to the learners' age and life goals. It is said that youngsters tend to get integrated in new society, new community, groups etc., while the adults rather skip that option and tend to have a specific reason such as career advancement, if they need to undertake such a step. According to the results from the survey, the surprising fact is that even though the target group of this study is the adult population, yet they are both, highly instrumentally and integratively motivated, where the latter (integrative) is the dominant one, which confirms the initial Gardner-Lambert theory. On the other hand, according to the results, both types of motivation actually do not differsignificantly as seen by the mean score, which undoubtedly confirms Dornyei's claims that integrative and instrumental are not that oppositebut rather similar to the "yin and yang" concept whereas both are indisputably contributing to the learner's aims. As of from the generaldata obtained by the questionnaire it can be categorically concluded that the respondents belonging to the academic world in Macedonia, most of whom have learned and may have acquired the desired proficiency of English before, still wish to continue learning. In otherwords, the one who learned will never stop learning or wanting to learn.

Thus it is inevitable to say that FL motivation is and will most probably remain at its high level among the intellectuals and academics in Macedonia.

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Appendix 1: Mean score of the instrumental motivation

Table 3:

Part A. I like to learn English/ improve my English because…	1	2	3	4	5	Mean score
Q1. I think it will someday be useful in getting a higher academic position.	1	5	7	33	26	4.083333
Q2. I need English language to get certified with FCE, IELTS, TOEFL	4	14	15	25	14	3.430556
Q3. it will enable my future PhD/ Post Doc position.	1	7	21	29	14	3.666667
Q4. it will be useful in getting better academic work position abroad	1	2	4	25	40	4.402778
Q5. English language is a basic requirement for academic positions.	3	2	16	29	22	3.902778
Q6. I will be able to search for information and materials in English for my future research projects/ studies	0	2	6	31	33	4.319444
Q7. it will enable me to participate in international academic events/seminars/ conferences.	0	2	7	23	40	4.402778
Q8. it will help me publish articles in English and be more visible on scientific research platforms	0	2	5	30	35	4.361111
Q9. other foreign colleagues/ researchers will respect me more if I know English	7	7	15	27	16	3.527778
Q10. it will help me establish or maintain international cooperation with fellow colleagues abroad	0	2	9	37	24	4.152778
Overall mean score						4.025

Appendix 2: Mean score of the integrative motivation questions

Table. 4

Part B. Learning English/ Improving my English is important for me because…	1	2	3	4	5	Mean score
Q11 it will allow me to be more at ease with English-speaking fellows/ people	0	2	7	35	28	4.236111
Q12. it will help me when traveling abroad	1	0	6	34	31	4.305556
Q13. it will help me make friends with people from abroad.	0	2	10	36	24	4.138889
Q14. I enjoy conversing with people/ colleagues who speak English as well	1	2	18	35	16	3.875
Q15. It will enable me to understand foreign cultures and tradition.	2	2	14	34	20	3.944444
Q16. I need English language to integrate with foreign cultures.	1	5	17	32	17	3.819444
Q17. it will help me during a study visit/ mobility	1	1	1	36	33	4.375
Q18. I will be able to participate freely in activities of other cultural groups	2	1	8	45	16	4
Q19. it will help me introduce myself/ my areas of interests.	1	2	4	41	24	4.180556
Q20. it will help me participate in formal/ informal discussions with foreigners.	1	2	1	38	30	4.305556
Overall mean score						4.118

SESSION 11

(Educational Sciences- Didactics of languages and literature)

ASSESSMENT OF STUDENTS' ACHIEVEMENTS AS AN IMPORTANT ELEMENT TO IMPROVE THE QUALITY OF LANGUAGE TEACHING AT THE TERTIARY LEVEL

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Abstract
The process of assessment is defined as the systematic collection and analysis of information to improve students' learning. This statement captures the essential task of students' assessment which enables the professors to measure the effectiveness of their teaching by linking students' performance to specific learning objectives. The main hypothesis of this paper is that the quantitative measurement of students' learning isimportant for providing useful feedback for the professors and the students about the extent to which students are successfully meeting course learning objectives. At the same time assessment enables the professors to determine the metrics of measurement for students' understanding of and proficiency in course learning objectives. It is also considered to have vital importance in the pedagogical design of educational curriculum before creating specific units and lessons and considering up front how the students will attain desired understandings.

The research method used for this purpose is based on national, institutional and study programme/course rules for students' assessment along with the professor's regular practice of note-keeping and practical application of the rules. Therefore, a descriptive method is applied combined with a case study analysis and a qualitative approach is put in place.

This paper focuses on the importance of student's assessment in teaching and learning in higher education. It discusses the assessment process conducted at the English Department of the Faculty of Education at the University "St. Kliment Ohridski" – Bitola. Put more precisely, it emphasizes the importance of setting high-quality assessment methods at the very beginning of tertiary education and following set of Rules established on a University level.

***Keywords**: assessment, students, achievements, higher education.*

Introduction

Over the past few decades' foreign language learning and teaching have undergone a significant paradigm shift as a result of the research and experiences that have expanded the scientific and theoretical knowledge on how students learn and acquire foreign language. Back in the second half of the last century learning a foreign language was considered a 'mimetic' activity being a process that involved students repeating new information. Grounded in behavioral theories of learning and structural linguistics, the quality and quantity of language and feedback were regarded as major determinants of success in learning language. In 1959, Noam Chomsky's review dramatically changed the way of looking at language by arguing that language was rule-based activity, not a set of habits. He argued that the stimulus-response psychology could not adequately account for the creativity involved in generating new utterances using internalized rules. The creative aspect of language behavior, in this sense, implies that the human mind is involved in deep processing of meaning rather than in memorized responses to environmental stimuli. Chomsky claimed that young learners are biologically programmed for language and have an innate ability to discover for themselves the underlying rules of a language system. His ideas led to the demise of structural linguistics, behaviorist psychology and audio-lingual approach to language learning and this led to an alternative theoretical position centered on the role of the linguistic environment in combination with the child's innate capacities in acquiring language. The Socio-cultural theory proposed by Vigotsky as the most prevalent and most widely held theory views cognition as a social faculty. According to him, participation in culturally organized activities is essential for learning to occur, which makes active engagement in social dialogue very important. Learning is regarded as intentional, goal-oriented and meaningful and is not a passive process as opposed to teaching as more active.

Because classrooms are again a major setting for language learning the pursuit to determine those elements that enhanced classroom language achievement became very significant. Why do two learners who have the same instructional opportunity achieve varying levels of language proficiency?Research focused on individual skills or abilities and environmental factors that may impact foreign language achievement and proficiency. In this sense, individual cognitive factors such as intelligence, aptitude and ability and affective factors such as attitude and personality variables are considered to be significant elements when assessing the students' achievements.

Research aim and methodology

The paper aims to produce arguments in favor of the hypothesis that the quantitative measurement of students' learning is important for providing useful feedback for the professors and the students about the extent to which students are successfully meeting course learning objectives.

The research method used for this purpose is directly connected to the paper's topic, which derives from national, institutional and study programme/course rules for students' assessment along with professor's regular practice of note-keeping and practical application of the rules. The theme can be only investigated with the descriptive research method. Still, for more objective results and more precise and in-depth research the descriptive research method is combined with a case study analysis and a qualitative approach is put in place, too. The professor's observations and regular practice of note-keeping of the students' feedback while teaching English language and literature play also an important part in determining the appropriate ways of students' assessment.

Apart from observations and professor' notes, a significant part of deriving scientifically based conclusions is the comparison of students' achievements, performances, results, views during the study process.

Since this problem involves collecting and analyzing non-numerical data to understand concepts, opinions or experiences, the descriptive method, obtaining information on what, when, where and how, is applied accompanied by the why component. Furthermore, two of the three most common qualitative methods, participant observation and focus groups, are used and a case study, as the qualitative approach is put in place.

The observed focus group consists of 28 first-cycle students, the first study year of the English Language and Literature study programme. The observation, the research method and the analytical process are conducted by the professor teaching English Literature and the Quality Assurance Advisor at the University "St. Kliment Ohridski" – Bitola.

The attempt to verify the above-mentioned hypothesis is based on a case study conducted at the English Department of the Faculty of Education at the University “St. Kliment Ohridski”- Bitola. Along the path, other more specific and narrow beliefs, elaborated in the conclusion have been also proven right.

Theoretical background

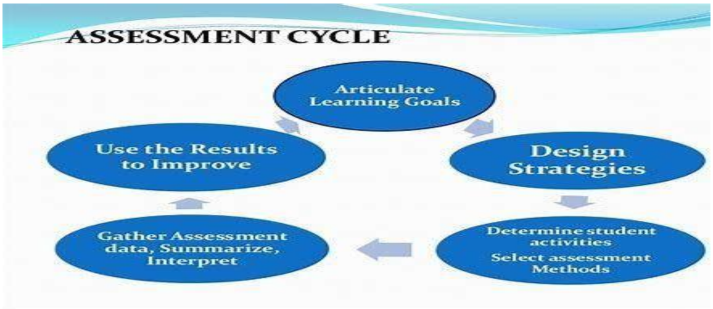
In education, the process of assessment is defined as a wide variety of methods and tools used by the professors to evaluate, measure and document the academic level, learning progress, skills acquisition or educational needs of students. The process of assessment is important in helping the students learn, determine whether they have understood the course material and get motivated throughout the whole educational process.

There are generally three forms of student assessment that are most frequently discussed in the theory of teaching and learning. The first, **summative assessment** is assessment that is implemented at the end of the course of study. Its primary purpose is to produce a measurethat “sums up” student learning. Summative assessment is comprehensive in nature and is fundamentally concerned with learning outcomes. While summative assessment is often useful in providing information about patterns of student achievement, it does so without providing the opportunity for students to reflect on and demonstrate growth in identified areas for improvement and does not provide an avenue for the instructor to modify teaching strategy during the teaching and learning process. (Maki, 2002) Examples of summative assessment include comprehensive final exams or papers.

The second form, **formative assessment**, involves the evaluation of student learning over time. Its fundamental purpose is to estimate students’ level of achievement in order to enhance student learning *during* the learning process. By interpreting students’ performance through formative assessment and sharing the results with them, professors help students to “understand their strengths and weaknesses and to reflect on how they need to improve over the courseof their remaining studies.” (Maki, 2002, pg. 11) Pat Hutchings refers to this form of assessment as assessment behind outcomes. She states,“the promise of assessment—mandated or otherwise—is improved student learning, and improvement requires attention not only to final results but also to *how* results occur. Assessment *behind* *outcomes* means looking more carefully at the process and conditions that lead to the learning we care about…" (Hutchings, 1992, pg. 6,). Formative assessment includes course work—where students receive feedback that identifies strengths, weaknesses, and other things to keep in mind for future assignments—discussions between professors and students, and end-of-unit examinations that provide an opportunity for students to identify important areas for necessary growth and development for themselves. (Brown and Knight, 1994)

The third form of assessment is assessment as learning. This type of assessment aims for students to take an active role in their learning process by monitoring their progress and using feedback to make adjustments. It empowers students to be independent learners.

It is important to recognize that both summative and formative assessment indicate the *purpose* of assessment, not the *method*. Different methods of assessment can either be summative or formative in orientation depending on how the professor implements them. Sally Brown and Peter Knight in their book, *Assessing Learners in Higher Education*, caution against a conflation of the purposes of assessment and its method. They think that the purpose should be more important than the form of assessment, since it turns the attention of the professor away from the crucial issue of feedback. (Brown and Knight, 1994, pg. 17) If the professor believes that a particular method is formative, he or she may fall into the trap of using the method without taking the requisite time to review the implications of the feedback with students. In such cases, the method in question effectively functions as a form of summative assessment despite the instructor's intentions. (Brown and Knight, 1994) Indeed, feedback and discussion is the critical factor that distinguishes between formative and summative assessment.


ASSESSMENT CYCLE
Articulate Learning Goals
Design Strategies
Determine student activities
Select assessment Methods
Gather Assessment data, Summarize, Interpret
Use the Results to Improve

Source: Prof Nita Temmerman PhD, 2023 (https://www.linkedin.com/feed/update/urn:li:activity:7053981796236980224/?origin=SHARED_BY_YOUR_NETWORK)

The general purpose of assessment is to demonstrate that the student has met all of the course requirements in an approved and previously established manner.To make that a reality, assessment tasks need to be appropriate to the learning outcomessince the student's achievementsare measured against them.

The role of the professor is essential to ensuring the assessment tasks enhance and reinforce student learning. This means there are expectations and requirements for professors who are responsible for setting the assessment.

Besides making sure the usual information is provided to students at the beginning of a course about assessment tasks, at minimum the professor must:

- ensure the tasks set are varied in nature, manageable and have a reasonable workload
- be graded against criteria made known to the student in advance
- be relevant/authentic
- provide timely specific and useful feedback to students about how they can improve.

The role of the professor is paramount in the process. They must facilitate learning and if neededto make modifications to their instruction. Students' performance on assessments provides a useful process for pinpointing gaps in students' knowledge and/or understanding; and an impetus for the professor to adapt their instruction as appropriate.

National and institutional rules for assessment

The national regulations instruct a basic numerological methods of summative assessment with a range of absolute numeration grades between 5 and 10, depending on the level of knowledge and skillspresented.

On the other hand, the institutional rules are more specific and set several possible methods of assessing the students' knowledge, in correlation to the type of the course (natural sciences, social sciences and humanistic etc.). The institutional rules also prescribe the scale assessment based on total score of points awarded for different activities performed within the course. Therefore, it is a combination of formative and summative assessment. But, the most detailed assessment method is the one that the professor applies, taking into consideration both national and institutional rules.

The quality of assessing students' achievements assumes equal basic standards to all, setting aside the unintentional subjectivism. Therefore, the professors needs to have clear instructions and rules that are applicable for all students in order to measure the knowledge level on a scale of 5 to 10, where 5 is for failure. These standards are provided by the national and institutional rules. The national rules secure basic assessment methods for all students at each higher education institution within the country and the institutional rules secures equal assessment methods for all students enrolled at the higher education institutions within the University. This is way the awarded grades offer comparison of students' achievements gained at different faculties, but from the same or similar course. Also, the awarded grades guarantee that the learning objectives are met at certain level. But, as said before, these rules are only the basics, since there cannot be prescribed set of rules that can be fully adequate and applicable for every single student and its different individual knowledge and skills.

This leads us to the importance of the assessment method the professor puts in place, which has to be based on the national and institutional rules, but, at the same time be adjustable to the uniqueness of every student as individual, with various skills, different "shades" of knowledge presented, variable level of investing and interest put in the course etc. Being aware of the complexity of the many elements involved in studying English language and literature (as in every other language), assessment method used by the professor is of a very huge importance when it comes to improving quality of teaching.

The concept of quality is difficult to pin down and can be very subjective. In trying to grasp the concept of quality in education, one starting point is to look for a definition. Theoreticians have struggled and come up with a variety of definitions, including the one where quality is defined by the degree to which set objectives are achieved. (Thomas 2003: 232) For our research, the concept of quality is defined as the production of qualified human resources which will help the growth and development of the society. In this sense producing high-quality professors of English language and literature at the English department of the Faculty of Education in Bitola is a serious challenge. This is where the notion of students' assessment becomes extremely important.

Assessment of students majoring in English language and literature: How do we evaluate?

While assessing students at the English department usually two scenarios are into play. The first one is when the professor uses end-of-course (or mid-term) tests, while the second is assessing students' performance through continuous assessment. The assessment criteria are always made explicit to the students and the professor is ready to demystify these at the beginning or during the course of the teaching and to adhere to them once they have been set in place.

Students majoring English language and literature are given two mid-term exam tests per course. Although they may be given their grade or percentage marks for their test performance, their final mark is not complete just after they take the two mid-term exams. At this point they are just introduced to their strengths and weaknesses and which objectives they should be striving towards to complete the course with positive grades. The guidance received by the professor at this stage is crucial for students' overall performance.

After the test stage, the continuous assessment enters into force. With no continuous assessment too much emphasis would be put on the tests. The teaching might be affected and students would have little incentive to work consistently throughout the semester. With this assessment method the students are evaluated not only for their test performance but for taking active roles in classes: doing research on a specific topic and presenting the findings, taking active interest in themes and topics related to the course, preparing PowerPoint presentations, participating in discussions and debates and elaborating on specific course topic. Once the students perform all (or some) of these activities they receive the final course grade enlisted in the students' paper records and in the online university evaluating module within the platform (i-Know system).

Conclusion

The main hypothesis of this paper is that the quantitative measurement of students' learning is important for providing useful feedback for the professors and the students about the extent to which students are successfully meeting course learning objectives. The attempt to verify the above-mentioned claim was based on a case study conducted with first-cycle students at the English Department of the Faculty of Education at "St. KlimentOhridski" University, Bitola.

The observations provided sufficient evidence that the assessment process is important in helping the students learn, determine whether they have understood the course material and get motivated throughout the whole educational process.Quantitative measurement of students' learning proved to be important for providing useful feedback for the professors and the students about the extent to which students are successfully meeting course learning objectives.

The study at hand showed that the use of two different methods of assessing student's performance has proven to be the most reliable source of getting an insight into students' skills and competencies acquired during the course. The combination of formative and summative assessment is the most reliable way for the professor to know whether the students have met all the course requirements in an approved manner. It is also helpful for the students since it provides them with the opportunity to get a final grade after undertaking different kinds of activities within the course of study.

Overall, the process of assessment is an important element not only on the individual, but also on an institutional level since it provides valuable information about students' performance, guides instructional practices, monitors progress, motivates learning, provides feedback and ensures accountability in education. Above all, it supports effective teaching and learning, facilitates educational planning and promotes student success.

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Rules on assessing student performance of the University St. KlimentOhridski – Bitola https://uklo.edu.mk/wp-content/uploads/2023/01/PRAVILNIK-za-proverka-na-znaenjeto-precisten-tekst-1.pdf

SESSION 11
(Educational Sciences- Didactics of languages and literature)

ANGLICISMS AND THEIR USE IN POLITICAL DISCOURSE

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Abstract
English itself has many loanwords from different languages and is still open to borrowing. However, due to its role as a lingua franca, English is also the greatest donor of anglicisms, which almost effortlessly infiltratate and become an inseparable part of many languages worldwide.
This paper tackles several key theoretical aspects related to anglicisms: it looks into how anglicisms are defined and classified by researchers; what their current 'status' in different languages is; it investigates the reasons behind this widespread linguistic phenomenon, i.e. the platforms and agents that make it possible as well as the functions anglicisms perform once they make their way to the recipient language.
The paper also puts a special focus on the use of anglicisms in political discourse. More specifically, by reviewing studies that deal with the use of anglicisms in political discourse, it attempts to ascertain why politicians resort to using anglicisms and how anglicisms become part of the political discourse.
The insights gained from this research suggest that even though this topic has been widely examined, it definitely deserves further attention, especially in the domain of politics, as clearly this phenomenon is not bound to subside any time soon and politics is one of the domains where its presence is the most dynamic and conspicuous.

Keywords*: anglicisms, Macedonian, classifications, functions, political discourse*

Introduction

Contact linguistics has established that linguistic borrowing is unpreventable as no language in the world exists in isolation. Nowadays, as the world is turning into a global village and the English speaking countries are taking the lead, particularly in terms of technology, science and entertainment, English has acquired the status of lingua franca and has become an indispensable skill particularly of those who aspire to achieve success in this global environment. Prodromou (2007, pp. 47-48) rightfully remarks that “English has become the means to help its users to serve their purpose in an international context and to understand and promote their personal identity”. However, due to its intensive contacts with the other languages in the world, English has also assumed the role of the greatest donor of lexis ever to the languages it is in contact with. This implies that when non-English speakers communicate using their own mother tongue, they still unavoidably make use of English loan words to help them communicate their message efficiently.

An outstanding number of studies have attempted to unravel various aspects of the English borrowings in other languages, especially in the second half of the 20th and the beginning of the 21st century, when the influence of English has been assessed as the most prevalent (Núñez Nogueroles, 2017). Some of these studies analyse the words of English origin that have been admitted in other languages (e.g. Görlach, 2001); others place the focus on the advantages and the drawbacks of using English words as well as the fear of some nations that they are "being foreignized by means of the Anglophone culture represented by the English language" (Fischer & Pułaczewska, 2008, p. 1, in Núñez Nogueroles, 2017, p. 5). Many of the studies on anglicisms prioritize investigating people's attitude towards anglicisms in their respective languages (e.g. Khoutyz, 2009; Đurčevic, 2021; Drljača Margić, 2014, etc.) and point to predominantly positive attitude and acceptance of anglicisms by the masses. Some researchers attempt to tackle the fear of 'purists' who see the widespread use of anglicisms as a national threat and try to prove their fears unfounded (e.g. Gerwens, 2017); whereas, others look into the use of anglicisms in specific domains, such as, for instance, politics (e.g. Đurčević & Kostić, 2021; Ćorić, 2020; Ajsic, 2014, etc.) and the reasons why and how politicians 'embellish' their speech with anglicisms.

By means of extensive literature overview, the paper at hand tries to tackle several key theoretical aspects related to anglicisms, primarily, by analyzing the different definitions and classifications of anglicisms; then, the reasons behind this widespread linguistic phenomenon, i.e. the platforms and the agents that make the penetration of anglicisms in the other world languages possible; as well as the functions anglicisms perform once they enter the recipient language. Finally, the paper investigates the use of anglicisms in political discourse in particular, in order to unravel why politicians resort to using anglicisms in their political statements, how anglicisms 'behave' once they merge with political discourse.

Definitions and classifications of anglicisms

Dictionaries normally define anglicisms as English words and phrases that are used in other languages (Macmillan Dictionary and Oxford Learner's Dictionary). However, researchers offer a more detailed approach to defining angliscims. Thus, Filipović (1990) defines the term anglicism as "any word taken from the English language which defines an object, idea or concept forming constituent parts of the English civilization; it needs not be of English origin, but must be adapted to the English language system as well as integrated into the English vocabulary" (in Đurčević, 2021, p. 370). This is in line with Pratt's (1980) contention that anglicisms are words borrowed from English, irrespective of their previous history (in Núñez Nogueroles, 2017, p. 8).

While the definitions proposed by Filipović (1990) and Pratt (1980) operate only on the word level, Carstensen (1993, p. 28) takes a broader approach and presents anglicisms as "all language elements that are generated on the basis of the English language" (in Czech Rogoyska & Zboch, 2016, p. 26). Gottlieb (2005, p. 163), too, treats them as "any individual or systemic language feature adapted or adopted from English, or inspired or boosted by English models, used in intralingual communication in a language other than English" (in Đurčević & Kostić, 2021, p. 169). Similarly, Onysko (2007, pp. 90-91), who investigates the presence of anglicisms in German, defines them as "any instance of an English lexical, structural, and phonological element that can be formally related to English". Núñez Nogueroles (2018, p. 220), on the other hand, tries to subsume most of the aspects mentioned above by defining anglicisms as "any linguistic element adopted, adapted or calqued from English (either directly or via an intermediary tongue), or inspired or boosted by English models, used in intralingual communication in a language other than English".

A close analysis of the definitions above reveals that term 'anglicisms' refers to a wide variety of language features, not only lexical items borrowed from English, and that, in fact, these features can be both authentic English language features as well as language features that at some point in the past had been adopted by English from other languages.

