

## Integration of Artificial Intelligence in Foreign Language Teaching: Exploring Views and Beliefs of Greek Foreign Language Teachers

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### Abstract

The present quantitative research investigates attitudes and perceptions of Greek foreign language teachers regarding the issue of the use, implementation and pedagogical exploitation of AI in foreign language teaching. A total of 150 foreign language teachers in the public sector of primary and secondary education (permanent and contractual teachers) participated in the survey and the methodological tool used was an electronic questionnaire. The survey took place between March and May 2024. The research questions, which are the main axes of the survey, were the following: a) How do teachers define AI? b) Have they used AI tools in foreign language teaching and if so, why and how often? c) what do they consider to be the positive aspects of AI in teaching? d) what do they consider to be its negative aspects and what concerns do they have? e) to what extent do they feel competent in the use and pedagogical exploitation of AI applications? The results show that teachers perceive AI as something new that they are not well informed about and wish to be trained to be able to integrate it into their teaching. Among the positives, the speed of creating digital content is listed and among the negatives is the fear that there will be no need for foreign language teaching in the future and therefore no need for jobs for foreign language teachers. As far as their competence is concerned, the majority feel that support and training are needed in order to provide a valid framework for foreign language teaching.

## 1. INTRODUCTION

As of November 2022, artificial intelligence has brought many changes to the educational reality and has clearly influenced the design and teaching of all subjects. The tools for creating teaching content are limitless, as are the possibilities for their use in the classroom. Artificial intelligence is now part of human activity, especially in the field of education it has changed the data by contributing to the digital transformation of the content of teaching, the shift to alternative forms of student assessment with emphasis on self-assessment and the change in the role of the teacher during the teaching practice. The plethora of AI applications available to teachers enables them to differentiate content, create their own material adapted to the needs and learning profile of their classroom, save valuable time, and use teaching assistants (chatbots). However, there are legitimate concerns about the rapid invasion of AI applications into educational reality and questions arise about the presence and role of the teacher in the classroom by limiting students' creative and critical thinking, by transforming the school from a place of creativity, imagination and exchange of ideas into a cold environment with no human contact and no empathy. In particular for the teaching of foreign languages, despite documented positive aspects, such as personalized and autonomous learning, adapted to each individual

learner, questions arise about the way foreign languages will be taught in the future, the possible lack of interaction with real teachers and native speakers of the language, the absence of an authentic framework for learning the foreign language.

## **2. LITERATURE REVIEW**

### **2.1. Definition of artificial intelligence**

Artificial intelligence is defined as a system that can perform a command or task exactly like a human. This system is fed with infinite data and is able, based on the commands it receives, to create hardware and content, adapt it, and extend it, but at the same time, it can also solve problems, propose alternatives and ultimately operate with strong logic, just like a human being. To behave with rational judgment, AI recognizes external visual or auditory information and includes an algorithm that analyzes which is the most rational and ideal approach to achieve the goal through capabilities (for example, visual perception and speech recognition) and intelligent behaviours (for example, evaluation of available information) (Tală, et al., 2024·Varmazi, 2022).

One of the main features of AI in education is the provision of personalized learning guidance or support to individual students based on their learning situation, preferences or personal characteristics (Fang et al., 2022·Hwang, et al., 2020). All educational institutions (from basic to higher education) must, very soon, adapt to the new situation and diversify their curricula. It seems necessary that the new curricula should include technical elements (digital literacy, data science, content programming, accessibility) as well as non-technical elements (critical thinking development, ethics, content management, personal data). According to Tală, et al., (2024), students growing up with AI today will have a completely different relationship with technology compared to the previous generation, which, already, had grown up with digital technology and had already used it to a very large extent. Therefore, on the one hand, actual curricula must provide for the cultivation of artificial intelligence literacy for both students and teachers and on the other hand, they must be structured in such a way that the principles of morality and ethics are preserved, without marginalizing the human factor. The school is a living organism, and the possible predominance of artificial intelligence alone would be detrimental to human endeavour, the cultivation of critical thinking, interaction and communication.

### **2.2. The advantages of artificial intelligence in foreign language teaching**

The Common European Framework of Reference for Language Teaching (CEFR, 2020) explicitly states that the teaching and learning of foreign languages is based on the cultivation of skills. Students, in authentic communicative situations and depending on their level of language proficiency, use the foreign language and carry out tasks related to real life (e.g. booking online airline tickets, participating in international fora, sending e-mails, ordering products, commenting on infographics, taking a stand on issues of common interest, understanding announcements in train stations, etc.). In the context of the CEFR (2020) framework of connecting foreign languages to the real world of learners, AI provides environments for immediate problem-solving, rapid response to queries, and tools for student self-assessment and feedback. Teachers can create their materials, design their lessons, suggest many alternatives and come up with many ideas for different versions of the topic they are working on. They can also access photos, audio files, videos, multimodal texts and a large variety of databases (e.g. corpora) that may be useful in planning teaching modules. In this way, teachers save time, as they can very quickly prepare, for example, an assessment test or the delivery of a weekly task (Tală, et al., 2024). On the other hand, students can self-assess their performance, compare their answers with those suggested by AI tools, understand their mistakes, and look for ideas and solutions to problems, while learning to work autonomously.