Given that "not only words are borrowed, but all aspects of language structure – morphology (word structure), syntax (sentence structure), phonology (sound systems), and lexical semantics (Thomson, 2001, p. 11), researchers also seem to lack unanimity when it comes to how anglicisms should be classified (Núñez Nogueroles, 2018). A commonly accepted classification is based on the semantic relationship of anglicisms with the existing lexicon of the recipient language. Thus, there are loanwords that do not have a semantic equivalent in the recipient language and loanwords that do have an equivalent in the recipient language. Literature overview reveals that the terminology used for these two types of borrowings varies in different studies. Thus, for instance, some researchers refer to these two types as *necessary* versus *luxury* (Tappolet 1913; *cultural* versus *core/prestigious* (Myers-Scotton, 2002; Haspelmath, 2009; MacKenzie, 2012), *functional* versus *modern* (Melchers & Shaw, 2011) respectively (in Đurčević & Kostić, 2021, p. 169). Similarly, Onysko & Winter-Froemel (2011) propose a pragmatic classification of anglicisms grounded in Levinson's (2000) pragmatic theory and distinguish between: catachrestic anglicisms which bear the implicature of informativeness (I-implicatures) and which are equal to the ones called *necessary* by other researchers, on the one hand, and non-catachrestic which bear the implicatures of manner (M-implicatures) and which are equal to the ones called *luxury* in previous studies, on the other hand. Đurčević & Kostić (2021), investigate the use of anglicisms in Montenegrin and demonstrate that this traditional distinction of loanwords into necessary and unnecessary is unacceptable as, according to them, all anglicisms are necessary from a semanto-pragmatic aspect, i.e. their presence in the recipient language had been requested and needed in one way or another.

Taking previous researchers' classifications of anglicisms as his starting point, Gerwens (2017) offers a classification which includes three categories: *loan creations, semantic loans* and *loan translations*. Loan creations, also known as pseudo-anglicisms, are words that are created in a language other than English and although they bear resemblance to English words, they are not part of the English lexicon and are not understood by most native speakers of English. Barbe (2004) discusses some examples of pseudo-anglicisms which showcase the creativity of Germans and their ability to generate English (seeming) words (e.g. *Showmaster* (*talk show host*), *Beamer* (*projector*), *Mobbing* (*bullying*), etc.). Semantic loans describe the process in which the meaning of an English word is borrowed and assigned to an already existing and often similar sounding word in the recipient language that traditionally meant something else (e.g. the German verb *realisieren*, which sounds strikingly similar to the English verb *to realize*, in German originally has been used with the meaning *to implement* or *to accomplish*, but now it also means – *to realize*) (Sick, 2004). Finally, loan translations, according to Gerwens (2017), are literal translations of foreign language words or phrases that are then incorporated into the target language (e.g. the word *familienplanung* in German is a literal translation of the English *family planning*).

Gómez Capuz (1992) offers a much wider perspective on anglicisms and differentiates among: a) *orthographic anglicisms* (transliterations of proper nouns —a place name or an anthroponomy — from a language that does not use the Latin alphabet, according to the English orthographic and phonemic rules); b) *semantic anglicisms* (the recipient language receives a new sense for an already existing word); c) *lexical anglicisms* (the receptor language absorbs a whole word (signifier + signified) from another language: This can be performed in three different ways: *the item is transmitted as it is in the original language; the item is translated by means of the receiving language morphemes; the two previous procedures are combined*), and d) *syntactic anglicisms* (syntactic infiltration) (in Núñez Nogueroles, 2018, pp. 214-215). In analyzing the types of anglicisms, Navarro (2008) focuses only on analyzing the *syntactic anglicisms* and highlights seven sub-types: determiner article omission; recurrent use of the periphrastic passive; alien use of the gerund form; English adjectival use; noun order inversion; use of the mal-prefix with feminine nouns, and use of the adverb no to complement nouns and adjectives (in Núñez Nogueroles, 2018, p. 215). Unlike Navarro (2008), Pulcini et al. (2012, p. 6) place the focus on the lexical borrowings and, consequently, propose a detailed typology of the *lexical borrowings*. Namely, they distinguish between direct and indirect borrowings (Fig.1), with direct borrowings being either loanwords, false or hybrid borrowings, and the loanwords being either adapted or non-adapted. Under indirect borrowings they place two types of anglicisms – calques or semantic loans, with calques being further divided into loan translations, loan renditions and loan creations.

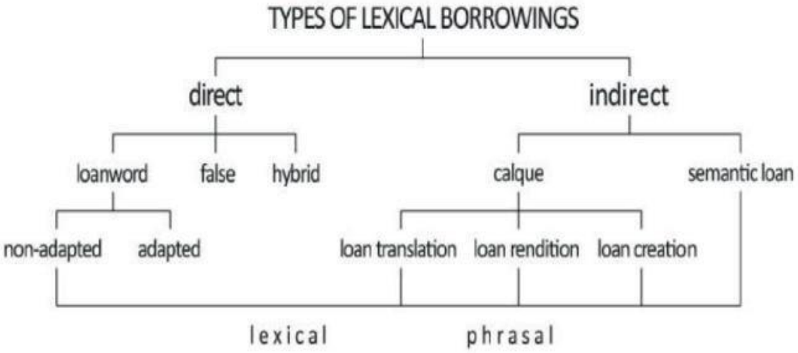

FIGURE I.

Typology of lexical borrowing by Pulcini et al. (2012, p. 6)

Unlike the above listed classifications of anglicisms, Khoutyz (2009, p. 7) bases her classification on the thematic use of anglicisms, and proposes three types of anglicisms: terms of various professional applications; words describing everyday activities, and vocabulary naming the most recent trends in society. As to the last type, Khoutyz (2009, p. 7) further explains that they are often not even translated into Russian and as such are normally used in business journals, health and fashion magazines.

The reasons for importing anglicisms and their pragmatic functions

Despite the purists' efforts to keep languages free from English borrowing, in many countries the acceptance of English loanwords by the general public can be neither denied nor overlooked (Hilgendorf, 2007; Gerwens, 2017). Literature overview reveals that the reasons for the wide-spread use of anglicisms are multifarious. Đurčević (2021) attributes it to the rise of English as a global language which has occurred as a direct consequence of the absolute political, military, economic, technological, and socio-cultural power of the United Kingdom and the United States of America. While their growth into the world's most powerful nations was caused by various factors, these all ultimately stem from British colonialism which flourished from 16th to 20th century as well as the rapid technological development and economic growth of the United States of America after World War II. Similarly, Gerwens (2017) attributes the proliferation of English to three interconnected and overlapping processes which have affected most countries either directly or indirectly: the British colonialism, the U.S. imperialism, and the age of global capitalism and globalization.

In this day and age, the globalization, which is based on interconnected and interdependent societies, individuals, markets, networks, telecommunication, the internet, global capitalism, and global politics, plays the most important role in the spread of English in various domains of contemporary societies (Gerwens, 2017). Yang purports that (1990) the highest proportion of anglicisms in German is used in advertisements, politics and culture, whereas according to Burmasova (2010) the English loanwords are the most common in sports but they are increasingly used in the business sector too (in Gerwens, 2017, pp. 30-31). For Gogoyska & Zboch (2016) the anglicisms are mostly used in the IT sector and least common in politics (in Gerwens, 2017, p. 40). Domínguez Mejías (2002) investigates anglicisms in Spanish and finds that their presence is most strongly felt in sports, physics and chemistry, economy, the textile industry, gastronomy, enology, computer science, biomedicine, and in transport (in Núñez Nogueroles, 2017, p. 15).

The presence of anglicisms has been investigated in the Macedonian language too (Janusheva, 2020). Thus, for example, Minova-Gjurkova (2003, pp. 136-139) notes the influence of English on Macedonian on the level of lexis in many different domains, from which the anglicisms subsequently enter the press and eventually end up in people's everyday speech (in Janusheva, 2020, p. 167). Kusevska (2021, p. 151) also notes that Macedonian native speakers resort to importing anglicisms in areas such as sport, shopping, communication, education, entertainment, and politics. She attributes that to the non-existence of suitable words to refer to newly invented concepts, ideas, entities and that this is particularly the case with professional vocabulary used in the field of Information Technologies (IT), economics and commerce. However, Kusevska (2021) also draws attention to the role played by mass media and advertisments in the reception of anglicisms in Macedonian. According to her, in Macedonian, anglicisms are used even when there exist corresponding Macedonian counterparts, just to make the news and ads more appealing and catchy to the viewers/readers. In a similar vein, Ðurčevic (2021), who analyses Montenegrin speakers' position towards English loanwords, concludes that they are predominantly perceived as modern, informal, and suitable for different professional domains. Drljača Margić (2014) explores Croatian university students' attitudes towards anglicisms and their equivalents in Croatian and her findings suggest that the majority of respondents describe English borrowings as modern and popular, and associate them with informal and private language use, as opposed to the Croatian equivalents, which are considered more appropriate in more formal contexts. The attitudes of agricultural experts toward anglicisms and their equivalents in Serbian is studied by Đorđević (2016), who claims that anglicisms are favoured by the majority of the respondents because of their internationality and simplicity both in terms of their form and meaning.

Despite people's generally positive inclination towards the use of anglicisms in their respective languages, the political and linguistic authorities in some countries, particularly in the European continent, show signs of serious concerns that the widespread process of adopting features typical of English in their languages substantially suppresses and hinders the growth and prosperity of their mother tongue. Rainer E. Hamel, an anthropologist and sociolinguistic scholar, goes as far as to suggest that 80% of current languages will be endangered by the end of the century, with English being expected to step into their place (in Schreiber, 2006). France and Spain are particularly vigilant in this respect. In an attempt to protect the status of their local language, they have set up official organizations to preserve their respective languages and have even passed laws which ban the use of certain anglicisms (Gerritsen et al., 2007).

One of the aspects that this study touches upon concerns the functions anglicisms perform in the recipient language. Paul (1891, pp. 460-461) explicates their functions by stating that anglicisms are borrowed, firstly, to fill a gap in the vocabulary, and secondly, as a result of fashion and necessity (in Ćorić, 2020). Rodríguez González (1996) examines the functional properties of anglicisms in Spanish and points out three functions which are actually pragmatic in nature: *ideational, interpersonal* and *textual*. The ideational (or referential or denotative) function is characteristic of loanwords which fill lexical gaps in the recipient language. Loanwords with an interpersonal component are stylistically marked and expressive in meaning, which means they can fulfill a variety of functions such as expressing affectation, irony, positive or negative associations, or are used as euphemisms, etc., while those with the textual component are used for achieving clarity, precision, economy of expression, variation of expression, a foreign atmosphere, etc. In this way, Rodríguez González (1996, p. 125) explains, the interpersonal and the textual component speak in favour of loanwords being motivated by prestige rather than need, but they are undoubtedly as important as the ones that have an ideational function.

Galinsky (1963, p. 134) identifies a number of stylistic functions of anglicisms in German: 1) they provide national American color of settings, actions, and characters; 2) establish or enhance precision; 3) offer or facilitate intentional disguise; 4) achieve brevity to the point of terseness; 5) produce vividness, often by way of metaphor; 6) convey tone, its gamut ranging from humorous playfulness to sneering parody on America and 'Americanized' Germany; 7) create or increase variation of expression" (in Đurčević & Kostić, 2021, p. 170). Gerwens (2017, p. 49) investigates the use of anglicisms in German magazines and identifies the following functions of anglicisms: the function of English as a status symbol, i.e. the speakers use them to appear more cosmopolitan; journalists use them in headlines to catch the readers' attention, so they act as an attention grabber; the anglicisms serve as a marketing tool, i.e. they are meant to 'advertise' the respective articles; they are used when one seeks to express oneself more variedly and nuancedly, etc. Khoutyz (2009, pp. 7-10) also confirms that in Russian anglicisms acquire a number of pragmatic characteristics which make the discourse marked, for instance, they are used to transmit an emphatic pragmatic meaning of newness and belonging to the unique society of the 21st century, which, in other words, means anglicisms mark the discourse as contemporary and the discussed problem as topical. Khoutyz (2009, p. 9) particularly underlines their 'economy of use' function, which refers both to the fact that the same anglicism can be used in numerous capacities and that it can communicate the same meaning with just one word, instead of by using longer and more elaborate phrases.

The use of anglicisms in political discourse

The presence of anglicisms in the domain of politics has been investigated by a number of researchers who analyze dictinct aspects of anglicisms in the political discourse of their respective languages (Đurčević & Kostić, 2021; Ćorić, 2020; Ajsic, 2014; etc.).

Politicians are highly influential figures in society, who with their linguistic and overall behavior are expected to serve as role models for the rest of the population, and, consequently, in their discourse they are expected to observe primarily the rules of the standard variety of their mother tongue. However, it is an undisputable fact that very frequently, irrespective of what their mother tongue is, they infiltrate anglicisms in their political statements. The researchers who dwell on the use of anglicisms in political discourse underline a variety of reasons as to why politicians are prone to using anglicisms. The assumed aura of cosmopolitanism surrounding anglicisms is, unquestionably, one of them. Namely, Schneider (2008) claims that this same aura of cosmopolitanism can also be used to exude a sense of superiority and to promote oneself, or even to promote a belief system as better and more modern than the one of the political opponents. Another possible motivation behind the rising number of English loanwords used by politicians is the potentially euphemizing and obscuring properties of these terms. In that respect, Schneider (2008) suspects that anglicisms are sometimes employed to deliberately obscure or distort whatever they are referring to. Hilgendorf (2007) also refer to this specific purpose of English loanwords, underlining the fact that since not all readers or listeners will know the exact translation of the anglicisms used, the English loanwords help politicians to obscure less than perfect circumstances, and, thus, exclude those who do not understand English. Kuseska (2020) foregrounds prestige as one of the main reasons for importing English words in the case of Macedonian politicians. Namely, according to her, anglicisms come in especially handy to politicians who wish to appeal to the public by attaching to themselves an additional connotation of modernity, open-mindedness, internationalism and Western lifestyle.

Đurčević & Kostić (2021, p. 179) investigate the use of anglicisms in Montenegrin political discourse and in their study they highlight the claim that in the sphere of politics some anglicisms have a far more positive connotation than their Montenegrin equivalents. They illustrate this point with the English word ‘leader’ and its Montenegrin equivalent ‘vođa’, by stating that in the context of local politics, ‘vođa’ all too often has a negative connotation, as it has acquired the meaning of a ruler, reflecting thus the discontent of the Montenegrin opposition and its dissatisfaction with the ruling party and its ‘ruler’.

Khoutyz’s (2010) study of anglicisms reveals that politics and economics were the very first fields where anglicisms started to emerge in the Russian language. She ascribes their prevalence in these two domains to Russia’s attempt to switch from a planned to a market economy in order to adopt notions and strategies of democratic government procedures already common in the rest of the world. Russians, she claims adopted words such as *governor, speaker, mayor, impeachment, summit* etc. because they have a more compact meaning than their Russian equivalents. Thus, for instance, the English word *summit* is very often used because when using the Russian equivalent it is necessary to explain the whole notion with a phrase ‘a high profile international meeting of political leaders’ (*встреча в верхах*) (Khoutyz, 2010, p. 201).

Ćorić (2020) focuses on anglicisms in the Croatian political discourse. In order to show the contact between the English and the Croatian language in the Croatian political discourse, she investigates articles on politics, published in online newspapers portals and compiles a corpus of anglicisms (e.g. *congressmen, desk, establishment, clinch, compatible, speaker, leader, lobby* etc.). This study, which in essence illustrates the immense influence of the English on Croatian political discourse, analyses the orthographic and semantic adaptation of anglicisms in the Croatian language and proves that due to the prestigious position of English, for the most part, the borrowed English words retain their original orthography and pronunciation and the number of their meanings is normally restricted to one specific meaning when transferred and used in the recipient language (Ćorić, 2020, p. 61).

Ajsic (2014) looks into political loanwords in contemporary Bosnian and confirms that Bosnian, similar to many modern languages, continues to borrow lexical material from English. However, he also notes that with the change in the linguo-political situation in Bosnia-Herzegovina in the past decades, the dynamics and patterns of lexical borrowing has changed too. He analyses editorials from the contemporary Bosnian press, focusing on the collocational patterns of the most frequently occurring English loanwords and compares them to their original collocational patterns extracted from a comparable English-language corpus. His findings confirm a divergence in the collocational patterning between the donor and the recipient language, and even point to a "washback" effect whereby some of the new collocational patterns from the borrowing language find their way back to the donor language through media discourse.

Conclusion

The thorough literature review reveals that researchers have shown a great interest in the study of the phenomenon of borrowing linguistic features from English in the languages worldwide. This is clearly visible in the fact that they have offered a number of definitions and classifications of anglicisms, most of which suggest that the term *anglicism* covers much more ground than meets the eye at first glance. Researchers have also dwelled on the reasons why anglicisms are admitted in other languages and, in that respect, place thestress primarily on the ongoing process of globalization. As to the domains inwhich their presence and usage are predominant, studies include a broad spectrum of domains which include, but are not limited to, consumption, popculture, business, education, information technologies, marketing, sports, andpolitics. Interestingly, research which focuses on gauging the reactions on thepart of non-native speakers of English marks a general tendency of acceptanceand endorsement of the English importations, despite the vocal protestationsof the 'purists' (some national authorities) who perceive this phenomenon as a serious menace which threatens to undermine the stability and prosperity of their mother tongue in the long run.

Finally, the paper at hand explored the use of anglicisms in the discourse employed by politicians in particular, by reviewing a number of studies which have tackled this issue in different languages in the world. The reasons they provide for the use of anglicisms in political discourse range from acquiring superiority, to imposing one's political identity and beliefs, to obscuring less favorable circumstances, and observing the principle of economy in language use. When adopted in political discourse, studies suggest that anglicisms, due to the popularity of English, shun undergoing major modifications and adaptations, both in terms of spelling and pronunciation, and are inclined toward creating novel collocational patterns in the recipient language.

Overall, what all these findings suggest is that this phenomenon is worthy of further scientific attention and exploration, particularly given its significant contribution to the molding of many of the contemporary languages worldwide.

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SESSION 11
(Educational Sciences- Didactics of languages and literature)

STANDARD ENGLISH

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Abstract

Standard English, regardless of its potential variants, language functions as a homogeneous system. Such questions about norms and standards mainly focus on limited, grammatical and phonological variations resulting from the spread of English worldwide. Although, there is no clear definition for the standardization of English, language speakers use this expression as they know perfectly what it refers to. Standard language is not isolated from the other aspects and forms in the society; on the contrary, it is integrated in all spheres of life. Standardization is also the basis for literate language, to be distinguished from the other languages. Sometimes languages contain diversity that can be seen and understood in the same way when written and spoken language are compared. Norms, rules, and components are included in a great number of typologically distinct varieties and dialects. Any exceptions to these rules just refer to either historical, social or some other circumstances. Still, English in its standard form is spoken in more than 60 countries. Various variants and dialects are spoken in the English speaking countries on a daily basis, but still there are people, who need to use English for specific purposes and, therefore, they have to learn and then apply the standard forms in use in their country. Sometimes negative things arise from the disorder which comes from the misunderstanding between real usage and real information in language. In general terms, certain linguists have defined English as a social dialect. It applies to great number of groups of people and one such group is especially important and strong in Great Britain. Individuals and groups of speakers accept the codification and standardization and their language abilities are judged according to those norms and rules. Although, Standard English has undergone a great number of changes and certain standardization and this has not stopped, i.e.,changes and reforms occur in the language all the time. During the process of education, special attention should be drawn to the acquisition of the Standard English, recognized as being of vital importance for the learners' future and prosperity. It is believed that certain prestigious groups wield great influence on Standard English from time to time, primarily under the influence of such groups, certain changes occur. It has to be accepted that it is a fact that, for each person who intends to have a good career, Standard English provides the ticket to a better position and prosperity. As was previously noted, Standard English is a passport to progress, so speakers, for example of African origin, can switch from dialect to the Standard English without any effort.

Key words: *standard, codification, norms, variants*

Introduction

Standard English, regardless of its potential variants, language functions as a homogeneous system. Such questions about norms and standards mainly focus on limited, grammatical and phonological variations resulting from the spread of English worldwide. Although, there is a general opinion not by the language experts but by the people that it is one language in question, the research has shown completely different. Variants of English language do exist and whether they are all different languages or we talk about only one Standard language it is matter of opinion.

As, a part of my doctorial thesis I have done research on four levels: phonetical, lexical, grammatical and semantic.

What I will try in this paper is to define Standard English and to show the results of this research.

Definition Of Standard English

There are many present and past definitions of Standard English but initially we have to try and observe the language characteristics. According to Svetlana R. Stojic, in her book "The Standardization of English Language", she recognizes the following characteristics of Standard English:

- ***Uniqueness,*** *which is the main linguistic characteristic in standardization in suppressing of the optional variants on all levels of language structure as in phonology, orthography, grammar and lexicology.*
- ***Autonomy,*** *as it is regarded as an unique independent language system since it does not represent variety, somehigher idiom regarding the other languages, but it is separate and unique although that is characteristic to each idiomregarding the similar ones.*
- ***Literacy,*** *here only in orthographic system the whole standardization has been achieved*
- ***Codification,*** *that is attempt to create single phase norm of use and one variant is really identified as language*
- ***Modernization,*** *adjustability to the standard language to the necessities of the society where it is used*

- ***Intertextuality,*** *higher-level of abstractness and objectivity on behalf of the efficiency which enables satisfaction of higher cultural necessities in the sphere of science, technique as well as in ordinary conversation.*
- ***Internationalization,*** *connected to modernization and intertextuality as it enables and helps communication through national and language borders.*
- ***Potential variant*** *which refers to the possibility to more parallel standardizations of the same language sometimes due to different cultural political and economic and geographic conditions.*

(R.Stojic 2005:241-244)

Such questions about norms and standards mainly focus on limited, grammatical and phonological variations resulting from the spread of English worldwide. Although, there is no clear definition for the standardization of English, language speakers use this expression as they know perfectly what it refers to. George Sampson 1925 expressed the opinion that Standard English should not even be defined, with which also Crowley agrees:

> *There is no need to define Standard English speech. We knew what it is and there is an end on't. We know Standard English when we hear it just as we know when a dog, when we see it without the aid of definition. Or to put it in another way we know what is not Standard English and that is sufficiently practical guide. One wants a definite example of Standard English we can tell him that it is kind of English spoken by simple unaffected young Englishman like the Prince of Wales.*

(Crowley 1989:246)

Standard language is not isolated from the other aspects and forms in the society; on the contrary, it is integrated in all spheres of life. This is also supported by Downs:

> *In that way standard language also becomes "social institution and part of abstract, uniting identity of great and internally differenced community.*

(Downes 1984:34)

Sometimes, language can be seen as a symbol for a whole group and a sign of recognition when different groups are compared to each other, which is also witnessed in Weinreich's statement below:

> *People become aware for the characteristics of their language when compared to the others exactly in situation of language contact and pure standard language then becomes symbol of group integrity.*

(Weinreich 1953:100)

Language should be generally seen as a basis of a group and it must have certain norms and rules. Any exceptions to these rules just refer to either historical, social or some other circumstances.

Research

As I have previously mentioned during my doctoral research I have tried to check the existence of the variants among the two biggest speaking language communities American and British English and for that purpose I have checked the The frequencies are checked by means of

- using groups of native speakers (English and American);
- making use of the two existing corpora of the English language: *BNC* and *COCA* although it has to be emphasized that each covers a different time period.

Then, the results obtained are presented in diagrams and, based on them, conclusions are drawn regarding how many of the pronunciations of the selected words comply completely, partially or not at all with those in the reference book used.

Another way to check it was to prepare questionnaires regarding the words used to be given to the two groups of native speakers, asking the following questions:

Do you recognize the words? (If the answer is yes) How often do you use them? Very often; rarely; never.

I will present some of the results on each level which were the most typical. Firstly, I will start with the phonological level where I have checked the pronunciation from two aspects:

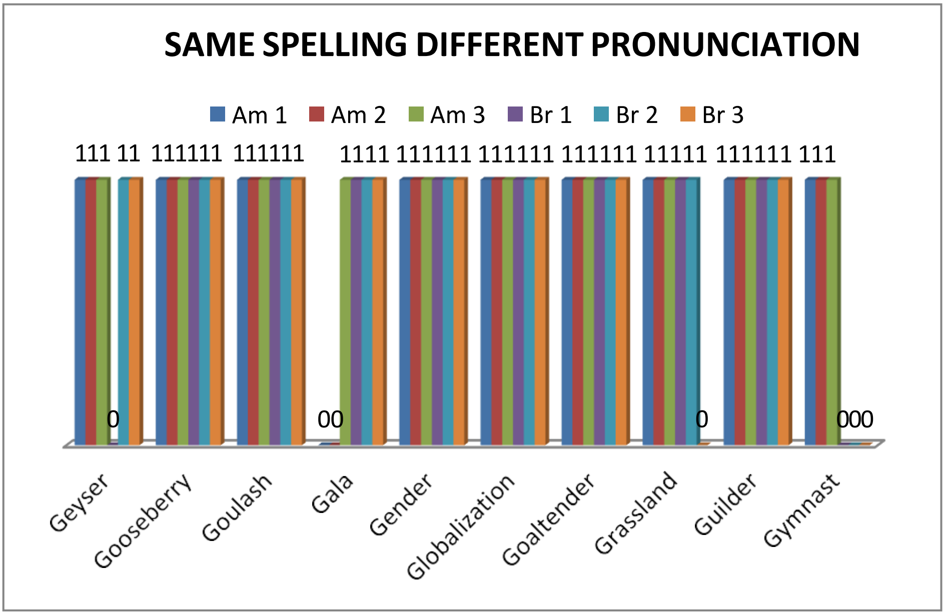
- Same spelling, different pronunciation
- Different spelling, same pronunciation

For the first of the above, **Same spelling, different pronunciation** refer to words which are spelled in the same way in the both variants but still there are differences in their pronunciation.

They were only checked with questionaries

Word starting with letter g

№	Word	Received Pronunciation	General American	Am1	Am2	Am3	Br1	Br2	Br3
1	Geyser	ˈgiː.zə r	‘gaɪ.zɚr	+	+	+	-	+	+
2	Gooseberry	ˈgʊz.b ə r.i	‘gʊz.be r.i	+	+	+	+	+	+
3	Goulash	‘guː.læʃ	ˈguː.l ɑːʃ	+	+	+	+	+	+
4	Gala	‘gɑː.lə	ˈgeɪ lə	-	-	+	+	+	+
5	Gender	‘dʒen.də r	‘dʒen. dɚ	+	+	+	+	+	+
6	Globalization	‘gləʊ.b ə l.aɪˈzeɪ.ʃ ə n	‘gloʊ .b ə l.aɪˈzeɪ.ʃ ə n	+	+	+	+	+	+
7	Goaltender	‘gəʊlˌten. də r /	‘goʊlˌten. dɚr	+	+	+	+	+	+
8	Grassland	ˈgrɑːs.lænd	ˈ græs .lænd	+	+	+	+	+	-
9	Guilder	ˈgɪl.də r	ˈgɪl dɚr	+	+	+	+	+	+
10	Gymnast	‘dʒɪm.næst	‘dʒɪməst	+	+	+	-	-	-

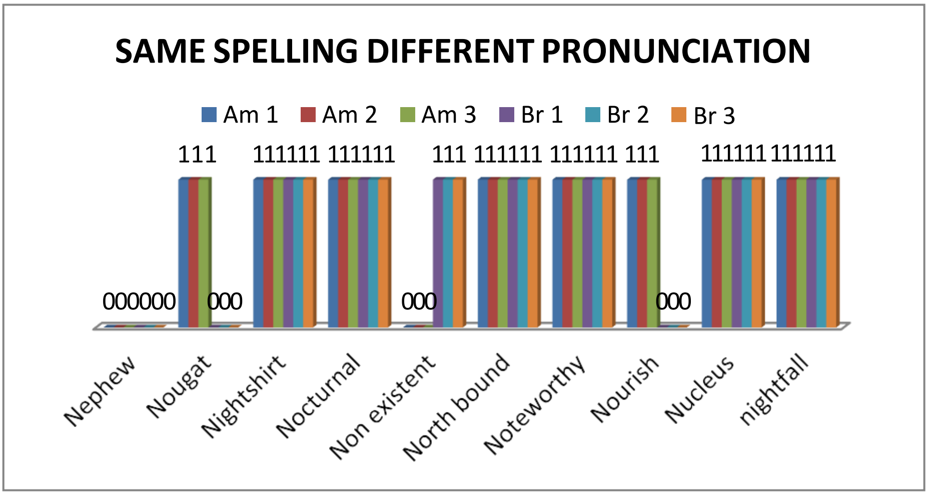


Out of ten six samples by British and American native speakers coincide

Word starting with letter n

№	Word	Received Pronunciation	General American	Am 1	Am 2	Am 3	Br 1	Br 2	Br 3
1	Nephew	ˈnef.juː	‘nev juː	-	-	-	-	-	-
2	Nougat	‘nuː.gɑː	‘nuː.gət	+	+	+	-	-	-
3	Nightshirt	ˈnaɪt.ʃɜːt	ˈnaɪt ʃɝːt/	+	+	+	+	+	+
4	Nocturnal	‘nɒkˈtɜː.nəl	‘nɑːkˈtɝːrnəl	+	+	+	+	+	+
5	Non existent	‘nɒn.ɪgˈzɪs.t ə nt	‘nɑːnɪgzɪstənt	-	-	-	+	+	+
6	North bound	ˈnɔːθ.baʊnd	‘nɔːrθbaʊnd	+	+	+	+	+	+
7	Noteworthy	‘nəʊtˌwɜː.ði	‘noʊtwɝːði	+	+	+	+	+	+

8	Nourish	‘nʌr.ɪʃ	‘nɝːrɪʃ	+	+	+	-	-	-
9	Nucleus	ˈnjuː.kli.əs	ˈnuː kliəs	+	+	+	+	+	+
10	nightfall	‘naɪt.fɔːl	‘naɪtfɑːl	+	+	+	+	+	+



Out of ten six samples by British and American native speakers coincide

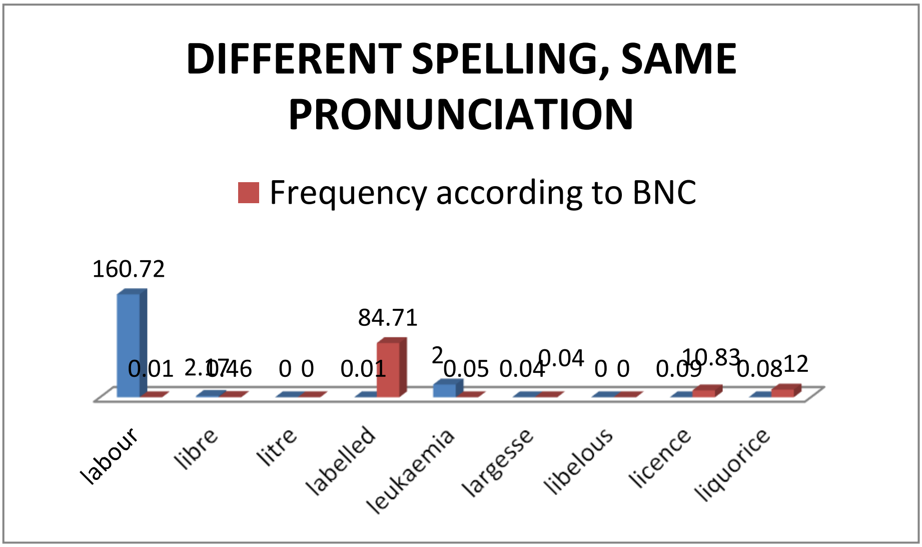
For the second of the above, **Different spelling, same pronunciation** refer to words which are spelled in the different way in the both variants but still have the same pronunciation.

According to the corpora:

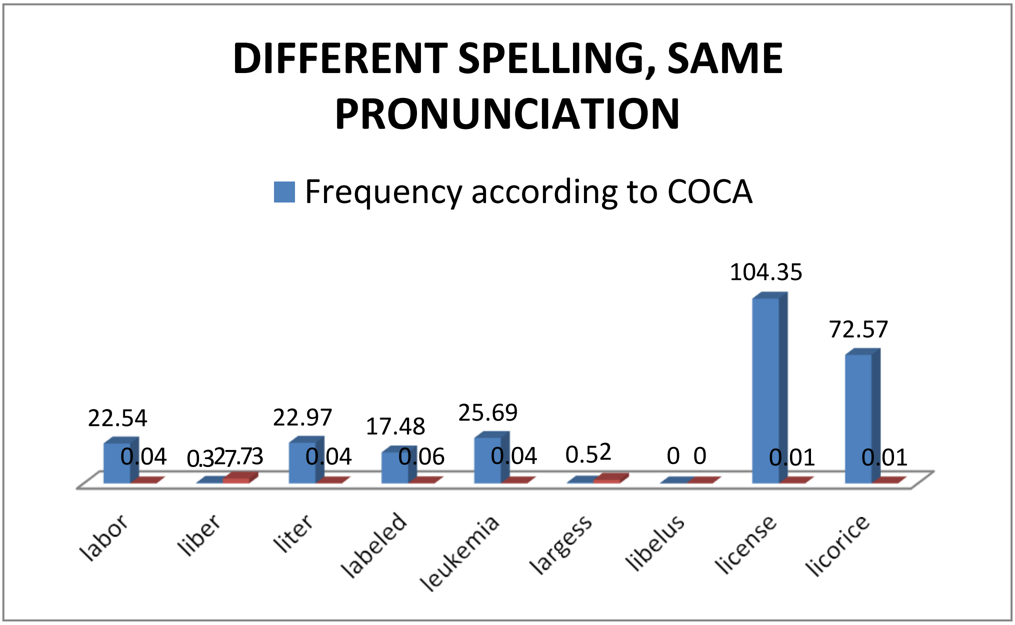
Word starting with letter l

№	**American English**	**British English**	**Frequency according to BNC**	**Frequency according to COCA**
1	labor	labour	160.72/0.01	22.54/0.04
2	liber	libre	2.17/0.46	0.37/2.73

3	liter	litre		22.97/.0.04
4	labeled	labelled	0.01/84.71	17.48/0.06
5	leukemia	leukaemia	20.00/0.05	25.69/0.04
6	largess	largesse	0.04	0.50/2.00
7	libelus	libelous		
8	License (n.)	Licence (n.)	0.09/10.83	104.35/0.01
9	licorice	liquorice	0.08/12.00	72.57/0.01



Three British samples out of nine are more frequent than the American ones, two are not found, three American counterparts are more frequent and one pair are equally frequent.

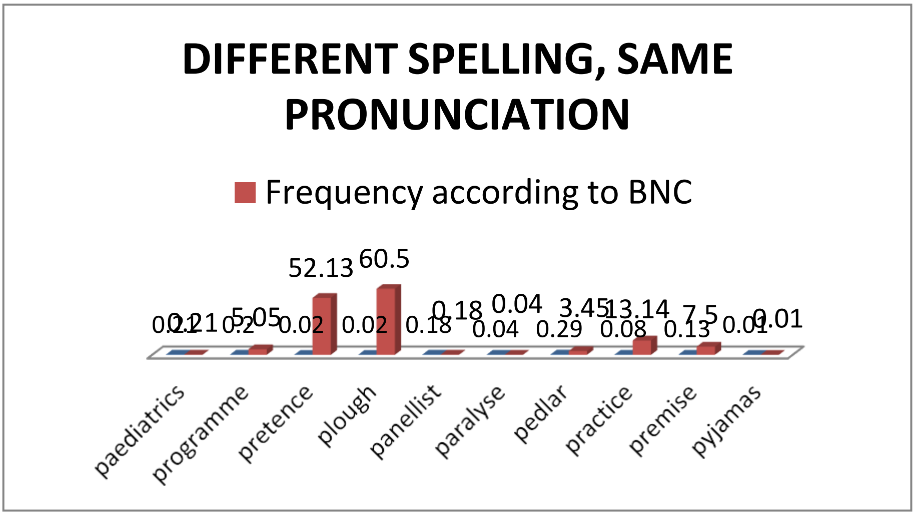


Six American samples out of nine are more frequent than their British counterparts, one is not found, and two British ones are more frequent.

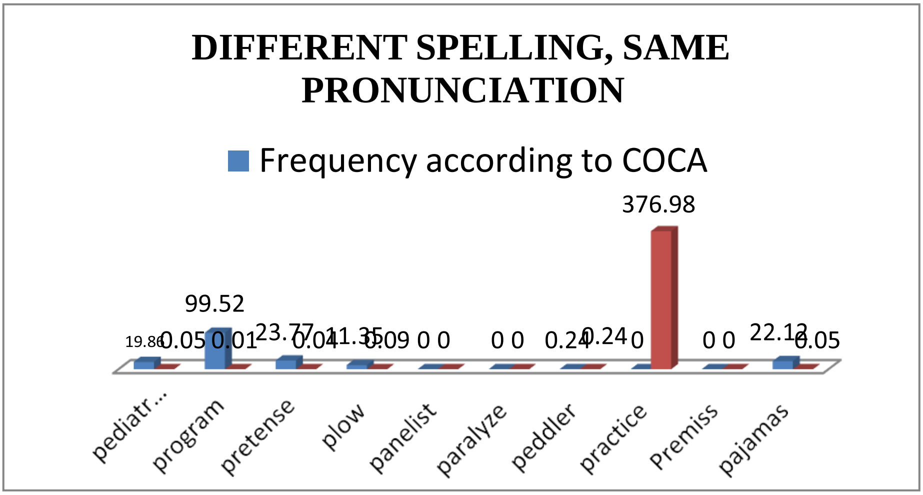
Word starting with letter p

№	**American English**	**British English**	**Frequency according to BNC**	**Frequency according to COCA**
1	pediatrics	paediatrics	0.21	19.86/0.05
2	program	programme	0.20/5.05	99.52/0.01
3	pretense	pretence	0.02/52.13	23.77/0.04
4	plow	plough	0.02/60.50	11.35/0.09
5	panelist	panellist	0.18	
6	paralyze	paralyse	0.04	
7	peddler	pedlar	0.29/3.45	0.24

8	practice	practise	0.08/13.14	0.00/376.98
9	premiss	premise	0.13/7.50	
10	pajamas	pyjamas	0.01	22.12/0.05

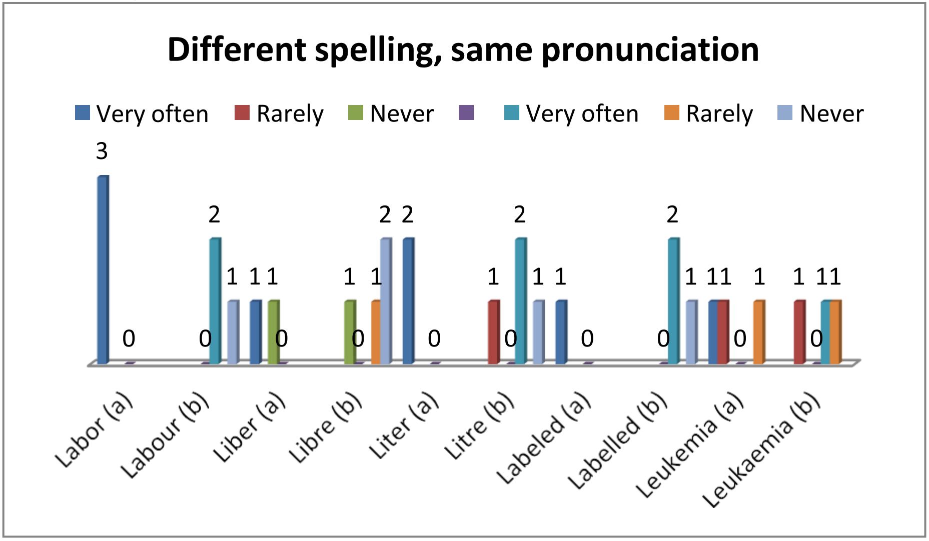


Seven out of ten British samples are more frequent than the American ones, and three pairs are equally frequent.

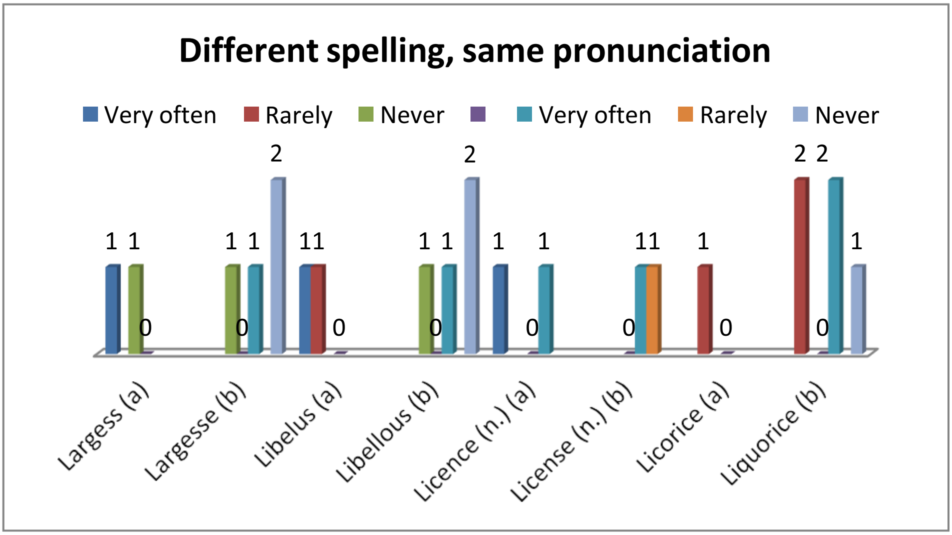


Five American samples out of ten are more frequent than the British ones, three are not found, and one British sample is more frequent.

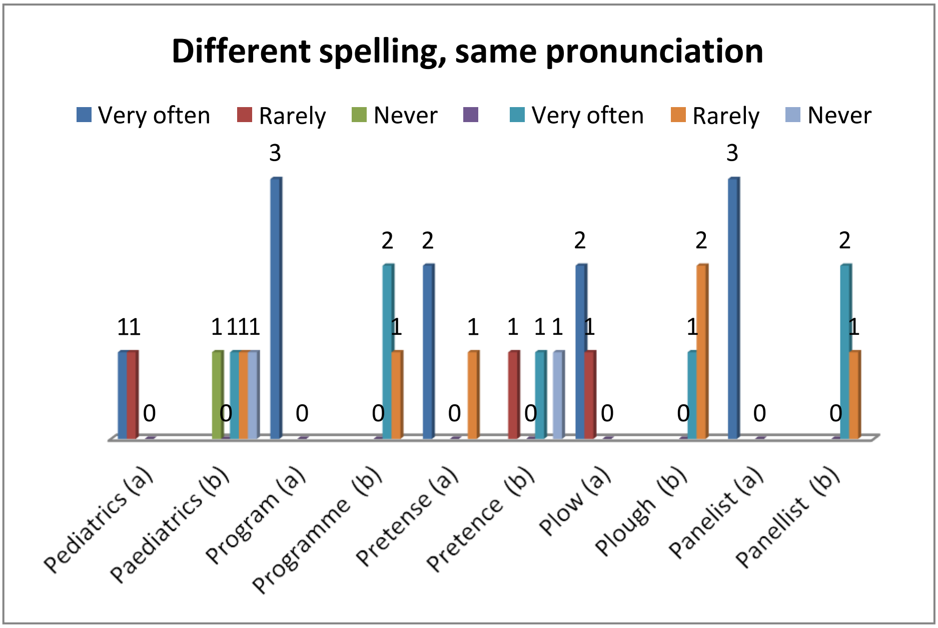
According to the questionaries:



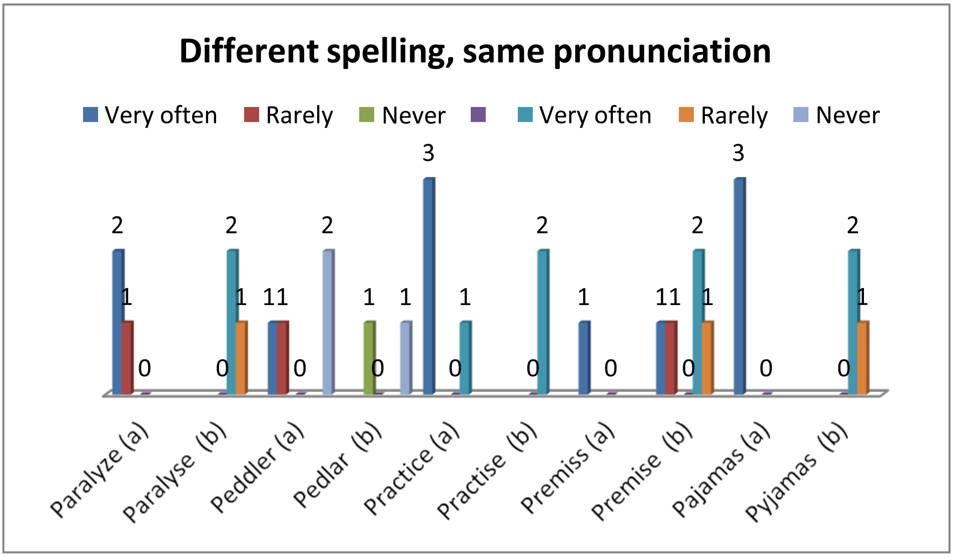
According to this diagram one of the American native speakers has chosen the option “very often” in three cases and in three cases one of them has chosen the option “never”. From the other side two British native speakers in one case have chosen the option “very often” and one of them in four cases has chosen the same option but 2 of the British native speakers in two cases have chosen “never” as an option.



According to this diagram all three American native speakers have chosen the option "very often" in two cases and in six cases two of them have chosen the same option. From the other side two British native speakers in five cases have chosen the option "very often" and only one of them has made the same option in four cases.



According to this diagram all three American native speakers have chosen the option “very often” in two cases and in two cases two of them have chosen the same option. From the other side two British native speakers in two cases have chosen the option “very often” and one of them has made the same choice in 3 cases.