They can also practice pronunciation and phonetics of words and practice conversation and interaction.

### **2.3. The disadvantages and limitations of artificial intelligence in foreign language teaching**

The experiential perspective in foreign language teaching presupposes the real world and problem-solving related to everyday life as a context (CEFR, 2020). Language is not only a tool for communication between people, but also a carrier of culture, cultural capital, values and ideas. Teaching a living foreign language is based on teacher-student interaction. This unique relationship that is built is aimed at transmitting values beyond the transmission of knowledge. From the experiential perspective, it is not enough for the learner to know how to conjugate verbs in the correct tenses, he or she must learn to use them correctly in specific communication situations (e.g., conversing with an older person, in a restaurant, in a theatre, etc.). The main question that arises in relation to the use of AI in language teaching relates to the concept of authenticity. The material produced is constructed and is a synthesis of data. Teachers cannot collect authentic material for the textual genre they need and there is a risk that if in the coming years, all texts are written with AI (newspaper articles, poems, podcasts, weather reports, cooking recipes, interviews, etc.), there will be no authentic reference material. On the other hand, there is the issue of copying and easy solutions when students have such easy access to all issues, limiting critical thinking, creativity, imagination, and even collaboration and teamwork, which are also essential soft skills. Furthermore, the lack of authenticity on the one hand and the limitation of the teacher's role on the other may lead to the degradation of foreign language teaching and perhaps in the future the question of professional stability or even professional rehabilitation of language teachers may arise.

### **2.4. Problem statement**

In relation to the introduction of AI applications in foreign language teaching, the stakes lie in how the teaching practice will be framed for the benefit of the students and the teacher. Interaction and the use of language in real-life situations are key components of foreign language teaching. At the same time, by teaching a living foreign language, the teacher transmits values and elements of the culture of the target country, thus highlighting the intercultural dimension. Finally, skills (linguistic, communicative, pragmatic, lexical) and literacies (visual, digital, social, informational) are cultivated (Mitsikopoulou, 2022·Institute of Educational Policy, 2021· Papadopoulou & Papanastasiou, 2020). The teacher has the textbook at his/her disposal, but also a multitude of IT tools to create his/her own digital content, adapted to the needs of his/her classroom and the profile of his/her students. It is worth highlighting that in Greece, training courses (distance and face-to-face) of six months duration have been implemented exclusively for foreign language teachers (English, French, German) on the pedagogical use and integration of digital tools in foreign language teaching (Koutsogiannis, 2017). These training programs are articulated in two levels: Level B1, which introduces the use of digital tools in foreign language teaching and introduces the concept of micro-activity, and Level B2, which attempts to introduce didactic scenarios (Mitsikopoulou, 2022·Bourguignon, 2003). Teachers in this training (level B2) are asked to develop teaching scenarios enriched with digital tools and resources in order to activate students and provide them with additional motivation to participate in order to develop communicative, as well as digital skills (Mitsikopoulou, 2022· Papadopoulou & Karava, 2020). However, there is little to no reference to AI tools and applications. Also, manuals have been enriched with digital material, but this has not been updated. In this research, we will investigate the views and perceptions of Greek foreign language teachers (English, French, German) on the entry of AI into daily teaching.