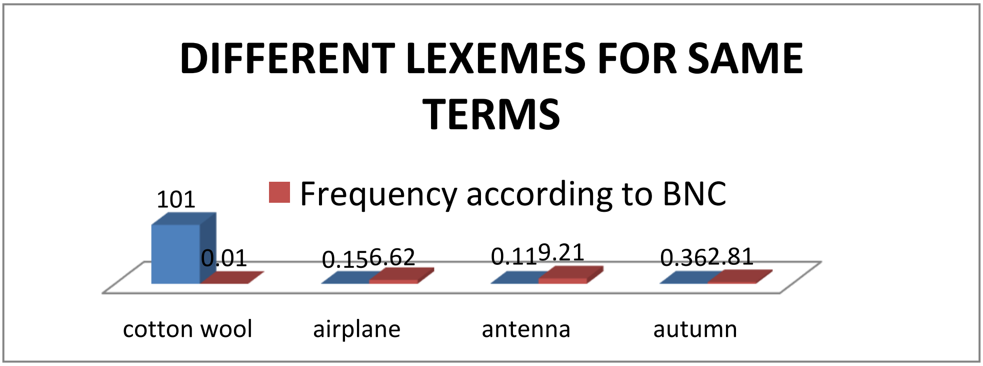


According to this diagram all three American native speakers have chosen the option “very often” in three cases, in one case two of them have chosen the same option, and in three cases one of them has made the same choice. From the other side two British native speakers in four cases have chosen the option “very often” and only one of them in one case has made the same choice.

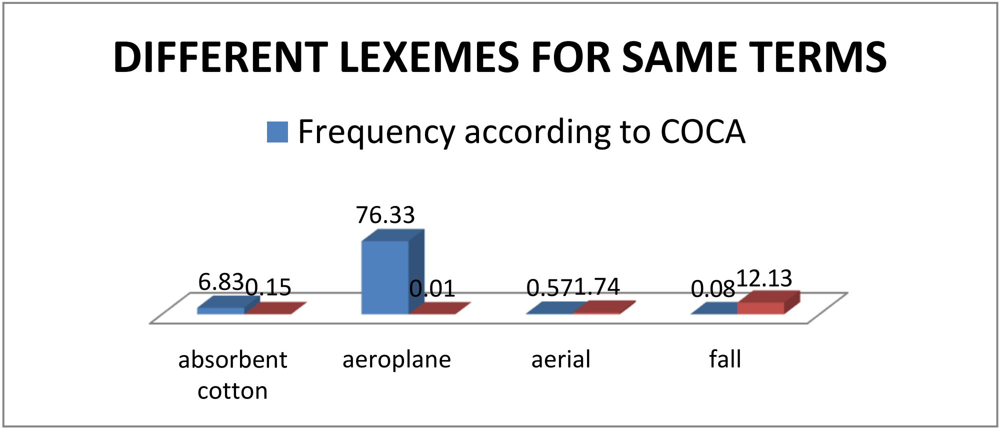
Lexical level
Different lexemes for same terms
According to the corpora :

№	British English	American English	**Frequency according to BNC**	**Frequency according to COCA**
1	cotton wool	absorbent cotton	101/0.01	6.83/0.15

2	Airplane	aeroplane	0.15/6.62	76.33/0.01
3	Antenna	aerial	0.11/9.21	0.57/1.74
4	Autumn	fall	0.36/2.81	0.08/12.13

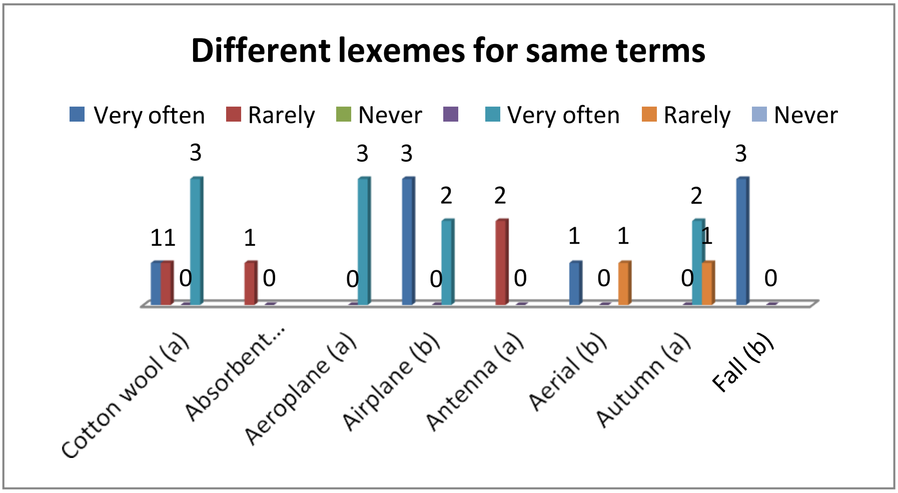


One British sample (in blue) out of four is more frequent than its American counterpart(in red), while three American ones are more frequent.



Two American samples (in red) out of four are more frequent than the British ones(in blue), while two British ones are more frequent than their American counterparts.

According to the questionaries;



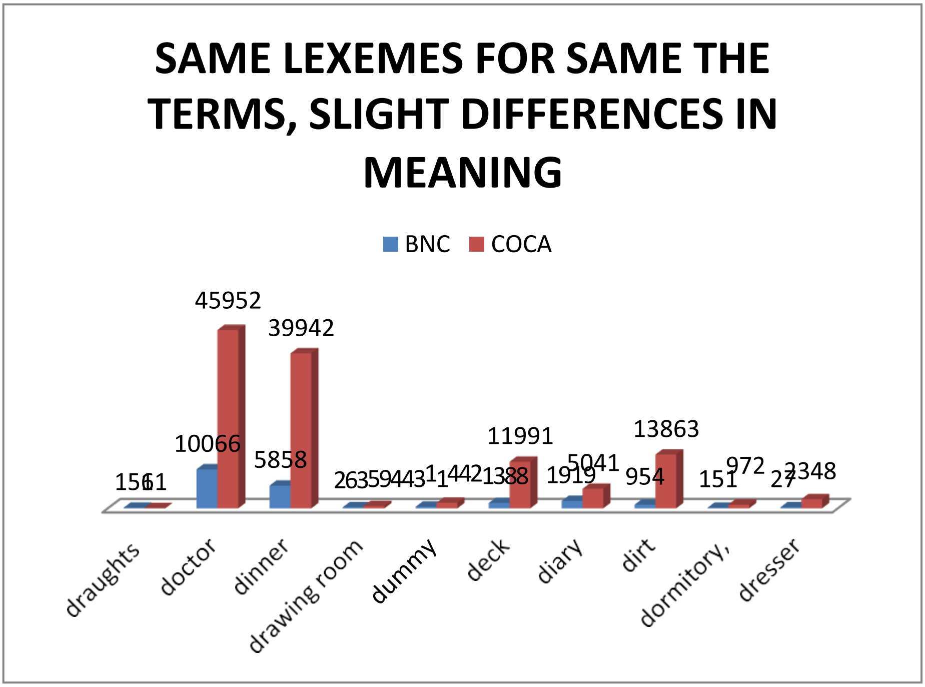
According to the diagram in two cases out of ten, all three American native speakers who are represented on the left side of the diagram, have chosen the option "very often" , in two cases two native speakers have chosen that option.

Three British native speakers in two cases have chosen the option "very often" in two cases only two of them have chosen the option very often.

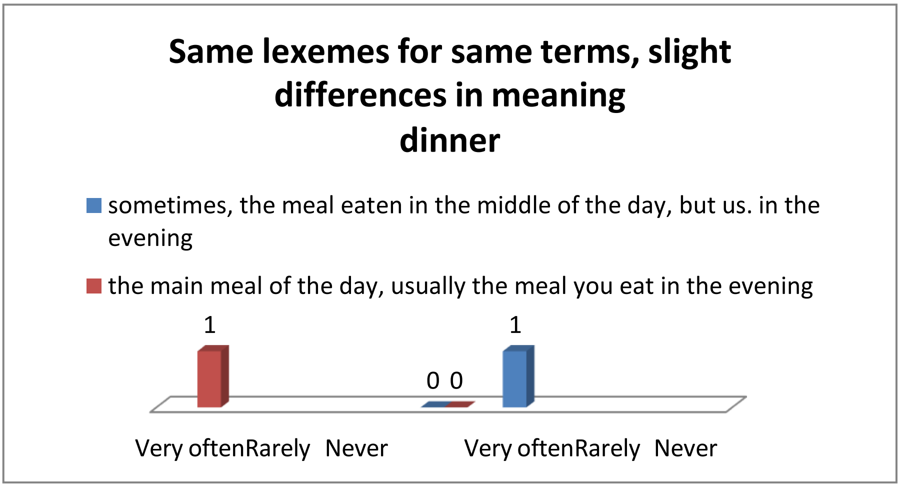
Same lexemes for same terms, slight differences in meaning According to the corpora

№	Term	Meaning 1 (British)	Meaning 2 (American)	BNC	COCA
39	draughts	a game for two people, each with twelve circular pieces which they move on a board with black andwhite squares	A game for two players using round pieces	151	61
40	doctor	WRITTEN ABBREVIATION Dr a person with a medical degree (=university qualification) whose job is to treat people who are ill or hurt	(WRITTEN ABBREVIATION Dr) a person who has the highest degree (=qualification) from a college or university	10066	45952
41	dinner	sometimes, in Britain, the meal eaten in the middle of the day	the main mealof the day, usually the meal you eat in the evening	5858	39942
42	drawing room	a comfortable room in a large house used for relaxing or for entertaining guests	Sitting room	263	594

43	dummy	a pacifier, a small piece of rubber that babies suck on	a model or replica of a human being	431	1442
44	deck	the floor or level of a ship or other types of vehicles	a wooden, raised platform adjoining a house, us. enclosed by a railing	1388	11991
45	diary	personal calendar *(US: *appointment book,*	personal journal	1919	5041
46	dirt	substance(s) rendering something unclean incriminating evidence ("we've got the dirt on him now")	earth, soil	954	13863
47	dormitory	a town where commuters live, usually	building with many small private rooms, as for housing the students of a college	151	972
48	dresser	a type of cupboard or sideboard esp. for kitchen utensils	a chest of drawers, usu. with a looking glass (mirror) (UK: *dressing-table*)	273	2348



Eight samples out of ten are more frequent in COCA than in BNC
According to the questionaries:

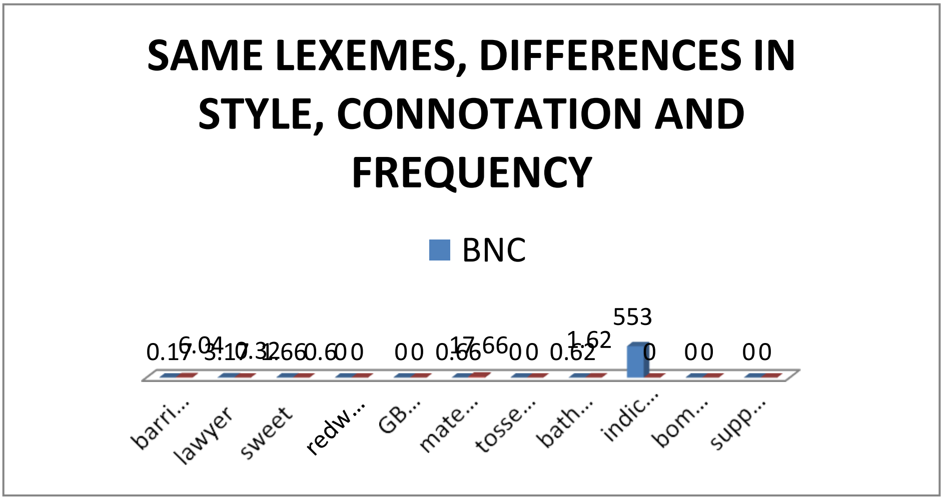


According to the diagram one American native speaker has chosen the option “very often” for the American meaning. The British native speaker has chosen the option “very often” for the British meaning.

Same lexemes, differences in style, connotation and frequency

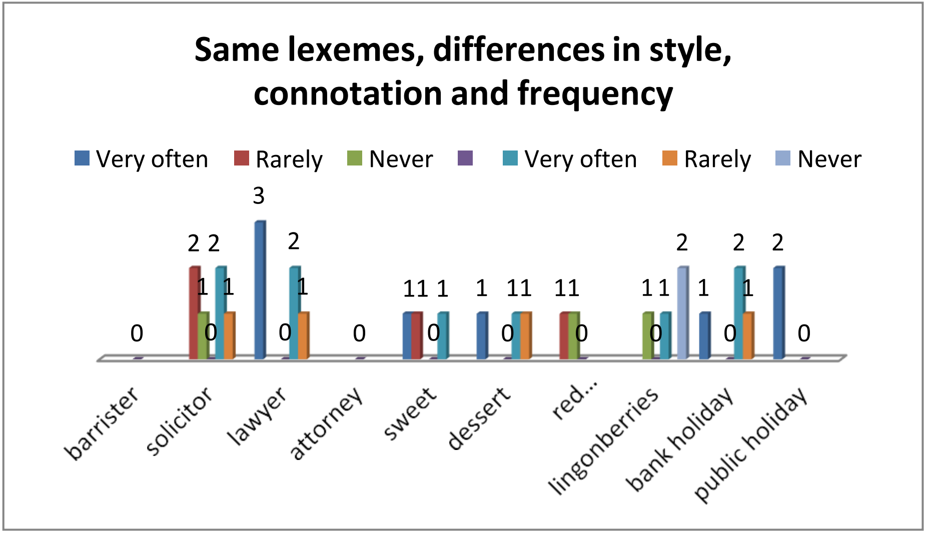
According to the corpora

№	Terms or expressions		BNC	COCA
	British	**American**		
10	barrister	solicitor	0.17/6.04	0.21/4.69
11	Lawyer	attorney	3.17/0.32	0.77/1.31
12	Sweet	dessert	1.66/0.60	5.28/0.29
13	red whortleberries	lingonberries		
14	bank holiday	public holiday		
15	mates & lads	friends & (young) men	0.66/17.66	0.02/56.52
16	tossers & wankers	dorks& losers		
17	bathroom	bath	0.62/1.62	2.08/0.48
18	indicators	blinkers	553/0.00	23.22/0.04
19	bombardier	air force		4.91/0.20
20	braces (to support trousers)	suspenders		



Three out of eleven British samples (in blue) are more frequent than the American ones (in red), five are not found, and three American sample is more frequent

According to the questionaries:



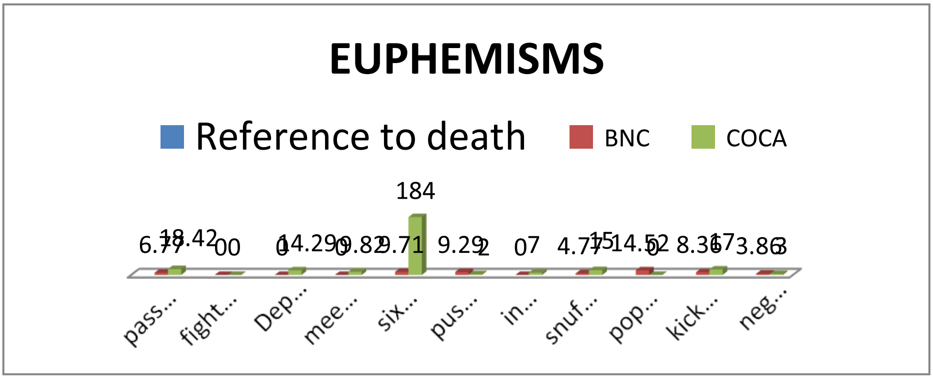
Americans who are represented on the left side of this diagram in only one case all of them have chosen the option "very often", two of them have chosen the same option in one case and one of them has made the same choice in three cases.

British are represented on the right side and in three cases two of them have chosen the option “very often” and only one of them has made the same option in three cases.

Euphemisms

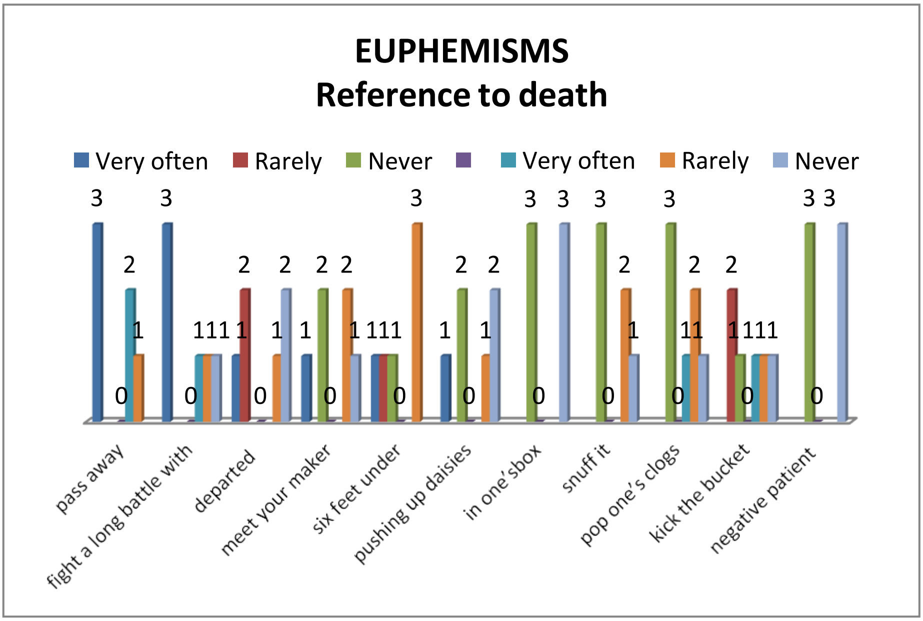
According to the corpora:

№	**Euphemism**	**Meaning**	**BNC**	**COCA**
1	pass away	Reference to death	6,77	18,42
2	fight a long battle with		0	0
3	departed		0	14,29
4	meet your maker		0	9,82
5	six feet under		9,71	184
6	pushing up daisies		9,29	2
7	in one’s box		0	7
8	snuff it		4,77	15
9	pop one’s clogs		14,52	0
10	kick the bucket		8,36	17
11	negative patient		3,86	3



Six out of eleven references are more frequent in COCA than in BNC.

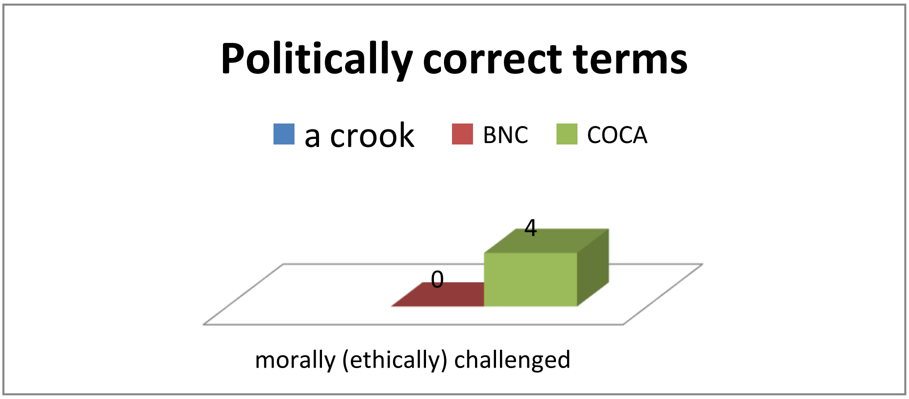
According to the questionaries:



According to this diagram all three American native speakers have chosen the option “very often” in two cases and one of them in four cases has chosen the same option, but in four other cases all of them have chosen the option “never” and two of them in two cases have chosen the option “never”. From the other side all British native speakers in two cases have chosen the option “very often ”, two of them in two cases have chosen the same option but all of them in onecase have chosen the option “rarely ” and also two of them in three cases have made the same choice.

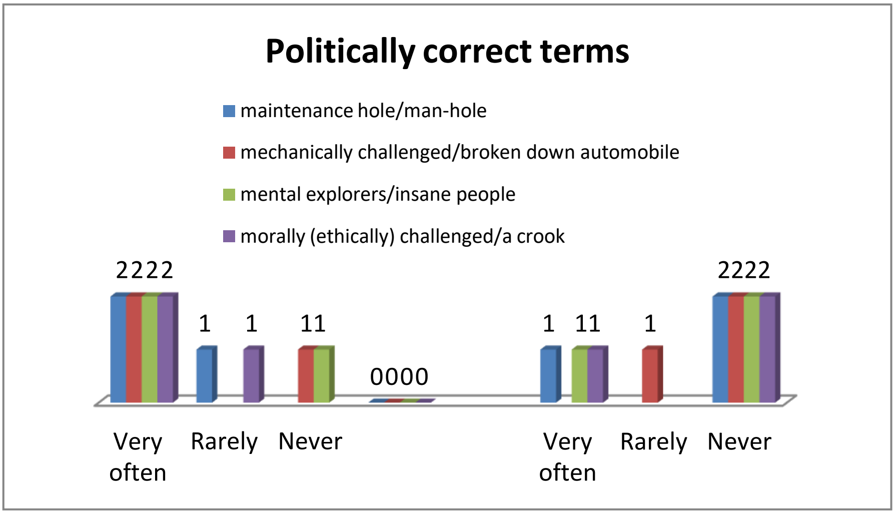
Politically correct terms
According to the corpora

№	Politically correct term	Meaning	BNC	COCA
31	morally (ethically) challenged	a crook		4
32	motivationally deficient.	lazy		
33	musically delayed	tone deaf		
34	nasally gifted	large nose		
35	near-Life Experience	abortion		
36	newcomer	immigrant	115	397
37	ontologically challenged	fictional / mythological		
38	optically darker	blind		
39	osmotically challenged	thirsty		



The reference is more frequent in COCA than in BNC

According to the questionaries:

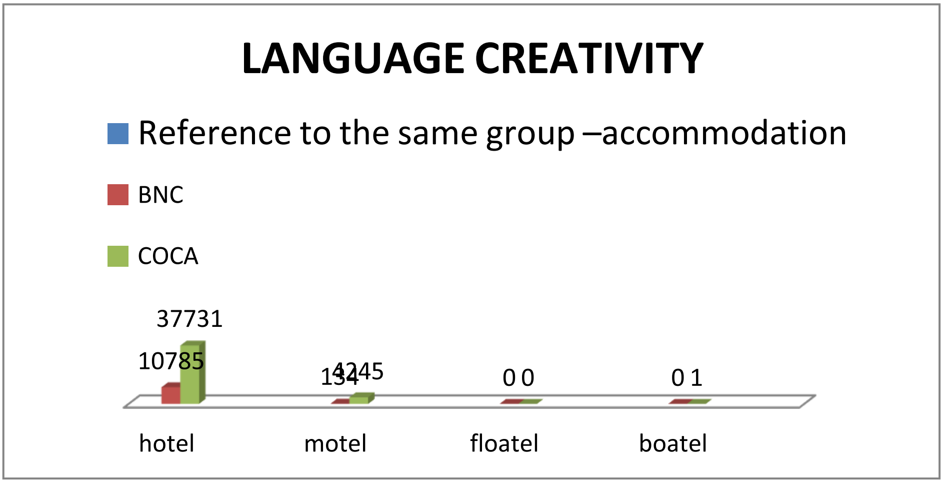


According to this diagram two American native speakers have chosen the option “very often” in four cases but two British native speakers in four cases have chosen the option ”never”.

Language creativity – in reference to cultural reality

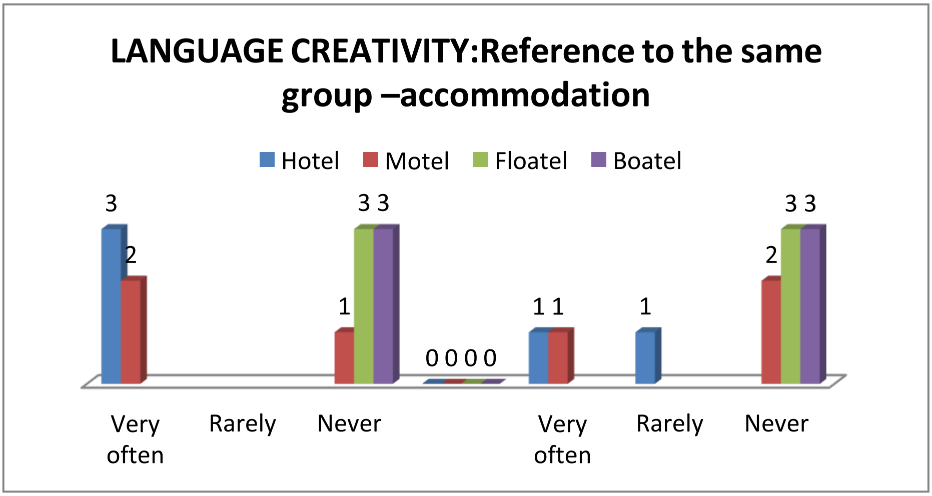
According to the corpora:

№	Term	Meaning	BNC	COCA
6	Hotel	Reference to the same group – accommodation	10785	37731
7	Motel		134	4245
8	Floatel			
9	Boatel			1



Two references out of four are more frequent in COCA than in BNC, whereas one is more frequent in BNC and one is found in neither.

According to the questionaries



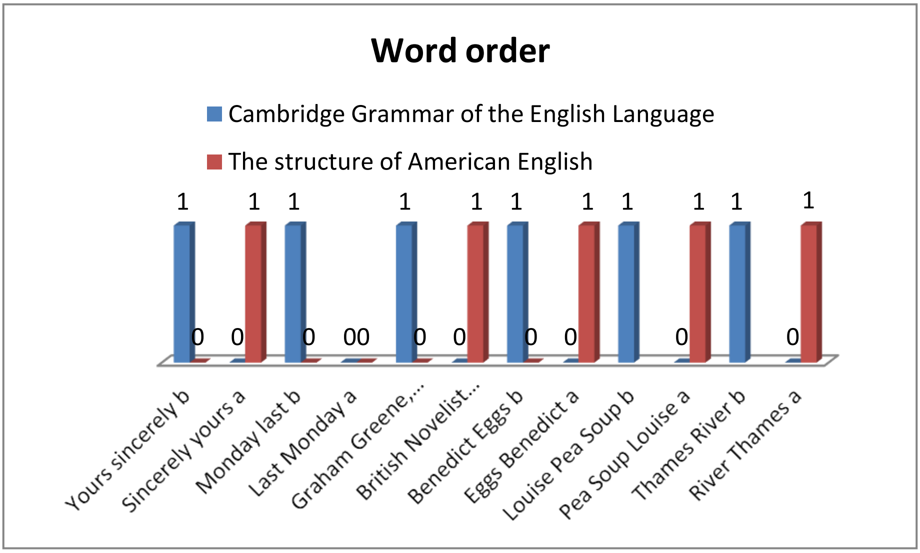
Americans who are represented on the left side of this diagram in two cases all of them have chosen the option “very often” in one case, two of them have chosen the same option in one case but all of them in two cases have chosen the option “never”.

British are represented on the right side and all of them have chosen the “never” option in two cases, two of them in one case have made the same choice.

Grammatical level

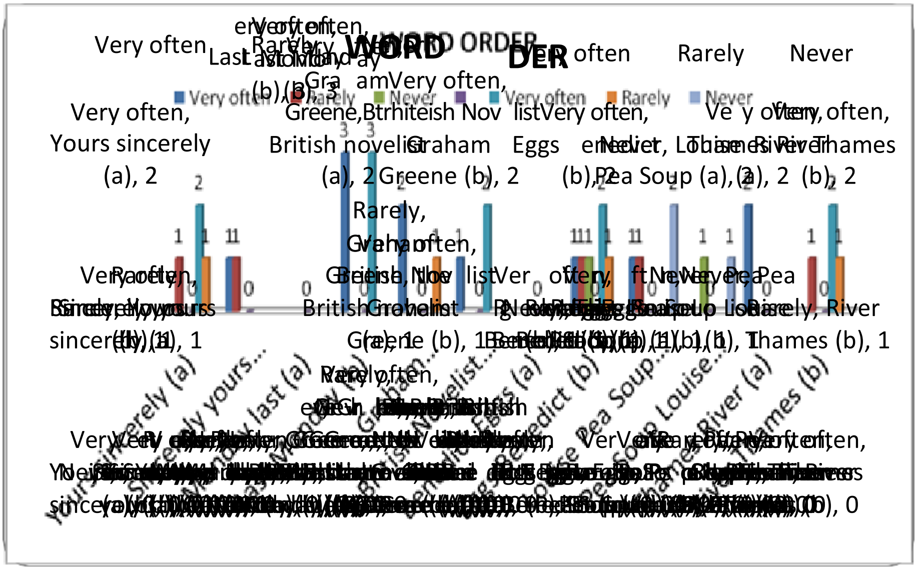
Word order

№	**British English**	**American English**	**Cambridge Grammar of the English Language**	**The structure of American English**
1	Yours sincerely	Sincerely yours	+	+
2.	Monday last	Last Monday	+	-
3	Graham Greene, the British novelist	British Novelist Graham Greene	+	+
4	Benedict Eggs	Eggs Benedict	+	+
5	Louise Pea Soup	Pea Soup Louise	+	+
6	Thames River	River Thames	+	+



Six pairs of sentences follow the rules set in the Cambridge Grammar of the English Language while one half of a pair differs from those in The Structure of American English

According to the questionaries:



According to the diagram refering to the word order, in one case out of six, all three American native speakers who are represented on the left side of the diagram, have chosen the option “very often” , in only one case only 1 native speaker has chosen that option.

British native speakers asked about this 6 pairs of sentences in one case all of them chose the option “very often” in four cases only two of them have chosen the option very often , while the option “ never”has been chosen by one native speaker in two cases .

Conclusion

According to all previous analysis which are only part of my huge research for my doctorial thesis, it can be surely confirmed that there are existing variants of English language and we should be very careful when we are defining Standard English. Nevertheless it should be looked generally we try to do that. Finally, it has to be accepted that it is a fact that, for each person who intends to have a good career, better education, progress, Standard English, whether it is British or American, provides the ticket to a better position and prosperity.

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SESSION 11
(Educational Sciences- Didactics of languages and literature)

THE POTENTIAL OF CONCEPTUAL METAPHOR IN LEARNING ENGLISH AS A FOREIGN LANGUAGE

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Abstract
The cognitive approach in linguistics has turned its attention to the problems of meaning, idioms and metaphor of language. For foreign language teachers, this knowledge can be useful in overcoming traditional barriers to language teaching and learning and can provide more efficient and creative ways of presenting English language.

Metaphor is typically seen as characteristic of language and is more a matter of words than thought or action. Our ordinary system of thought, with which we think and act, is fundamentally metaphorical in nature.

Metaphor is an underutilized resource in learning a foreign language that will be shown in this research. While metaphor in the English classroom has been the subject of many researches, they are all based on its use as means of acquiring vocabulary. This research aims to show the potential of metaphor in learningEnglish, as well as areas which can be improved.

In order to prove its application and benefits in teaching, an analysis of the curriculum for grade II was performed, as well as an analysis of the approved textbook and the representation of the metaphor in any form in it.

A comparison was made between an experimental and a control group, which, after the end of the research period, showed that the students from the experimental group had better results and were more willing to participate in the activities of the class.

This paper is intended to make it easier for teachers to apply metaphor in class, which would make their teaching more effective and make learning more fun for their students.

Keywords: *metaphor, cognitive methods, conceptual metaphor, role play, drama activities, drama as a technique, learning English as a foreign language, teaching English, motivation.*

Introduction

"In all aspects of life... we define our reality in terms of metaphors and then proceed to act on the basis of metaphors. We draw inferences, set goals, make commitments, and execute plans, all on the basis of how we in part structure our experience, consciously and unconsciously, by means of metaphor *(Lakoff, G., & Johnson, M. (1980). Metaphors we live by . Chicago: University of Chicago Press, p. 158)"*

(Lakoff and Johnson, 1980)

The concepts that govern our thought are not just product of the intellect. Our concepts structure what we perceive, how we move around the world and how we treat other people. Our ideological system thus plays a central role in defining our everyday realities. If we are right when we suggest that our conceptual system is largely metaphorical, then the way we think, what we experience and what we do every day is a metaphor.

Because language is fundamentally metaphorical, the conceptual system that governs everyday speech, thought, and even human action is fundamentally metaphorical. Metaphor is considered a way of thinking or conceiving the world. From a cognitive perspective, metaphor functions as a "bridge" for people to gain better knowledge and understanding of new, abstract and not well-defined concepts. Therefore, metaphor has been adopted as an analytical tool in many discourses.

Important Views on Conceptual Metaphor in ESL

Lev Vygotsky - Vygotsky believes that students learn the most when challenged and guided by a more advanced individual. The teacher, in a role of facilitator, begins by constructing a context in which students will be intrigued by what they see around them. In each well-planned lesson, the student develops between his or her current level of development and what he or she can reach or potential level, a part that Vygotsky called the Zone of Proximal Development (ZPD), where children learn to help each other, gradually develop learning and increase their capacity. The desired result is for the student to move up the stairs in the development zone and to move to the next zone as a goal of higher development.

Jean Piaget - Swedish biologist and psychologist Jean Piaget (1896-1980) is famous for constructing an influential model for child development and learning. Piaget's theory is based on the idea that as a child develops, he/she builds cognitive structures, i.e. mental "maps" or network concepts to understand and respond to physical stimuli in his environment. Piaget further argues that children's cognitive structures become more sophisticated during its development and range from several innate reflexes such as crying to very complex mental activities.

Piaget's theory consists of four developmental stages through which the child develops *(Keramitchieva R.Psihologija vo obrazovanieto I vospitanieto. Skopje: Prosvetno delo, 2002. p.87):*

1. Sensomotor phase (birth - 2 years) - This is the phase where the child does not know that physical objects exist if they are not in his field of vision (permanence of objects).
2. Preoperative phase (2 - 7 years) - The child is not yet able to conceptualize abstractly and needs specific physical situations.
3. Specific operations (7 - 11 years) - As physical experience increases, the child begins to understand by creating logical structures that explain his physical experiences.

Formal operations (11 - 16 years) - By this time, the child's cognitive structures are adult-like and involve understanding of the concept (**Posted by** On Purpose Associates . *Educators* , *Kids* , *Piaget* . **October 31, 2006 <** https://www.webmd.com/children/piaget-stages-of-development>)

The metaphor, by presenting the reality applied at a young age, not only supports the basic development, but also helps it. For example, in the preoperative phase (from two to about 6-7 years) children begin to combine thought with language, but still do not think logically. Classroom improvisation gives them the opportunity to link past experiences together and create meaning and a more complex understanding of the world around them. As children work in improvised conditions, the teacher exposes them to a wider vocabulary and creates more opportunities for communication with peers.

Winifred Ward

"Let the children
develop games from

their thoughts, imaginations and emotions (Winifred Ward. Creative Drama, 2nd E. Appleton-Century-Crofts, New York, 1957. Introduction)

Winifred Ward (1905-1975) opened the wonderful world of children's drama. She developed the field of children's theater and creative drama, allowing children to experience and appreciate the art of theater.

In 1944, Winifred Ward, a pioneer in the field of drama, convened a conference of teachers interested in forming an association that in less than 10 years would become a committee and later the American Educational Theater Association. Although children's plays were still popular stories and children's classics, the 1980s and 1990s brought new young authors to the stage. Their plays focused on current issues, themes, and often controversial themes. Old stories were and are still popular, but what is offered to young audiences is becoming more diverse and appealing to teenagers. Ward also founded the field of Creative drama. At the beginning of her "Creative Drama", from 1930, she felt that dramatizing a literary text or original story was a very "worthwhile endeavor, that led to student development, a school method that emphasized self-expression, an exercise in spoken English and respect for literature. But there is a shortage of manuscripts" (Winifred Ward. Creative Drama, 2nd E. Appleton-Century-Crofts, New York, 1957. Introduction).

Dorothy Heathcote

This is how Heathcote (1926-2011) explains the conceptual metaphor in education:

"... Metaphor allows students to penetrate other people's consciousness and experience a key segment of life as those people experience it. In this way, the application of educational drama brings students one step ahead of reading and introduces them to an activity in which they appropriate a personality, while at the same time building self-confidence through their roles. It is the development of human experience towards new understandings. It uses the facts, but it always provides new meanings" *(Heathcote, D. Dorothy Heathcote: Collected Writings on Education and Drama. London: Hutchinson, 1984. p.120).*

Heathcote is a practitioner and disseminator of a unique methodology based on the use of drama technique as a tool to stimulate holistic learning. Metaphor, when used this way, through drama as a technique, evokes an educational process, similar to constant travel, in that learning never ends and is always just a new beginning.

The child's behavior is monitored in an imaginary situation. Calculated risks are taken that allow the child and the teacher to expand their knowledge in order to be "re-formulated". Through constant observations, the teacher is able to realistically measure the knowledge in the class in order to raise it towards a specific goal of the curriculum.

Alan Maley - Fortunately, he lives and works in the period of major transformations in the way English is taught. In its very beginnings, in 1962, the structural method was already swaying and there was little material in the field of language learning. Over the next decade, everything changes. Chomsky's revolution is taking place and a new communicative approach is being developed. That is the period when teachers try new ideas in their own way.

Undoubtedly the most comprehensive methodological development takes place in the 80s, and it includes the slow evolution of the communicative approach. The overall focus is on communicating with real meanings, with an emphasis on the use of "authentic" texts. Students are first involved in communication activities and later attention is paid to the linguistic aspects of communication. "Learning to use" becomes "Using to learn". (*Alan Maley, The Creative Spark in ELT: a retrospective… ..Part One . Individual Perspectives. Folio sample article (Vol. 10/1, September 2005) http://matsda.org.uk/folio_article_sep05.htm)*

Maley is primarily engaged in explaining the role of the teacher in the classroom, how he uses that role, whether it creates or destroys the positive atmosphere for learning. In his book "Drama Techniques in Language Learning" (*Alan Maley, Drama Techniques in Language Learning University of Cambridge, ninth printing, 1992),* Maley explains at the outset what is meant by drama activities: "These are activities that give the student the opportunity to use his personality to create a character that he uses in class. These activities are based on the natural ability of each person to express themselves through imitation, pantomime or acting." They are based on the student's imagination and memory. Each student brings a different life, a different background to the class. He should use all that in class, in cooperation with other students. If the teacher ignores it, it is as if he is teaching the language in a vacuum. The very fact that we open our mouths while speaking implies that someone is listening. The listener is a person. "Why would you ignore him?” (*Alan Maley, Drama Techniques in Language Learning University of Cambridge, ninth printing, 1992),*

Advantages from Using Metaphorical Improvision in Daily Teaching

In classes that involve metaphorical improvisation, the school environment is a kind of an open classroom for a humanistic approach to education. There is a climate of acceptance, psychological freedom and open communication, and different ideas, behaviours, feelings, values, and even students’ mistakes are acceptable. Self-actualization, student choice and decision-making are encouraged. There is mutual trust and respect, which are the basic characteristics for learning and developing self-confidence.

Metaphor is important because it stimulates creativity in problem solving. It can foster students’ perceptions of themselves and their world. Improvisations can provide students with an outlet for emotions, thoughts, and dreams that they would not otherwise have the means to express. The student can, though only for a few moments, become someone else, explore a new role, experiment with different personal choices and solutions to very real problems - problems from his own life or problems faced by characters in literature as well as historical figures. This can happen in a safe atmosphere, where actions and consequences can be examined, discussed and in a very real sense experienced without the dangers and pitfalls that such experiments would have in the “real” world. This is perhaps the most important reason why metaphorical improvisation is in daily teaching.

Here are some specific benefits of using metaphor in teaching ESL:

1. It stimulates authentic conversations
2. It is a fluent activity
3. It is suitable for repetition
4. It creates sensitivity and awareness of reality
5. It increases motivation
6. It means getting out of the routine
7. It prepares students for real life and the unexpected

Research Methodology

Structure of the research

The research itself includes the following parts:

- Analysis of the curriculum for the second grade for the academic year 2021/2022

  Given the current situation, it is in abbreviated form.

- Analysis of the textbook English Adventure, Student's book, Starter B.
- Experimental and control group

They are expected to answer the following questions:

- How does metaphor, as a stylistic figure in teaching English as a foreign language, support both teaching and learning?
- How can metaphor be used most effectively?

The tools used to help answer the above questions are the following:

- Review of the curriculum for the second grade
- Review of the approved textbook for the second grade
- Comparative analysis of the experimental and control groups

Manner of data collecting when reviewing the curriculum for the second grade

Objectives of the curriculum for the second grade:

For the student:

- to be able to hear aurally and visually recognize specific lexical units related to the given topics;

- to reproduce orally separate lexical units and short expressions of the most immediate interest with correct pronunciation and intonation;

- to establish basic social contact using the simplest forms of formal and informal greeting and farewell, as well as forms of polite expression and models of cultural behaviour;

- to establish and lead a simple communication (speech interaction) by applying the adopted lexical units, grammatical structures and language functions appropriate for their age;

- to develop awareness of the values of one's own and respect for other cultures and traditions (multiculturalism), the rights and responsibilities of the child, care for the environment, as well as awareness of certain universal life values;

- to be able to work in pairs or a small group, contributing with their share and taking responsibility for their actions, in order to cooperate and build relationships with classmates.

Activities and methods listed in the curriculum for 2nd grade

Activities:

- Brain Brainstorming.
- Intonation exercises, non-verbal elements, etc.
- Listening to audio / video recordings and the teacher’s speech.
- Naming after visual displays (flash cards, poster) or reality (realia).
- Specific (non) verbal indication of people and objects.
- Listening to statements and responding to them with gestures and drawings.
- Memory games.
- Association games.
- Guessing games.
- Games such as: Bingo, Simon says, Hot potato, Musical chairs, Treasure Hunt, What’s in the box?
- Reproduction of the auditory lexical unit (drills).
- Answering questions such as true / false or open-ended questions.
- Exercises using pantomime.
- Dramatic improvisation, puppet theater play.
- Nursery rhymes, chants and songs, such as: One Little Finger; Trick or Treat Song.
- Colouring.
- Crafts: 3D modelling (plasticine, clay), hand print, sponge patterns (crafts).
-

Approaches / methods:

- Language Community Learning.
- Communicative method.
- Content-Based Instruction.
- Lexical.
- Natural.

- Structural.
- NeuroLinguistic Programming.
- Task-Based Language Teaching.
- Eclectic.
- Audiolingual.
- Audio-visual.
- Situational Language Teaching.
- Suggestopedia.
- Total Physical Response Method (TPR).
- Direct.

Assessment of student achievement

Each activity of the class during which the students perform, either on a receptive, reproductive or productive level, provides an opportunity to observe their progress and to evaluate it appropriately. Thus, the evaluation is performed as an integral part of each lesson, and not as an independent and isolated act. It is important to mention the authentic evaluation, i.e. natural evaluation, which takes place in the real world or simulates a situation known to the students, with procedures that do not differ drastically from the usual activities in class, instead of creating an artificial environment for evaluating their knowledge of the language. The development of each student is supported separately, focused on the children’s curiosity, skills, interests and experiences.

Didactic recommendations

When choosing the activities, one should take into account the differentiation and diversity that would cooperate according to the possibilities and abilities of the students. So, when planning the lesson, the different needs of the students and their learning styles should be taken into account, each student individually (diversification) in order for each student to fully realize their potentials. English language teaching for students of this age is based on multisensory (visual, auditory, tactile, etc.) and holistic learning that covers the cognitive, affective and motor aspects of students, i.e. the teacher integrates the various components to teach the language in a functional way.

The focus of the work on English language classes in the second grade is on oral expression that is associated with a given situation in the classroom, through games, dramatization, songs or movements by stimulating the imagination and creativity of the students. Students generally adopt content mechanically (through reproduction), but it is important to check that the message is properly understood, thus including the cultural elements (multiculturalism) *(https://www.bro.gov.mk/wp-content/uploads/2020/09/Skratena_programa-Angliski_jazik-II_odd-2020.pdf).*

Data collection during the analysis of the approved textbook for second grade

In order to collect data on the representation of metaphor in the second grade textbook, the only approved second grade textbook New English Adventure, Student's book, Starter B was reviewed.

- Size 220 ×275 mm, 89 p
- It is divided into teaching units, modules (total 8)
- The teaching units have an almost identical structure

English Adventure, Student's book, Starter B	*Language Focus; Vocabulary; Reading / Listening; Task; Further Skills; Study / Practice / Remember*

Plus additional Material; Appendices: Communicative functions index, Holiday pages, Cut outs and stickers for each unit.

In the teacher's book (*Heath, Jennifer, Regina Aczynska, Mariola Bogucka, Susanna Reed. New English Adventure Starter B. Teacher's book. (2016). Pearson Education Limited)*, there is already a daily lesson plan, which the teacher can use, but as an option there are many drama techniques listed, which metaphorically, can help create a "real" atmosphere in the classroom. They also include instructions on how to implement them:

Warm-up

It is a regular part of the lesson, for students to start thinking in English. It could be a popular song, game, or activity that students enjoy.

Songs and choruses

In each teaching unit there is a song and a chorus. These activities provide an extremely motivating and fun way to learn vocabulary and they make students sensitive to the rhythm and intonation of the language. Students love them and thanks to them they remember the vocabulary very well.

Stories

Children really enjoy listening to stories because they are part of their experience outside the classroom. Stories are a motivating way to introduce a new language into its natural context.

Detailed tips for working with stories before, during and after listening to the recording are included in the teacher's notes for each lesson 5, as well as on page A16.

Work in pairs and group work

Working in pairs and groups allows you to develop additional fluency in speaking. It is not enough for the teacher to speak only English. It is very important that students have the chance to first practice collective speaking repetition (all students at the same time) before starting to work in small groups or in pairs.

Working in pairs and groups will be effective and will not be too loud if students:

- they know exactly what to do,
- know how to complete the exercise,
- know who starts the exercise and in what order it should be completed
- know how the exercise should be completed
- know the vocabulary needed to complete the exercise
- speak in muffled voices,
- and have an easy task to perform.

If there is too much noise while working in pairs or groups, stop the exercise and make sure the students know what needs to be done and how. Then let them continue, but ask them not to speak so loudly.

Games

Games are part of children's daily lives, so playing in class can help them use English more naturally. It gives them the opportunity to practice the language in its natural context, as well as to become flexible while collaborating with other students. Another reason for playing games with students during the lesson is to change the pace and diversify the lessons. Students need diversification and physical activity. If they are tired and bored, the game can stimulate and encourage active learning.

Games and activities in New English Adventure textbook are easy to prepare and implement. They do not require special equipment. Many of these are TPR activities that involve following simple guidelines.

The general principles of organizing educational games and activities are the same for working in pairs and groups. Students who know what to do will not make as much noise as students who do not know exactly. Children who end up playing may make noise and disturb other students. That is why it is important that games do not last too long. Special attention should be paid to hyperactive students and, if it is possible, they should be given additional tasks in order to be busy.