### **2.5. Research aims and research questions**

This research aims to investigate the views and perceptions of Greek language teachers regarding the integration and pedagogical use of artificial intelligence in foreign language teaching. The main axes of the research are the following: a) definition of AI, b) utilization of the potential of AI applications in foreign language teaching, c) positive elements of the pedagogical use of AI applications, d) negative elements, concerns, worries and ethical issues and e) training in the pedagogical context of teaching practice with AI applications. The research questions, which stem from the research axes, are the following: a) How do teachers define AI? b) Have they used AI capabilities in foreign language teaching and if so, why and how often? How effective do they consider the integration of AI applications in improving students' language and communication skills and in the assessment and self-assessment of students? c) what do they consider to be the positive aspects of AI in teaching? d) what do they consider to be its negative aspects and what concerns do they have about it? e) to what extent do they feel competent in the use and pedagogical use of AI applications? Each of the above research questions is matched by a set of open-closed sub-questions/options. The *first* question was open-ended and asked teachers to formulate their definition of AI. The *second* research question (utilization of AI in foreign language teaching) had six (6) options regarding the extent, applications utilized, frequency, purposes, and effectiveness in language improvement and evaluation. In the *third* research question (positive elements of the pedagogical use of AI applications and tools in foreign language teaching), nine (9) options were set which are related to the following: increasing students' interest, improving understanding of the lesson, adapting materials to students' needs, increasing student-teacher interaction, enhancing critical thinking, enhancing cooperation among students, providing feedback, enhancing autonomy and finally, promoting creativity. There is also the option 'none of the above'. In the *fourth* research question (negative elements, concerns, worries and ethical issues), 7 (seven) options were asked: Distraction, overuse of technology and dependency, lack of social interaction and personal contact, health and concentration problems, plagiarism, equipment costs, technical problems, lack of time for other activities. There is also the 'other' option. Finally, in the *fifth* research question (training in the pedagogical context of teaching practice with AI applications), 4 (four) sub-questions were asked for the relevant axes: training and support, general competence, competence in assessing students through AI applications, and personal data management. This question included the second open-ended survey question related to the future of AI in foreign language teaching and the role of the teacher (5 sub-questions in total).

### **3. MATERIALS AND METHODS**

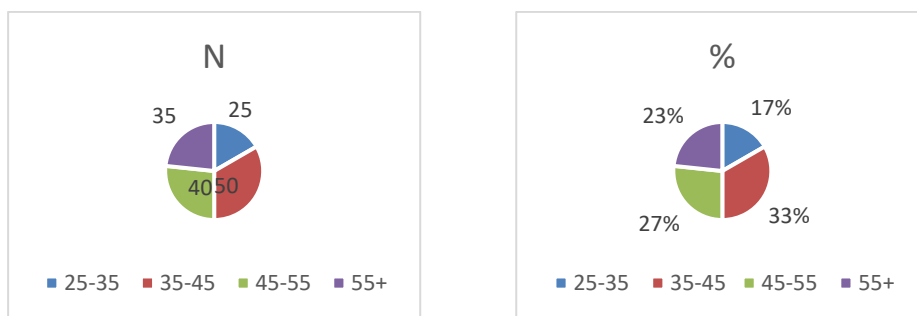
The sample consists of 150 Greek teachers teaching foreign languages (English, French, German) in the school year 2023-24 in the public sector (permanent and contractual teachers). The survey took place between March-May 2024 and the geographical spread of respondents covers a wide range of the country. A written electronic questionnaire was used as the research instrument. The use of a questionnaire in a survey presents many advantages, including the ease of collecting quantitative data, statistical analysis for drawing conclusions, immediate storage and archiving of data, and certainly the anonymity of participation. More specifically, in the present study, the written electronic questionnaire was chosen as the tool for collecting the survey data. This research was based on a standard methodology that is applied to the questionnaire-based surveys. The choice of such a method is justified by the fact that it is commonly used. Completing a questionnaire is the most widespread technique for collecting information. As Cohen & Manion (2018) argue the positive characteristics of a questionnaire are that it is more reliable compared to other information collection techniques because it is anonymous, and participants answer more honestly. It also presents the possibility of being

shared with many people at the same time thus providing a wide range of information. We chose to include closed questions with a Likert scale, but also open free-expression questions without word limitation so that participants could freely express their opinions. The method chosen for data collection was the self-administered questionnaire, which was developed on the *Google Forms* platform and was distributed as a link by e-mail to participants and through the forums and groups dedicated to them. We also mention that many participating teachers were trainees of the researcher on issues of educational evaluation, digital technologies, and educational administration. We note that this questionnaire underwent testing prior to its finalization and distribution to the research community. The sample used in the survey was 150 teachers. We specify that initially there were 157 respondents, but 7 questionnaires were not validated, being subsequently excluded.