Game ideas are included in the resources section on page A 21.

Puppet *(Heath, Jennifer, Regina Aczynska, Mariola Bogucka, Susanna Reed. New English Adventure Starter B. Teacher's book. (2016). Pearson Education Limited p.A9)*

The doll is a symbol of play and fun, as it is the way students should perceive English at this stage.

The doll (best if it could be a Disney character like Mickey Mouse, Minnie Mouse or others) should appear in repetitive situations. They can be introducing the student during the lesson, while singing the song “Hello!”, together with the class, when initiating games, helping students to realize their language achievements, playing with them and learning them as well as singing the song “Goodbye!” The puppet also plays the role of a friend who provides students with a sense of foresight and gives them a sense of linguistic self-confidence during the lessons. Therefore, when it is not possible to find a Disney character puppet, it is advisable to use another doll or soft toy. The doll can “live” in the classroom or just “attend” English classes.

Children are very sensitive little creatures that need support and praise. Do not spare smiles, patience, friendliness and help to them. If you give them such support and encouragement, you can undoubtedly count on success in education.

It is also important to diversify the exercises and activities in *New English Adventure* and to pay close attention to the audit. It should be noted that the better you use your time during a lesson, the learning will pay off.

The section “Building motivation” states that it is extremely important to maintain the involvement and motivation of young students during each lesson. When students are motivated, they learn faster and in a more active way. It is also very important from the point of view of the teacher, who, if the students are interested in the lessons, struggles with fewer cases of difficult behavior and problems with discipline *(Heath, Jennifer, Regina Aczynska, Mariola Bogucka, Susanna Reed. New English Adventure Starter B. Teacher's book. (2016). Pearson Education Limited p. A11).*

Below you will find some ideas to help keep students motivated:

• Make the classroom a friendly and exciting place to learn. Happy and friendly atmosphere will have a stimulating effect on the students’ creativity and their desire to learn and participate in class work.

Elementary school students eagerly and easily engage in all activities both emotionally and physically. They are not able to passively observe certain situations. Therefore, it is worth the effort for students to contribute to the course of the lesson. For example, while listening to a story, students can learn about the adventures of their favorite character. They can also do physical exercises and activities, e.g. to act on stories, short scenes or dialogues.

Students also want to speak about themselves, their inclinations and experience, and their knowledge of the world around them. *New English Adventure Starter B* provides tasks that will enable them to do so. You can also invite students to invent their own games and activities and if they can be played in class, perform them.

Success is the best motivating factor, so try to make each student feel like a winner and reward verbally the correct answers as well as good behaviour.

The textbook itself gives a description of several games that can be realized in class:

What does the picture present?

Telephone (Chinese whispers)
Alternative bingo
How many of us are there?
Catch and say it!
Pass the ball
The ball is burning
Guessing game: pictures
I name it and you point to it
Simon says

Comparative analysis and interpretation of the results of the experimental and control group

In this research students from the second grade from fourclasses in the Primary school "Gjorgji Sugarev" – Bitola were included.They were divided into two groups, the first one was the experimentalgroup (2-1 and 2-4) and the control group (2-2 and 2-3). The number of students in each of the groups is approximately the same and the students' success was approximately the same at each group level. All students (from all four grades, i.e. both groups) participated in the research.

The groups were exposed to different treatments during the testing period. The experimental group used drama techniques appropriate to their knowledge, to better understand the vocabulary they were repeating and studying in that period.

At the beginning, all four classes (i.e. both groups) were told they would have exercises to repeat the material studied in unit 8 - My party. The two groups will do the same exercises at the end of the research, i.e. after the end of the unit.

The experimental group was expected to show significant improvements as a result of the application of drama techniques, while the control group was expected to show a slightly weaker result.

The respondents are 7- 9 years old. The field research lasted from the 4th to the 20th of May or about three weeks, during which time the students had two hours of English per week.

In terms of their attitude towards learning, both groups had difficulties in applying what was learned, as well as difficulties in speaking. The conceptual metaphor was introduced for two reasons: first to motivate the students and make language learning more enjoyable and second to make students use the things they have learned in communication.

The textbook was the same for both groups. It is New English Adventure, Student's book, Starter B, by Tessa Lochovski and Christiana Bruni. Second grade vocabulary (pets and food) was reviewed during the research period. The control group was taught with a communicative method, based exclusively on the activities in the textbook (it was done according to the daily lesson plan provided in the textbook itself). No additional drama, improvisational, metaphorical or any other activities were introduced in the control group, except those in the textbook. The students were sometimes introduced to the words, and sometimes they had to come up with the rules for forming sentences on their own. While the students worked on their examples, the teacher helped them if needed. The answers were checked one by one aloud. Using pre-prepared pictures or using those from the textbook, students said their own sentences.

The Macedonian language was used as rarely as possible, in order for students to hear and use only English language. The vocabulary was first introduced through pictures, questions, drawings, then the examples in the textbook were reviewed, followed by listening and repetition exercises. Finally, the words were used in exercises with pictures or questions about them. In the skills section, students had to listen to the text, as well as fill in and answer certain questions. They were read aloud.

Unlike the control group, in the experimental group, in addition to the textbook activities, additional drama activities were introduced that included pantomime, role-playing, and games that contributed to language learning and practice. In the experimental group the students were active and participated in the activities of the class. The teacher was the guide, and sometimes just their friend. The textbook was the same as in the control group. But the teaching was not based only on the exercises in it. The teacher introduced additional activities, such as role-playing and games. A picnic was even organized in the school yard for a more credible presentation of the teaching unit.

Most of the students were not in the mood to talk at first, so the teacher introduced warm-up activities in order to make them feel more comfortable and relaxed. The teacher paid great attention to achieving a safe and free atmosphere.

There were also withdrawn students who believed they would not be able to communicate in English. However, the research itself aimed at increasing communicative competence, primarily through mutual cooperation between students. The teacher used warm-up activities and at the beginning she participated in the role play in order to relax and help them. Those were small roles. That way she could monitor what was happening and control the time and the tension. Acting in small roles also gave her a chance to encourage and support her students while they worked.

After getting used to this approach, students began to get used to talking in pairs, in groups or in front of an entire class. The main emphasis was on the application of speaking skills and the use of English in communication. The students felt free and relaxed to speak in the assigned activity.

The Macedonian language was not used by the teacher in order for the students themselves to get used to the use of English only. If there were any parts that the students did not understand, the teacher used gestures and facial expressions to explain them.

After the teacher made sure that the students understood what to do, she withdrew and only observed and noted any mistakes in the activities, but never interrupted the activity. The correction of the errors followed the completion of the activities.

In the beginning, role-playing was practiced in pairs. The students could sit, but if they wanted to, they could act in front of the whole class. They were not forced to do so. They had the freedom to decide for themselves how to rehearse their roles.

The period when the drama techniques were used in class was not the same for every lesson. Sometimes they were used at the beginning of the class to motivate students or to warm up, and sometimes they were used to repeat the material in a relaxed atmosphere.

Drama activities were also performed in the middle of the class when students would get bored. They lasted 5-10 minutes, so as not to create a longer break in the class.

Drama activities were also used to rehearse the new material at the end of the lesson after the material had been taught. Efforts were made, when possible, to include children who attend classes online in the dramatization itself.

Drama techniques were applied from easy to more complex, in order to motivate students to apply these techniques.

At the end of the research, the students from the experimental group were convinced that speaking a foreign language is not as difficult as they thought. They were also not forced to speak without errors. Sometimes students, between themselves, unconsciously corrected their mistakes. They did not feel pressured because they were learning and practicing English in an atmosphere full of fun and enjoyment.

After almost 3 weeks, each group was asked the same vocabulary questions again. From the given 16 words in the experimental group there was an average of 12 correct words per student. In the control group that average was 8. So we would conclude that the metaphor applied in English language teaching helped students to learn vocabulary, as well as to increase their communication skills.

Conclusion

In almost every classroom, the initial learning of English is planned with great energy, imagination and love, in order for students to feel like a whole new world opens before them, a world in which they listen and in which they speak another language. But sad is the fact that for some students it is a disappointment, in which they gradually fall behind and refuse to cooperate with the teacher. That’s why it is important that every teacher plans the path to success. It is the duty of every teacher to constantly look for ways to make language teaching more natural, more realistic and more fun. So you need to pay close attention when choosing techniques and activities. For teachers looking for effective ways to teach, drama as a technique offers tremendous opportunities.

Every perception of the text is both an interpretation and a performance at the same time because with each performance the text has a new perspective.

Metaphor can help teachers simulate reality in several ways:

- By making learning an enjoyable experience;
- By setting realistic goals towards which the students move;
- By slowing down, practicing and analyzing real experience;
- By linking learning to real experience.

With the implementation of English from the first grade, students from the youngest age are exposed to its application and use. It is primarily through stories, songs, pantomimes and games in which, in addition to fun, they also develop a love for the language. Through examining the representation of dramatic techniques in the curriculum, it could be seen that in the second grade the focus of the work on English lessons is on oral expression which is done through games, drama, songs or movements by stimulating the imagination and creativity of students.

Through the presentation and analysis of the textbook it was seen that *the textbook itself is a support for the teacher. It offers a chance for teachers to develop their own way of teaching. The guidelines given in it are in order to provide clear use of materials and support in understanding and thinking about some key areas in language teaching. In this way we would explain to the teachers why some ways of teaching succeed or not and how to make their teaching a pleasant experience, both for the students and for themselves.*

Through a number of exercises in them, by presenting and practicing the language in a real, motivating context, students are encouraged to use their knowledge and skills both in the classroom and in the outside world.

Communication exercises in each of the textbooks are given in order for the students to demonstrate and answer as much as possible, thus it can be seen what they know, as well as the parts with which they have problems.

The comparison between the two groups showed that through role-playing and games, students become more fluent in speaking and freer in using language. Students are encouraged to make the most of their experiences and fantasies and to be fully involved in a particular activity, in order to facilitate their language learning both for themselves and for the whole class. The experimental group, through drama activities, showed excellent results and great improvement after the period set for the application of drama techniques. The control group, studied using a communicative method, did not make such noticeable progress.

The results of this research showed that metaphor has a positive impact on learning a foreign language. Through metaphorical improvisation, students experienced "real situations" in the classroom.

It was also noted that even after the end of the research period, students in the experimental group were more willing to participate in class activities and were freer to make mistakes. They were full of self-confidence and showed respect for themselves and other classmates. The activities used in the lesson had to be creative. At first, the students did not want to participate in the activities. But the monotony of the class was shattered by drama activities. When the students realized that the activities were as effective as they were enjoyable and that they were learning while acting, they became more involved.

English teachers should be aware of the benefits and significance of conceptual metaphor and should try to use it in their classrooms to make their teaching more effective and to help their students use English for communication.

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EXPLOITING INFOGRAPHICS FOR ELT

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Abstract
An Infographic is information represented in visual form using graphics and text. Infographics integrate text, images and design features in a way that is concise, accessible and memorable. The present data and ideas to diverse audience on different platforms as part of knowledge transfer and can serve as authentic resources that meet the needs of English language learners. Infographics as a great source of visually rich content keep students motivated while learning English language as a foreign language and are useful in helping students to describe processes, reflect on progress, analyze and evaluate data. Despite their relatively low word count, infographics have been shown to enhance language skills. They help English language student to think critically about a subject, data set or complex idea and improve research skills and find trustworthy information sources, organize information logically, enhance their creativity and develop multi-perspective thinking. The aim of the paper is to share a wealth of ideas and activities for developing tasks and complete English language lessons around authentic infographics as well as suggestions for tasks that teachers can use with students to get them creating their own infographics and developing their critical thinking, digital literacy and language skills.

***Key words**: English language, Infographics, language skills, students*

Introduction

There has been a lot of concern about how students learn things, as opposed to just what they learn (Boulton & Lucas, 2011). This is especially crucial due to the significant changes in 21st-century pedagogies, which rely on the effectiveness and efficiency offered by information and communication technologies (ICT) tools like Web 2.0, smartphones, digital technologies, and other tools in education (Mynbayeva, Sadvakassova & Akshalova, 2018; Myamesheva, & Anarbek, 2015). Numerous contemporary methods have been developed as a result of the significant changes in 21st-century pedagogies, including, but not limited to project-based, problem-based, flipped classroom, project-based learning, thinking-based, gamification, design thinking, learning, and competency-based learning approaches. These approaches demonstrate how substantially 21st-century instructional methods have changed from traditional approaches to modern approaches. These contemporary methods are particularly significant because they put students at the center of their learning and give them the chance for active participation. Additionally, they enable students to take responsibility for their learning, make defensible choices about the components of their learning process, and practice self-regulation. In this way, teachers help students learn. Modern approaches also enable the smooth integration of ICT tools and other digital technology, which increases their efficacy in enhancing student outcomes (Ogunsola, Adelana, & Adewale, 2021). Infographics tools are one type of digital technology that has been shown to be useful for improving pedagogies and easing teacher workload while further simplifying learning for students by moving it from abstraction to concreteness (Lavin, Korte, & Davies, 2010).

Therefore, the aim of the paper is to share creation tools that help teachers make their own infographics and activities for developing English language lessons around authentic infographics proposed by Nik Peachey in his webinar recording called "Exploiting Infographics for ELT".

Infographics in the EFL setting

Infographics are modern, fashionable design and visualization tools that are used in educational settings to present information in an attractive, engaging way. The use of infographics is one popular technique for conveying complicated information to students in a learning setting (Abilock and William, 2014). Infographics have been defined in a variety of ways. It is a type of data visualization that aims to make complex information more understandable (Smiciklas, 2012); it combines text and graphics to quickly communicate qualitative and quantitative data to students (Toth, 2013); it is a way to communicate properly organized, and systematically designed visual contents to students (Lapum & St-Amant, 2016); it is a way to visually present instructional contents to students through text images, videos, diagrams, and charts, for faster comprehension of contents (Al-

Mohammadi, 2017) and it is an information represented in visual form using graphics and text (Pichey,2023).This further indicates that infographics can quickly and effectively convey information to students visually in the English language classroom (Smiciklas, 2012; Dunlap & Lowenthal, 2016). Infographics typically include three different sorts of elements: visual (graphics, colors, icons, and signs), content (texts, facts, and data), and knowledge (Siricharoen & Siricharoen, 2015). Infographic designs can be as simple as a layout of illustrations or as complicated as interactive animations. They have the ability to serve as communication tools, enabling comprehension of all relevant information without further source research (Toth, 2013). Additionally, infographics help learners avoid cognitive overload by removing extraneous knowledge and information. They also ensure speedier information transmission and comprehension in the quick-paced world of today. Because of this, infographics are now a fairly common type of contemporary communication. The usage of infographics in the ELT classroom has numerous potential advantages. Teachers concur that students are quite happy with the assignments of evaluating and producing infographics (Siricharoen & Siricharoen, 2015). Students learn and retain information more readily when it is given in the form of infographics (Ozdamli,2016). Infographics may help students acquire subject-related material and build a variety of practical skills and talents (Kibar& Akkoyunlu, 2017). Learning from both pre-made infographics and the processes used to create them can improve visual thinking and the capacity to learn through visuals. It can also teach students how to find and select the right visuals, as well as how to customize them for particular purposes, increasing their communication influence. These studies investigated the extent to which L2 learners generally learned through infographics. Pisarenko and Bondarev (2016) examined the impact of using infographics as a teaching and learning aid in the context of teaching foreign languages for specific purposes. There were two groups involved in the experimental study. In contrast to the control group, which exclusively used conventional materials, the experimental group incorporated infographics in their instruction. The findings showed that infographics have a positive impact on foreign language instruction because their use ensures that students actively acquire knowledge and raises their level of communicative proficiency in a foreign language. Additionally

Alrwele (2017) is the only study carried out in Saudi Arabia that looked at how infographics affected EFL students' academic performance and how the students perceived such effects. Two distinct areas of education were created, one utilizing infographics and the other using more conventional teaching techniques. Surveys and achievement tests were used to gather the data. The outcomes showed that the experimental group greatly outperformed the control group in terms of achievement. Additionally, the majority of experimental group participants (almost 90%) preferred infographics to conventional text-based materials. According to them, the infographics had a positive impact on both their intellectual and emotional growth (Alrwele, 2017). Furthermore, Bicen and Beheshti (2019) used flipped classroom instructional infographics to conduct research to measure the perceptions and evaluate the accomplishments of ESL preintermediate English language level students. They conducted a case study in which they used both a qualitative and a quantitative research approach to investigate the students' attitudes and academic success levels. According to the students' perceptions, infographics inspired them to learn and recall difficult material more quickly. The use of infographics in the classroom had a similar positive impact on students' learning and development of language comprehension skills. "Flipped Classroom Instructional Infographics" is the name of a study that Huseyin B., Mobina B., et al. did in 2019 regarding the use of infographics in a flipped classroom learning setting. The purpose of the study is to analyze the views and progress of ESL students in learning English through infographics used in flipped classroom training. According to the study's findings, the engaging and thorough nature of flipped classroom instructional infographics is more likely to stimulate students' motivations in the experimental group compared to the controlled group, which could make it easier for them to understand concepts, help them memorize information more quickly, and boost their confidence in the learning process. Finnaly, the effectiveness of infographics in teaching writing skills in the EFL setting of Saudi institutions was also studied by Hameed and Jabeen in 2022. Saudi EFL undergraduate students were participants of their study. Through the pre-test, post-test, and questionnaire, the researchers collected data. The research results showed that infographics improved students' creative writing abilities. Additionally, students' perceptions were excellent since they thought infographics were an eye-catching way to evaluate novel concepts.

However, researchers agree that a review of EFL teaching literature reveals sparse information about the implementation of infographics in EFL classrooms. **S**cholars note that teachers are not well-trained regarding infographic making tools and lack educational ideas of how to deploy them in the context of ELT classroom. This led to the requirement for research into the information and readiness of trainee teachers to use infographics tools for teaching and learning when they become in-service teachers.

Infographic sources

Teachers should use infographics into their English teaching and learning strategy for a variety of reasons. Perhaps one of the most fundamental reasons is – because they have become a predominant part of the way people choose to communicate information online and as such teachers need to help their students understand this genre of communication and work with it effectively. Infographics are, however, a very effective means of conveying the information in a much more visual way that is less dependent on explanatory text. According to Peachey (2023) the easiest way to find infographics for a specific topic is to use Google-keyword+Infographic such as:

e-Learning Infographics-Educational infographics

Daily Infographics- Get a new infographic in your inbox each day

Cool Infographics -Lots of information about data visualization and infographics

Pinterest-Find and save infographics and get suggestions for similar ones

The following creation tools presented in the paper will help teachers make their own infographics and dynamic material, or they can teach their students how to use them to make visuals (Peachey, 2023).

Creation tools

Draw.io

This is a great free tool for creating small graphics, flowcharts and diagrams. Download it and use it on your desktop.

- **Genial.ly**

  A great freemium tool for creating dynamic infographics, games, posters and presentations.

- **Visme**

  Another great freemium tool that also includes templates for interactive digital books.
- **Canva**

  A great freemium tool for creating dynamic infographics, games, posters and presentations.

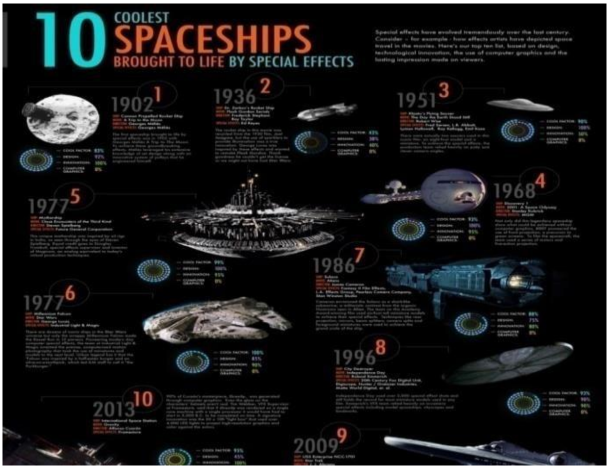
These steps indicate how to make an infographic:
Step 1: Outline your goals for creating your infographic.
Step 2: Collect data for your infographic.
Step 3: Make data visualizations for your infographic.
Step 4: Create your layout using an infographic template.
Step 5: Add style to your infographic design

English language lesson plans

English language lesson plans below based around infographics will enhance students' critical thinking, digital literacy, language and communication skills during the learning process (Peachey,2023). These lesson plans could be used as a collection of a ready-to-use materials as well as generic ideas that teachers can use to create their own tasks for exploiting infographics.

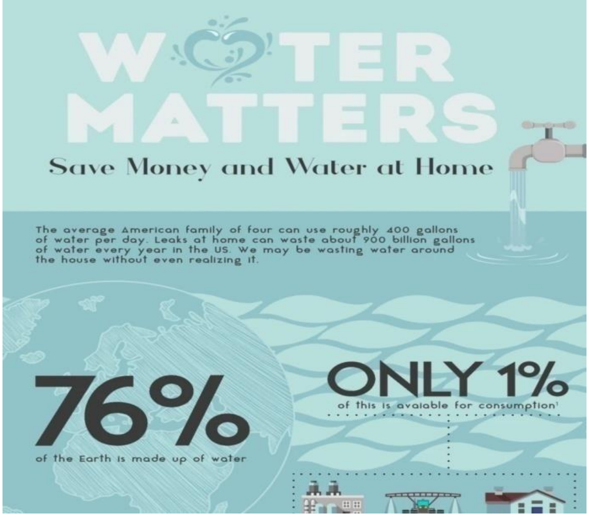
CREATED QUIZZ

Give your students an infographic and get them to create a quizz based around it. Once the students have created their quizz they can use it to check the comprehension or knowledge of other students in their class. You can make this competitive and have teams to quizz each other.


10 COOLEST SPACESHIPS BROUGHT TO LIFE BY SPECIAL EFFECTS
Special effects have evolved tremendously over the last century. Consider - for example - how effects artists have depicted space travel in the movies. Here's our top ten list, based on design, technological innovation, the use of computer graphics and the lasting impression made on viewers.
1902 1
1936 2
1951 3
1968 4
1977 5
1986 7
1977 6
1996 8
2013 10
2009 9

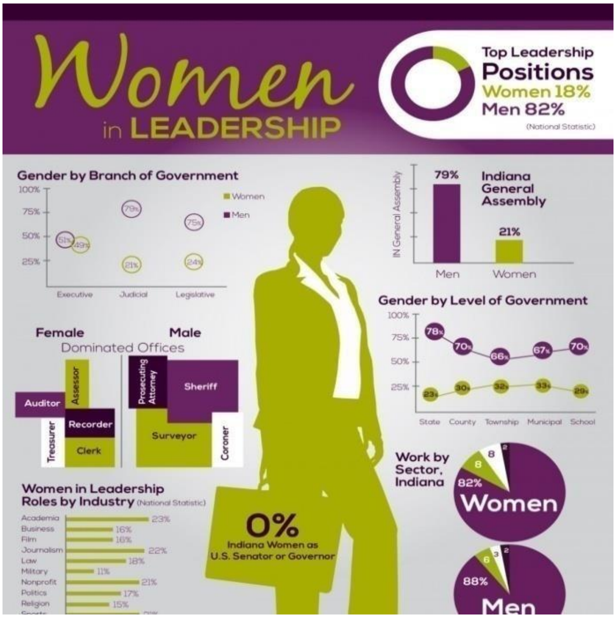
WATER MATTERS

Make a presentation! You can ask your students to prepare an oral presentation based on the information they took from the infographic.


WATER MATTERS
Save Money and Water at Home
The average American family of four can use roughly 400 gallons of water per day. Leaks at home can waste about 900 billion gallons of water every year in the US. We may be wasting water around the house without even realizing it.
76%
of the Earth is made up of water
ONLY 1%
of this is avaiable for consumption

WOMEN IN LEADERSHIP

Ask your students to take notes about the most important information in the infographic and then use the notes to write a summary. The summary could have some form of publication as a motivation, such as a newspaper report website publication.



To sum up, the proposed creation tools and English lessons plans are a great source of visually rich content for teachers to keep their students motivated whether they are in the physical or online classroom. Students can utilize infographics as creative learning exercises as well as information sources that influence their cognitive styles. The assignments that go with the infographics are meant to inspire students to question the origins of the information they come across online and to think more critically about the material they are exposed to.

Conclusion

The aim of the paper was to share a wealth of ideas and activities for developing tasks and complete English language lessons around authentic infographics as well as suggestions for tasks that teachers can use with students to get them creating their own infographics and developing their critical thinking, digital literacy and language skills. The paper has shown that the utilization of infographic are cognitive tools that assist students to learn with, analyze problems, reflect on their progress, describe methods, and assess data. What emerges as a conclusion and recommendation regarding the use of infographics and such lesson plans is that they contribute not only to the development of language skills but at the same time to organize information logically, think critically about a topic, data set, or complex notion in English language education. Students also become more creative and develop multi-perspective thinking in a visually engaging style. All arguments presented in this paper could help language syllabus teachers to create books based on infographics. It should be emphasized that if teachers are not prepared to create and use infographics in the classroom to promote effective learning and enhance student learning outcomes, then infographics will not be used effectively in the educational setting.

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SESSION 11

(Educational Sciences- Didactics of languages and literature)

CHALLENGES IN THE FIELD OF ESP TEACHING AND LEARNING: A CASE STUDY WITH THE STUDENTS OF THE FACULTY OF ECONOMY IN “FAN S. NOLI” UNIVERSITY

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Abstract

As widely observed, there is a growing tendency towards the implementation of new trends, tools and practices in the process of teaching foreign languages to all the categories of students and in almost all knowledge levels. Aiming at becoming part of the globalization process, many educators are experimenting with different methods and techniques due to the fact that they differ according to the students' specific interests, language acquisition capacities, teaching/learning environment, etc. This paper focuses on the practices followed while teaching 'English for Special Purposes' to the students of the Faculty of Economy, in Fan S Noli University. It takes into consideration a number of elements such as the choice of textbooks, teaching methods, the communicative aspect, students' attitude and other aspects which are important and highly influence students' performance during and after the course. In this aspect, special attention will be paid to the application of virtual learning as a means of sharing experiences in higher education. Moreover, questionnaires will be utilized in order to bring into focus students' views and suggestions for improvement in the field of ESP teaching/learning in order to adapt the current practices for better acquisition and lifelong learning.

***Keywords**: ESP, textbooks, vocabulary, communicative competence*

Introduction

English for Specific Purposes (ESP) has been part of the Higher Education curricula for many years since it is considered as an important element in providing students with the necessary linguistic competence for their future performance. Its main focus is to convey English knowledge and to build language skills that are tailored to meet the specific needs and goals of learners in particular professional or academic contexts. Though different from each other, ESP is closely related to EGP (English for General Purposes) due to it often being the 'next step' in learning a foreign language (in academic field). It is generally argued that the students who have previously been taught EGP find it easier to deal with the complexities of ESP due to their level of general knowledge of everyday language. Due to ESP addressing specialized fields where English is used as a means of communication and the rising need for ESP-equipped graduates, Higher Education Institutions have seen it necessary to adapt and modify their teaching tools and methodologies to properly cater to labor market's needs. The entire process entails a number of challenges and discrepancies which somehow influence the process of language acquisition.

The focus of ESP

Even though it is widely considered as the foundation of ESP, EGP is usually frowned upon when it is taught to students at university level. This is the result of the fact that learners at this level have more specific needs (Dudley-Evans & St John, 1998) and should be provided with the same categories like the ones received by other targets of ESP courses. The latter are mostly expected to be adults who learn English as per the specific linguistic requirements of their professions. What seems to be a focal point among most ESP teachers is what Duyen (2019) addresses as the need for it to be taught within the boundaries of "globalization and internationalization".

In this aspect, however, it can be argued that aiming to accomplish all the above mentioned duties without having a certain knowledge of EGP will hamper the entire process and somehow alter the focus of the subject as well. The lowest 'necessary' level of EGP knowledge required by a university level student to succeed in ESP courses varies according to lecturer's views (there are teachers who believe that A2 level will equally facilitate ESP teaching/learning) but what concerns us is the fact that without previous knowledge of EGP both students and lecturers face various difficulties which very often lead to the formers' lack of proper communicative capabilities very necessary for today's labour market's needs and expectations.

On a more practical level, we can bring into focus the fact that ESP is goal-oriented (Robinson 1989) which means that we (as teachers) need to tailor our teaching methodologies and tools according to specific goals and develop our course based on our students' needs and future benefits. Due to ESP courses devised based on Communicative Language Teaching (Richards 2001), lecturers are required to adapt their specific approach accordingly and, consequently, all the curriculum of the subject, the environment/s where it will be acquired and most importantly, students' perceptions. This process includes a wide range of preparations which are often subject to fundamental changes as per needs implied by global changes and labour market's needs.

Current Situation-general observations

Nowaday, students have the opportunity to be taught by educators who draft their teaching content taking into account learners' specific expectations derived mostly by their study program and their future areas of employment. In this aspect, ESP as a university subject is required to employ specific teaching methods and tools to cater to the requirements of "the specific discipline it serves" (Dudley-Evans, 1997). However, as with all other fields of our life, there are exceptions regarding the implementation of one or more of the required elements for an adequate ESP learning experience in our Higher Institutions.

On a more specific observation, it can be mentioned that the current practices followed by lecturers teaching ESP to students of the Faculty of Economy in Fan S Noli University are to some extent in compliance with the latest trends suggested by researchers. As such, it is observed the use of ESP textbooks in most of the Study Programmes with the exception of two cases in which the lecturers have decided to utilize EGP textbooks as a result of students' low level of English knowledge and mixed ability classes. While students' general knowledge of English language is unquestionably important, many researchers argue that their use is highly important to the achievement of students' specific needs. Dudley-Evans (1997) confine it to intermediate and advanced level but current practice has proved that even students with a pre-intermediate level of English knowledge have successfully completed their ESP courses. This is a result of various factors among which students' motivation and dedication as well as the fact that ESP courses mostly focus on vocabulary teaching are the most prominent ones.

Regarding the use of ESP textbooks, it is worth highlighting that various researchers acknowledge the fact that there is room for constructive changes and not all of them succeed in reaching the goals of their corresponding specific domain failing, thus, in fulfilling what Shannon (2010) refers to as students' "socio-cultural" needs, many agree that their use is mandatory. Moreover, some researchers consider them as "the milestone" (Umar & Eterji, 2020) of any ESP acquisition course and consider their absence as the cause of a failure of its focal point (Richards, 2001) leading to an "incomplete teaching-learning process" (Hutchinson & Torres, 1994). Another reason making the use of EGP materials inappropriate for ESP teaching is the fact that the knowledge they offer is not linked to students' immediate and to their future interests and the type of the language the latter acquire lacks the level of objective factual examples.

Technology comprises a topic which always leaves room for constructive discussion. It is noted that when ESP classes are concerned, its use is limited to the device used for listening skills, a laptop necessary to present final course projects and emails used to collect assignments. It is clear that ESP teaching (like all the other subjects) needs to move with the evolutions of the time and adapt new methodologies and practices as well.

New tools/new practices

Researchers suggest a number of materials, practices and tools regarding the improvement of the process of ESP teaching/learning. West (1994) and Long (2005) suggest taking learners' needs and target situations into consideration while drafting the course syllabus while Ellis (1997) strongly advises teachers to focus their materials on well-thought topics which help learners "practice the target skills areas". It is very necessary for teachers to extend the range of their teaching tools with relevant, authentic models, texts, videos and recordings taken from current areas, everyday activities of various banking operations, businesses, etc., accordingly. Also, in this aspect, greatly advantageous is considered the introduction of virtual collaborative learning which is already being used by educators in different subject areas. It improves students' collaborative skills, their information-sharing abilities, technology use and increases their motivation in participating during and after classes. All these contribute to rendering ESP acquisition a more easily percepted process, far from a miscellaneous number of attitudes ranging from both extremes.

In order to comply with the students' specific needs and the actual trend in ESP teaching, it is highly suggested that teachers of this subject opt for the use of Integrated Skill Approach. Pardede (2019) argues that the implementation of this approach in the teaching process successfully develops the communicative competence of the students leading to satisfactory outcomes and improved critical thinking. It is an advantageous approach which motivates the combination of the teaching methods and tools in all the skills of language teaching/learning and renders ESP an enjoyable subject where students seek to find ways in which they can build foundations for further use when they face hiring competitions, work commitments, etc.

Many teachers agree that the introduction of virtual teaching tools like "Miro board", Canvas, Quizzizz, Kahoot, Thinglink, Skillshare, Poll Everywhere, Socrative, etc., highly contribute to material contextualisation; raise students engagement and interest; and complete the socio-cultural aspect that is a feature that current ESP textbooks lack. Teachers might also make use of 'instructing' videos recorded according to classes' specific needs and 'assigned' interactive ones making students find themselves more personallyrelated as well as highly influenced.

Students Perspective

In order to have a better view of the current situation, it was seen necessary to consider the issue from the students' perspective. Therefore, 100 students were asked to give their evaluation for their ESP course experiences via questionnaires. In the end, it was noted that 90 % of the students strongly believe that change is necessary, 40 % of whom knew what they would like to change while 50 % are willing to cooperate.

Students were asked to suggest activities according to their preferences in order to improve the relationship between them, the teacher and the subject and among the suggested activities: blogs, social media, integrated projects, etc., lead the way. There are also students (60%) who advocate a fewer assignment policy, more space for ESP as a subject (70 %) and more eBanking related material (45%). A very interesting aspect were students' suggestions for more translation activities (50 %). There were also many students (75%) who were against the actual form of assessing their knowledge but none of them gave any specific recommendations. Though not fully ingrained in the latest development of ESP teaching theories, students' point of view remains a meaningful aspect in the entire process of language acquisition and should serve as an assessment element for teachers' way of conceptualizing the subject in general and all the specific elements in particular.

Conclusions

Many students agree that current ESP textbooks provide them with a high amount of new vocabulary and very little space to properlyacquire on a communicative level. Also, a considerable number of themstate that avoiding grammatical topics entirely from the text leads to students' incorrect use of language. This leaves the teacher with the duty to fulfill the gap by providing their students with additional material.

The hours available for this subject are another point which needs to be seen more carefully. There is not enough space for the entire information to be dealt with adequately in order for the students to be able to acquire, practice and employ it in any future circumstances. All this process would become easier for both parties if students' suggestions are taken into consideration while drafting future syllabuses and if teachers agree to incorporate updated activities/real models taken from banks/businesses in order to grasp students' interest and to enhance their academic/real life performance.

The most important change which needs to be done is to keep 'growing up' with our students.

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POSTER SESSION

THE IMPORTANCE OF TEACHING ENGLISH GRAMMAR BASED ON AND THROUGH LANGUAGE SKILLS

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Abstract
The aim of this paper is to emphasize the importance of teaching English grammar communicatively by being based on and through the other language skills (reading, writing, speaking and listening). According to Larsen-Freeman (2003), knowledge on grammar should be considered as a skill, which she refers to as grammaring (the fifth skill). Many EFL teachers find it difficult to approach integrating different target grammar structures into practice in their classes with their students.
In this paper, ways of integrating grammar instruction with skills and through them will be explored and what the benefits and drawbacks of integrating grammar and skills teaching will be discussed. In order to support our students learning, it is important to discuss how to adapt course materials and integrate communicative tasks whenever we find it necessary in our teaching context. What is the attitude of other colleagues in relation to this approach? Have they ever applied it? Results will be introduced and conclusions will be drawn by analyzing the answers of a questionnaire covering this very interesting topic.

Keywords: *English grammar, language skills, integrating, communicatively*

Introduction

Grammar teaching has always been one of the most controversial and least understood aspects of language teaching. (Thornbury: 2008). In 1622 a certain Joseph Webbe, schoolmaster and texbook writer, wrote: 'No man can run speedily to the mark of language that is shackled ... with grammar precepts.' He maintained that grammar could be picked up through simply communicating: 'By exercise of reading, writing, and speaking ... all things belonging to Grammar, will without labour, and whether we will or no, thrust themselves upon us.’ (cited from Thornbury: 2008, p. 14). It seems that Webbe was one of the earliest scholars to doubt the value of grammar instruction, and of course not the last one. It took centuries until this claim became the heart of what is known as *Communicative Approach*, or *Communicative Language Teaching* (CLT), which emerged in the 1970s. Since then, different scholars have been arguing that grammatical knowledge (linguistic competence) is only one element of communicative competence, which, according to them, includes knowing how to use grammar and vocabulary in order to communicate appropriately and how to do this in certain social contexts. Traditionally speaking, ... students are taught grammar as a set of rules, but even if they can apply the rules to exercises successfully during the lesson, they don't seem to be able to activate their knowledge of the rules when they are communicating during another part of the lesson or in another context. (Larson-Freeman, World Learning; 2018, TGC, M 2, p. 4).

Larson-Freeman (2003) created the term *grammaring* to convey the idea that grammar is a dynamic system, which needs to be taught as a skill, the *fifth skill* (the other four being *reading, writing, speaking* and *listening*), rather than as a fixed body of rules. If teachers understand that what they might try to do is to get students to use grammatical structures accurately, meaningfully, and appropriately, then they realize that they need to provide students with an opportunity to use grammar structures in meaningful and engaging activities. In the past decade, there has been a lot of discussion about the need to integrate grammar and skills teaching. What are the benefits of this approach? How does it help students improve their English? (World Learning; 2018, TGC, M 5. p. 3).

The integrated-skill approach, …, exposes English language learners to authentic language and challenges them to interact naturally in the language. Learners rapidly gain a true picture of the richness and complexity of the English language as employed for communication. Moreover, this approach stresses that English is not just an object of academic interest nor merely a key to passing an examination; instead, English becomes a real means of interaction and sharing among people. This approach allows teachers to track students' progress in multiple skills at the same time. Integrating the language skills also promotes the learning of real content, not just the dissection of language forms. Finally, the integrated-skill approach, ..., can be highly motivating to students of all ages and backgrounds. (Oxford, 2001; pp. 10-11). Integrating grammar into skill-based lessons can be an effective way to enhance language learning. By incorporating grammar concepts within the context of practical skills, students can develop a better understanding of how grammar functions in real-life situations. Different types of grammar teaching methods and techniques used by teachers can affect the development of all language skills (reading, writing, listening and speaking) and the overall language performance of the learners.

Research Methodology

In the light of the questions raised above, our study attempts to investigate the practice of integrating grammar in skill-based language teaching in order to improve learners' comunicative skills in using English either in speaking or writing.

The research design is the conceptual structure within which this paper is conducted. The main aim of this study is to assess the importance of integrated–skill teaching and learning of English grammar. A descriptive survey design involving both qualitative and quantitative techniques was employed. The primary sources of data were from subject teachers who are actually teaching EFL in different schools of our region. The main technique was that of the questionnaire designed for teachers to attain the required information. It was distributed to 20 teachers and it was divided into 4 parts:

Part 1. Teachers' Profile

Part 2. Teachers' attitude to the importance of teaching grammar to improve learners' writing and speaking skills

Part 3. Teachers' awareness in teaching integrated grammar to improve students' skills

Part 4. Teachers' responses regarding the methods currently being used in order to teach grammar communicatively

These are the main objectives of our study:

-Investigating whether the techniques of teaching grammar motivate students to improve their skills in order to learn English better,

-Exploring the teachers' awareness in teaching integrated English grammar to improve students' skills, and

-Exploring the methods currently being used in order to teach English grammar through skills.

The questions were adapted from http://journalppw.com.

Results And Discussion

This section deals with the results, analysis and interpretation of the data obtained from the teachers' responses to the questionnaire statements.

As indicated above, the teachers involved in this study were 20 [randomly selected], all from our region. Their background information is presented below:

Table 1: Part 1. Teachers' Profile

No	Item	Years	Number	%
1	Age	18-24 years	5	25%
		25-34 years	6	30%
		35-44 years	5	25%
		45-55 years	4	20%
2	Qualification	Bachelor	-	-
		MA	12	60%
		Doctorate	8	40%
		PhD	-	-
3	Total years in teaching English	1-5 years	10	50%
		6-10 years	1	5%
		11-15 years	1	5%
		16-20 years	4	20%
		20-... years	4	20%
4	Level of school	Elementary	7	35%
		Middle	7 / 2	10%
		High	3	15%
		University	8	40%
		Other	-	-

Table 1 gives a general background on teachers' profile and basic information. The first item includes information about the teachers' age. 5 of them (25%) are of a young age 18-24 years old with little experience in teaching English. 6 of the teachers fall in the age group from 25-34 years old (30%) and 5 (25%) are within 35-44 years of age range, respectively. 4 of the teachers (20%) are from 45-55 years old. As far as the teachers' qualification is concerned, 12 (60%) of them hold an MA Degree, and the rest 12% (8 of them) hold a Doctorate Degree. As to the teachers' experience in teaching English language, it is shown that 10 of them (50%) have taught English up to 5 years, 1 of them (5%) has an experience of 6 to10 years and another one (5%) has taught English from 11 to 15 years. Besides, 4 of the teachers (20%) have a 16-20 years of experience as EFL ones, and another 20% of them (4) have a longer experience above 20 years. As for the level of school, 7 of the teachers (35%) actually teach English at elementary school. 7 of them teach at both elementary and middle school, and only 2 of them (10%) teach at middle school. Besides, 3 of the teachers (15%) teach at high school and 8 of them (40%) teach at University level (Bachelor). From these data, it can be mentioned that all the teachers meet the qualification required and they are capable of integrating grammar into skill-based English classes.

Table 2: Part 2. Teachers' attitude to the importance of teaching grammar to improve learners' writing and speaking skills

No.	Statement	Alternatives									
		5		4		3		2		1	
5.	Knowledge of grammar helps learners to communicate in written/spoken language effectively and efficiently	10	50%	9	45%					1	5%
6.	Grammar exercises in the textbook should be presented in meaningful	4	20%	13	65%	3	15%				

	contexts and situations										
7.	There is no reason for learners to study grammar when they learn language			1	5%			10	50%	9	45%
8.	Teachers should discuss grammar deductively	1	5%	12	60%	4	20%	3	15%		
9.	Using a variety of techniques in grammar teaching enables learners to express their ideas using written/spoken language	13	65%	7	35%						

Strongly agree=5, Agree=4, Neither agree or disagree=3, Disagree=2, Strongly disagree=1

Table 2 above includes information about the teachers' attitude to the importance of teaching grammar in order to improve their learners' skills in writing and speaking. It is obvious that the majority of the teachers strongly agree (50%) and agree (45%) with the idea that knowledge of grammar helps learners to communicate either in speaking or writing effectively and efficiently. Only 1 of the teachers (5%) seems to strongly disagree with that. The teachers arehighlighting the importance of grammar in the whole process of learning a language. There seems to be a fair rapport between the aboveidea (statement 5) and the 7th one with which 10 of the teachers (50%)disagree and 45% strongly disagree. Only 1 of the teachers (5%) agreesthat there is no reason to study grammar when learning a language. Asfar as textbooks are concerned, again most of the teachers strongly agree (20%) and agree (65%) that grammar exercises should be presented in meaningful contexts and situations. Only 3 of the teachers (15%) seem to have a neutral opinion on this statement. Teachers are referring to their own textbooks, which they have been using in their classes. In fact, in most cases, exercises are presented in isolated sentences and the learners only try to find the correct form, which does not foster their opportunities to use language communicatively. Should teachers discuss grammar deductively? This is certainly the traditional way of presenting grammar and only 1 of the teachers (5%) strongly agrees with it. However, a considerable number of teachers, 12 of them (60%) seem to agree with this approach, which shows that many teachers still use it in their classes. 4 of them (40%) neither agree or disagree and only 3 (15%) of the teachers disagree with presenting grammar deductively. there is no doubt that using a variety of techniques in grammar teaching enables learners to express their ideas either in written or spoken language. All the teachers accept that, 65% strongly agree and 35% agree, respectively.

All in all, responses to the above statements imply that the teachers believe that grammar is one of the most important issues in the process of language learning. What the teachers need to remember is to scaffold the grammar instruction appropriately, starting with simpler concepts and gradually progressing to more complex ones. They have to make sure to provide clear explanations and examples when introducing new grammar rules and offer plenty of practice opportunities for students to apply their knowledge. By integrating grammar into skill-based lessons, teachers can always help learners develop both their language proficiency and their grammatical accuracy.

Table 3: Part 3. Teachers’ awareness in teaching integrated grammar to improve learners’ skills

No.	Statement	Alternative									
		5		4		3		2		1	
10.	Language consists of micro skills: reading, listening, writing and speaking and other elements	14	70%	6	30%						

	(grammar and vocabulary); and these skills should be taught in integration										
11.	Integrated grammar teaching helps learners learn English language in a better way	14	70%	6	30%						
12.	Integrated grammar teaching creates positive sense to learners and teacher - to create smooth interaction	9	45%	11	55%						
13.	Integrated grammar teaching motivates learners to learn the English language	6	30%	9	45%	3	15%	1	5%	1	5%
14.	Integrated grammar teaching helps learners develop positive self-esteem, independent learning and critical thinking	6	30%	10	50%	4	20%				
15.	Integrated grammar teaching creates a good classroom discipline	5	25%	8	40%	7	35%				
16.	Integrated grammar teaching helps learners develop their skills	9	45%	10	50%	1	5%				

EFL teachers need to know the benefits of integrating grammar with other skills for their learners. Table 3 includes information about teachers' awareness in teaching integrated grammar to improve learners' skills. All the teachers seem to accept the idea that all the skills of language (including grammar as the fifth skill and vocabulary)should be taught in integration, 14 of them (70%) strongly agree and 6teachers (30%) agree, respectively. The same figures refer to the otherstatement which expresses that integrated grammar teaching helpslearners learn English language in a better way. Also, the teachers agreethat by using this approach creates a positive sense for both learners and teacher to interact smoothly, 9 of the teachers (45%) strongly agreeand 11 of them (55%) agree, respectively. In some way, this is relatedto the question 15 which expresses that integrated grammar teaching creates a good classroom discipline. Although the majority of the teachers 25% and 40%, respectively, strongly agree and agree, there are 7 of them (35%) who are neutral. As for the question whether integrated grammar teaching motivates learners, not all the teachers approve it. Although the majority 30% strongly agrees and 45% agree,respectively, there are 3 of them (15%) who neither agree or disagree and 5% who disagree and another 5% who strongly disagree. How much does this approach help learners develop positive self-esteem andindependent learning? What about developing their skills? In answering these questions, it seems that most of the teachers acknowledge the benefits of their learners. 6 of the teachers (30%) strongly agree and 10 of them (50%) agree with the first one and 9 of the teachers (45%) strongly agree and 10 of them (50%) agree with thesecond one, respectively. Still there is a small number of teachers 20%and 5%, respectively who are neutral.

On the whole, it has to be said that the teachers in general are aware of the advantages that teaching integrated grammar have in order to improve learners' skills since they are exposed to grammar concepts in meaningful contexts. It also enables students to see the practical application of grammar rules and structures and encourages their critical thinking by making informed decisions about language choices and constructions. This process requires analysis, synthesis and evaluation, fostering higher-order thinking skills beyond rote memorization of grammar rules. This approach fosters a deeper understanding of grammar and its role in effective communication (either in speaking or writing), ultimately enhancing overall language proficiency.

Table 4: Part 4. Teachers' responses regarding the methods currently being used in order to teach grammar communicatively

No.	Statement	Alternative									
		5		4		3		2		1	
17.	Grammar teaching is considered as an old method practice of teaching	1	5%	6	30%	7	35%	6	30%		
18.	Grammar lessons are organized in a way that prepare learners to use grammar for real-life situations	5	25%	13	65%	1	5%	1	5%		
19.	Learners are made to work in pairs and groups to practice grammar rules	6	30%	9	45%	4	20%	1	5%		
20.	Learners are advised to take responsibility for their own learning	11	55%	9	45%						
21.	Learners are encouraged to express their ideas freely when grammar is being taught	10	50%	9	45%	1	5%				
22.	Learners are motivated to use grammar items to write or tell something about themselves	14	70%	6	30%						
23.	Grammar items are presented by	10	50%	9	45%	1	5%				

	using contexts and situations										
24.	Learners are assigned written and oral task to make use of the grammar items which they have encountered	6	30%	14	70%						
25.	Please share any other comments you have	Grammar should not be taught by rules but in real-life contexts. Grammar plays a crucial role in language acquisition, that is why it is important. Grammar is important because it helps in using the language correctly. Grammar is by far the most important unit when dealing with English and communication. We are good communicators when we know how to use grammar.									

Table 4 includes information regarding the methods currently being used in order to teach grammar communicatively. Can grammar teaching ever be considered as an old method practice of teaching languages? The responses to this question are a bit surprising. It seems that 7 of the teachers (35%) are neutral, only 1 of them (5%) strongly agrees and 6 teachers (30%) agree. Only 6 of them (30%) disagree with this statement. The majority of the teachers still think that grammar should be part of their teaching languages practice. This brings us to the next statement with which the majority of the teachers strongly agrees (25%) and agree (65%), respectively by emphasizing that grammar is taught in the context of real-life situations. Only 1 of the teachers (5%) is neutral and another one (5%) disagrees. By using authentic texts, learners grasp the nuances of grammar rules and their appropriate usage. Again, most of the teachers (30%) strongly agree and (45%) agree with the fact that working in pairs and groups helps learners practice grammar rules. 4 of the teachers (20%) are neutral and only 1 of them (5%) disagrees. In this way they are encouraged to apply their grammar knowledge while communicating with each-other, gaining practical experience. All the teachers seem to advice their learners to take responsibility for their own learning, (55%) strongly agree and (45%) agree, respectively. Learners need to become attuned to the patterns, rules and conventions that govern English language. In this way, they develop a deeper appreciation for language structure and are better equipped to analyze and evaluate their language use and improvement. Teachers also encourage their learners to express their ideas feely. Similarly, most of the teachers strongly agree (50%) and (45%) agree, respectively. Only 1 of the teachers (5%) is neutral. This attitude helps learners recognize how grammar shapes meaning and facilitates accurate expression, making the learning process more engaging and relevant. All the teachers (70%) and (30%), respectively strongly agree and agree that they motivate their learners to use grammar items to write or tell something about themselves. Similarly, learners are also assigned tasks (either written or oral) to practice grammar encounters. All the teachers, (30%) and (70%), respectively strongly agree and agree with that.

Grammar instruction based on language skills bridges the gap between theoretical knowledge and practical application. Learners acquire grammar concepts and put them into practice, which makes them see the direct impact on their language skills. This integration promotes a deeper understanding of grammar as a tool for effective communication rather than an isolated set of rules. As for the other item, again the majority of the teachers, respectively (50%) and (45%) strongly agree and agree. Only 1 of the teachers (5%) is neutral. Contextualizing grammar is very important. Instead of teaching grammar rules in isolation, teachers try to provide meaningful contexts for learners to understand how grammar is used in authentic communication. Teachers need to choose skill-based activities or topics that naturally lend themselves to the application of specific grammar concepts.

Conclusions and Recommendations

English grammar forms the backbone of effective communication in the English language and the majority of the teachers, who responded to the questionnaire, are aware of the importance of grammar. While grammar instruction has sometimes been viewed as tedious or disconnected from the other language skills, a more integrated approach that emphasizes teaching grammar based on and through these skills can greatly enhance language learning outcomes. This article explored the significance of incorporating grammar instruction within the context of language skills and highlighted the benefits it offers to language learners. Teaching English grammar based on and through language skills is a powerful pedagogical approach that enriches language learning experiences. By integrating grammar instruction within the context of language skills, learners develop a holistic understanding of grammar’s role in effective communication. This approach enhances language proficiency, promotes contextualized learning, and fosters critical thinking and language awareness. Ultimately, it equips learners with the necessary tools to become competent and confident communicators in the English language.

Based on the data analysis and conclusions, here are some recommendations on different strategies that can be used to integrate grammar into skill-based lessons:

1. Instead of teaching grammar rules in isolation, teachers need to provide meaningful contexts for learners to understand how grammar is used in authentic communication by choosing skill-based activities or topics that naturally lend themselves to the application of specific grammar concepts.
2. Teachers have to start by introducing the skill or task, and then gradually introduce relevant grammar concepts to support learners' language development. They can begin with basic structures and gradually progress to more complex grammar rules as learners gain proficiency.
3. Teachers also need to incorporate error analysis activities into skill-based lessons by encouraging learners to identify and correct grammar mistakes made during their practice or production of the target skill. This helps learners understand the importance of accurate grammar usage within the context of their skill development.
4. While skill-based lessons focus on practical application, it's essential for the teachers to provide explicit instruction on grammar rules and structures when necessary by teaching grammar points that are directly relevant to the skill being learned and making sure learners understand the underlying principles.
5. Teachers need to demonstrate correct grammar usage during skill demonstrations or presentations by modeling appropriate language structures and encouraging students to emulate them in their own practice. Providing feedback and corrections as needed to reinforce accurate grammar usage is important as well.

6. Teachers have to find time to design skill-based exercises that incorporate grammar practice. For example, if teaching writing skills, they have to include exercises that focus on using appropriate verb tenses, subject-verb agreement, or sentence structure. This allows learners to practice the skill while also reinforcing their understanding of grammar rules.

7. Nowadays, it is not that hard to find and utilize authentic materials, such as articles, videos, or real-world examples, which naturally contain grammar elements related to the skill being taught. This exposes learners to authentic language use and demonstrates how grammar is applied in real-life contexts.

8. It is also very useful to include communicative activities that require learners to use the target skill while incorporating appropriate grammar structures. For instance, if teaching speaking skills, teachers need to provide role-play activities that require students to use specific verb forms, prepositions, or sentence patterns. Above all, the key is to strike a balance between skill development and grammar instruction. By integrating grammar into skill-based lessons in a purposeful and contextualized manner, students can develop both their language proficiency and their understanding of grammatical structures.

In a near future study, observations from different EFL classes at different schools of our region, analysis of several textbooks, and feedback from the learners will help us to have a bigger and better picture of the importance of implementing this approach.

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POSTER SESSION

THE PANDEMIC SITUATION AND THE REVIEW OF TEACHING METHODS

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Abstract
The Covid-19 pandemic was a worldwide concern. In Albania, as well as in other countries, the situation created by it affected every area of life and one of the areas that was affected more was education.
Through this study, we aim to identify how teachers in our country acted to cope with teaching during the pandemic by using different methods in comparison to the teaching methods they used before. The use of digital devices had a great impact on this aspect. Teachers in Primary Education, Lower Secondary Education (LSE), Upper Secondary Education (USE) and University were included in this study.
The study was conducted through an online questionnaire divided into three sections that include data on teachers, online teaching methods that were used during the pandemic, and online teaching methods that are still being used after the pandemic. We reached important conclusions from the conducted study regarding how the pandemic and the development of technology has changed the way of teaching nowadays. The change in teaching is carried out by interweaving online learning methods in the learning process. Through this study, we aim to highlight the use and efficiency of these methods after the pandemic and what we need to do to improve them in the future.

Keywords*: online learning, teaching methods, COVID-19 pandemic, online learning and teaching platform, information technology.*

Introduction

The recent Covid-19 pandemic destroyed many balances that existed within and between all countries around the world. It caused changes in politics, economy, culture, education, etc (Westphal A, 2022; Heo, S. et al., 2022; Schwartz, KD. et al., 2021). For the lost balances to be restored, and for the adaptation to these changes to be done in the most effective and efficient way, each country's government plays an important role (Firey, Th.A, 2020; Chung, H.W, 2021) After all, the latter is responsible for developing the competencies, skills, attitudes and values of a society in the future. The field of education contributes directly to these dimensions (Andreas Schleicher, 2020). That is why this field should be at the heart of any plan the government makes about the society's future. Through our study we intend to help a little with the next steps that the governing authorities should take regarding the education of our country.

In the field of education, the pandemic prompted the teachers to look more closely at the teaching and learning process. It had a great impact on taking a deep look at the health of students and the way they learn today. This was exactly the starting point of several studies (Pócsová, J. et al., 2021; Stringer, N. and Keys, E., 2021) including our own. Our research was conducted via an online survey focused on teaching during and after the pandemic with the participants being teachers in pre-university and university education.

Online learning has a worldwide spread. This teaching method was especially appreciated during the two-year period of the pandemic (Gustafsson-Wright, E. et al., 2022). In Albania, all educational institutions were affected by this situation (OECD, 2021). However, they had to adapt to the situation created by the pandemic and find solutions for online learning just like the other countries (European Commission/EACEA/Eurydice, 2022.). This was felt especially in the first year, which found all the teachers unprepared. The time required to plan online learning was too short to carry out any preliminary training. Even so, the Ministry of Education worked on training the teachers. The trainings received were more influential in the second year of the pandemic, as observed in the adaptation that teachers and students had to the online learning methods that year. All that was presented above is also accepted by different teachers who participated in the survey that was carried out in support of this study.

Despite the difficulties that the pandemic created in every field around the globe, this situation led us to find new mechanisms and ways of how human society should function in the 21st century. We should see the challenges of teaching during the pandemic using online learning methods as an incentive to review in depth the use of teaching methods in the 21st century (Miço, H., 2019; Borba MC., 2021). This is exactly what prompted us to conduct this study. Specifically, we want to highlight the extent to which teachers support online teaching methods and whether they want to further work with them.

Methodology

The main purpose of this study was to analyze the teaching methods implemented during the pandemic, to draw conclusions on their use nowadays and to test teachers if they support the further development of these methods. We based our study on some of the methods used by other papers (R Y Tyaningsih. et al 2021; Žnidaršič, A. et al., 2022; Keri,L and Jupe,A., 2021).

The research for this study was carried out online and was aimed at pre-university and university teachers. Data collection techniques used in this study were surveys and online interviews. The application used in online surveys is Google Forms and for online interviews using Google Meetings. 922 teachers completed the questionnaires: 31.8% from Primary Education, 42.7% Lower Secondary Education, 23.6% Higher Secondary Education and the rest from Higher Education. Most of the teachers are from the schools included in the Regional Directorate of Pre-university Education Korça, few schools from Tirana and Gjirokastra. Of the 98% of public-school teachers taken in the study, 61.7% are of social profile and 38.3% of natural profile.

The questionnaire is divided into three sections. The first section includes general data about the participating teachers, such as gender, institution where they work (private or public), profile of the subject (natural or social), and level of education where they teach. The second section contains open and closed questions (with single and multiple choices) on the methods used during online learning. The third section comprised open and closed questions (with single and multiple choices) on online teaching methods that are still being used after the pandemic. Some of the answers in this section were Likert scaled: (Strongly disagree, Disagree, Neither agree nor disagree, Agree, Strongly agree) and (Worst, Bad, Average, Good, Best)

The obtained results were processed using SPSS version 20. Mainly the Chi-Square test and Crosstabulation were used when studying the differences in the trainings received and online methods used by teachers of different levels of education.

Results and discussion

The survey was conducted in the period February 2nd to 20th , 2023, pre-university and university teachers from various Albanian schools (public and private schools) and two Albanian universities (Korça and Gjirokastra). A Google Form questionnaire was sent to everyone. Several other teachers were interviewed via Google Meet.

According to the responses received from the first section of the questionnaire we see that the total population of this case study was 922 teachers. 31.8% from Primary Education, 42.7% Lower Secondary Education, 23.6% Higher Secondary Education and the rest from Higher Education. 98% were from Public Education and only 2% from Private Education. 61.7% in the natural profile and 38.3% in the social profile.

According to the responses in the second section one of the most important results from this study is that the majority of teachers who participated agree that the pandemic has greatly affected the teaching process. (See chart 1)

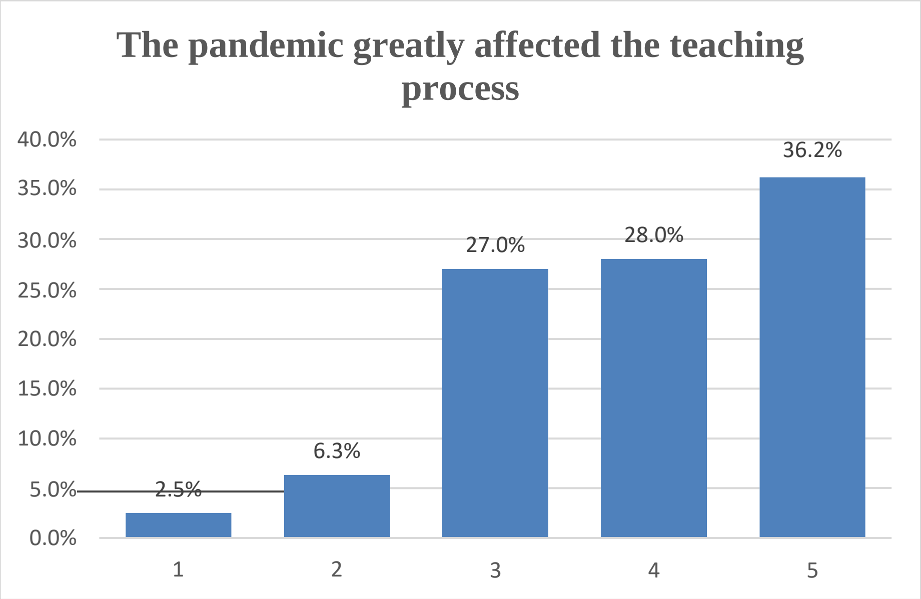

Chart 1.

We also noticed that most of the teachers (40.6 %) agree that online learning was an appropriate teaching method to overcome the difficult situation created by the pandemic in Albanian education.

The Chi Square test was applied to see if using the online methods of teaching are related to the respondent being a teacher in primary school, high school or university. From the p-value=0.754 we notice that there is no difference between the two variables. (See Table 2,$\chi 2(3, N = 922) = 1.195$, p-value=0.754>0.05).

Table 5. Crosstabulation

		Do you currently use any of the methods used during online learning?		Total
		NO	YES	
You are teaching in:	Upper Secondary Education	112	106	218
	Lower Secondary Education	200	194	394
	Primary Education	141	152	293
	University	7	10	17
Total		460	462	922

Table 6. Chi- Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.195[a]	3	.754
Likelihood Ratio	1.197	3	.754
N of Valid Cases	922		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 8.48.

Regarding the training received in the framework of online learning during the pandemic, about 52.4% of teachers responded positively. Upon further investigation, we notice a significant difference between training for online teaching with regards to the respondents teaching in private or public school. (See Table 4,$\chi 2(1,\, N = 922) = 6.331$, p-value=0.012<0.05). Specifically, teachers working in private schools have received more training for online teaching during the pandemic (See Table 3).

Table 7.Crosstabulation

		Have you conducted training in the framework of online teaching during the pandemic?		Total
		NO	YES	
You are teaching in:	Private Education	2	12	14
	Public Education	437	471	908
Total		439	483	922

Table 8.Chi- Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	6.331[a]	1	.012		
Continuity Correction[b]	5.047	1	.025		
Likelihood Ratio	7.098	1	.008		

Fisher's Exact Test				.014	.010
N of Valid Cases	922				

The Chi-Square test proved that there is a relation between the teachers' responses for "The pandemic influenced the teaching process" and "Online teaching was the right method for the difficult situation from pandemic". (See Table $6, \chi 2(2,\ N\ =\ 922)\ =\ 66.845$, p-value=0.0<0.05). More specifically, the teachers that felt more impacted by the pandemic, believe that the online teaching was right solution to face this difficult situation. (See Table 5.)

Table 9. Crosstabulation

		Online teaching was the right method for the difficult situation from pandemic					Total
		1	2	3	4	5	
The pandemic influenced the teaching process.	1	5	2	1	4	11	23
	2	3	6	13	8	28	58
	3	7	10	79	66	87	249
	4	3	20	45	83	107	258
	5	30	20	61	82	141	334
Total		48	58	199	243	374	922

Table 6. Chi - Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	66.845[a]	16	.000
Likelihood Ratio	65.041	16	.000
Linear-by-Linear Association	.121	1	.728
N of Valid Cases	922		

Zoom, Google Classroom, Akademia.al are the most used platforms during the pandemic in our educational institutions. Teachers point out that among the online methods most used during the pandemic were Presentations, Online Classes, Recorded Lessons, Videos, Flipped Classroom, and Educational Games. These were also the methods that the students liked the most and showed better results in their studies. As previously stated, all the above mentioned results come from the answers received from the questionnaire in the second section.

According to the questions in the third section, we see that 50.1 % of teachers still use some of the online teaching methods.

The bar chart below indicates the teachers in primary school, high school and university continue to use methods of online teaching as indicated by the answers to the question: Do you use any of the methods used during online learning today? (See chart 2)

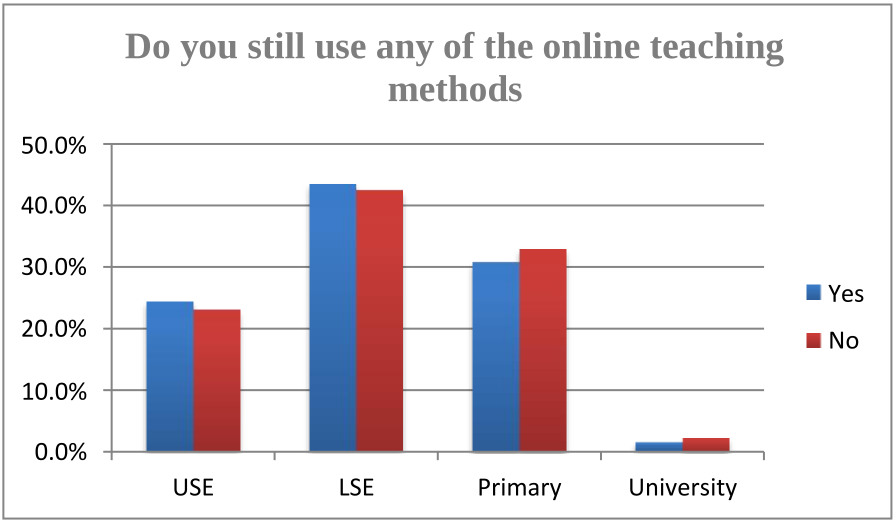

Chart 2.

Among these we mention Presentations, Recorded lessons, Videos, Flipped Classrooms, Blogs, Educational Games based on online learning. 44.4% of the teachers think that the students feel very good by using these methods.

The teachers' responses for the question" Do you think that the pandemic situation and the development of technology encourage us to look for new teaching methods? 90.7% of teachers respond positively. (See chart 3)

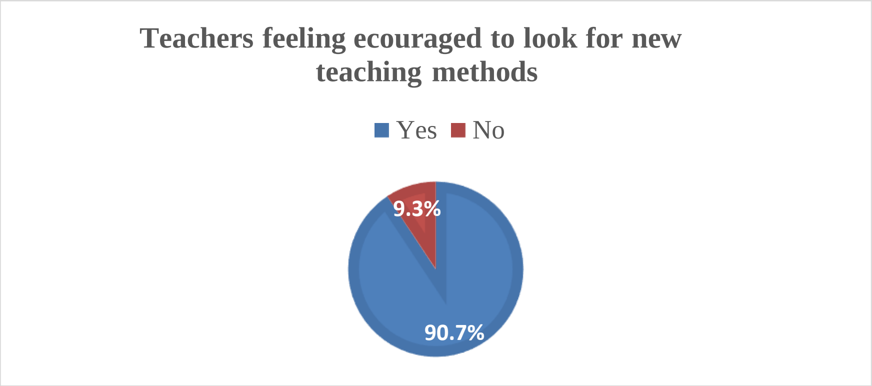

Chart 3.

The result obtained in the last question encourages us to study these methods further.

Conclusions

Nowadays we find many articles on online learning. Some advocate online education and others remain more loyal to traditional classroom learning. In both cases, the task of teachers is to find and use methods to make the education process as fruitful as possible in terms of developing the knowledge, skills, attitudes, values of students based on their age groups. There are also teachers who see online learning as a complement to traditional classroom education, but not a full replacement for it.

Based on our study and the results from the teacher questionnaires, we come to the conclusion that the majority of teachers, 67%, strongly agree or agree that online learning was the right solution to overcome the pandemic situation; 52% of them say that they still use some of the methods utilized during the online teaching process; and 90% of them say they strongly agree to have a combination of classroom learning methods and the methods used during online learning.

Regarding the use of online learning methods during the pandemic period, teachers say that students are satisfied with these methods and would like to use them further. More specifically, 78% of the teachers say that the students strongly agree or agree to continue using online learning methods. Examples of these methods include recorded lessons, presentations, videos, blog communication through the creation of learning groups, etc.

From the data we gathered, the teachers state that they knew little or nothing about the online teaching methods. Through their answers, they showed that during the pandemic they used the online methods that are widely used today, despite not properly naming said method. Approximately 53% state that they have received adequate training in their use, while the rest were self-taught.

Online teaching had certainly problems during its implementation. According to the teachers participating in the study, these problems were related the teachers and students not being familiar with digital platforms, them not being equipped with digital tools and poor Internet connection. Despite these problems, everyone agrees that the methods used during online learning had a positive impact on overcoming the crisis created by the pandemic. Undoubtedly, online teaching would have recorded better results if the quantity and quality of materials prepared online were at higher levels, i.e. if the teachers had a better knowledge of them, pre-prepared materials and an experience in using them. This conclusion is confirmed by comparing the performance of developed countries which were not new to online teaching. The different studies that they carried out show that the results achieved by the students had no changes compared to the period before the pandemic.

Hence, if online teaching and learning methods will be regarded as an ongoing aid to the classroom education process, we must work on the preparation of teachers with these methods. In order to have this, we need support from teachers, leaders and other education actors, so that the teachers can be provided with the opportunity to become more familiar with the use of these methods and a fund of materials to use online.

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