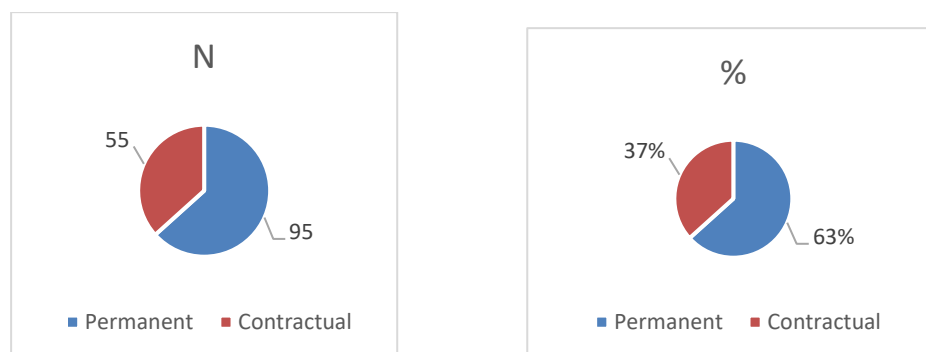
### 3.1. Demographic data

150 Greek teachers teaching a foreign language (English, French, German) in the school year 2023-24 in the public sector (permanent and contractual teachers) participated in the survey. Of these, 130 are women (87%) and 20 are men (13%). Of these, 95 are permanent (63%) and 55 work as temporary contractual teachers (37%). There are 90 teachers working in primary education (60%) and 60 in secondary education (40%). 70 teachers teach English (47%), 48 teachers teach French (32%), and 32 teachers teach German (21%). The age groups are distributed as follows: 25 teachers in the 25-35 range (17%), 50 teachers in the 35-45 range (33%), 40 teachers in the 45-55 age group (27%) and 35 teachers in the 55+ age group (23%). In terms of years of service, the teachers in the sample are distributed as follows: 0-10 years of service have 25 teachers (17%), 10-15 years of service have 45 teachers (30%), 15-20 years of service have 45 teachers (30%) and 20+ have 35 teachers (23%). It is worth mentioning that due to the limited scope of this article, the results are presented without the inductive analysis (in terms of discipline, age group, gender and years of service). This could be the subject of a future contribution.

**Table 1. The age group of participating teachers**



**Table 2. Professional Status**

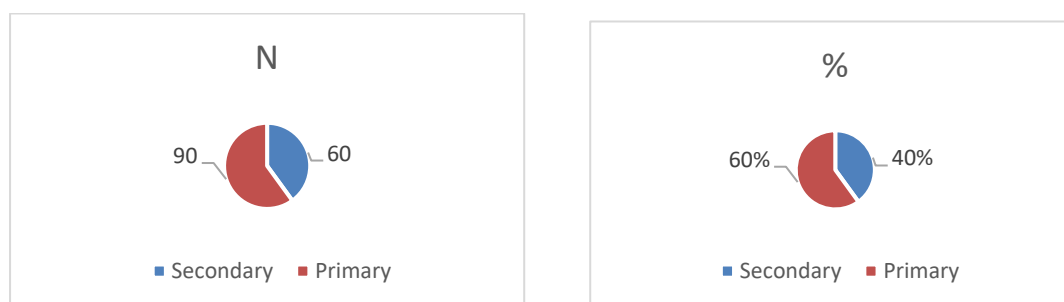




**Table 3. Discipline**



**Table 4. Level of teaching of participating teachers**



## 4. RESULTS

### a) How do you define artificial intelligence?

This is the first research question and the first open-ended free-expression question of the questionnaire. Participating teachers were asked to give their own definition of AI and to freely develop their thinking in the open-ended question. Surprisingly, a large number of teachers (30 teachers, 20%) answered that they had simply heard AI mentioned but were unaware of what it was. The qualitative analysis of the responses recorded by the rest (120 teachers, 80%) leads us to some interesting conclusions. By way of example, here are three definitions given by teachers of English, French and German. Permanent English language teacher with 0-10 years of service working in primary education reports: "... AI is something new and unprecedented for teachers. It is a set of data, files, resources, references, and applications that we can access at any time. It gives us many possibilities to make the lesson more attractive, and more understandable and to prepare our own material very quickly or to correct it. I think it has infinite applications, but I am afraid that the authenticity and critical thinking will be lost." A permanent French language teacher with 10-15 years of service who teaches at primary level defines AI as follows: "... it is the total invasion of digital applications in teaching. It is something invisible that moves above our heads ... a cloud, something we cannot understand or grasp its power. Artificial intelligence scares me because in a few years it will replace our role. Everything will be done by computers and robots." Finally, a permanent German language teacher with many years of service (20+) stresses that: "... artificial intelligence is a system that allows the teacher and the student to have direct access to knowledge, to material, to infinite data at any time. It has both positive and negative aspects. Having access to thousands of data is positive, not being able to choose correctly, having our critical thinking diminished and our role weakened, that's scary." It is worth mentioning that the teachers who responded to the open question were not limited to the definition of AI, but expressed fears concerns and worries about its creep into the educational process. The qualitative analysis of the responses provided

reveals the following: AI, for the teachers in the sample, is defined as direct access to a wide range of data and resources that can help the teacher to create their own material or have an "assistant" in teaching. At the same time, they express concern about how to handle this wealth of data, as well as about the role of the foreign language teacher in the future.

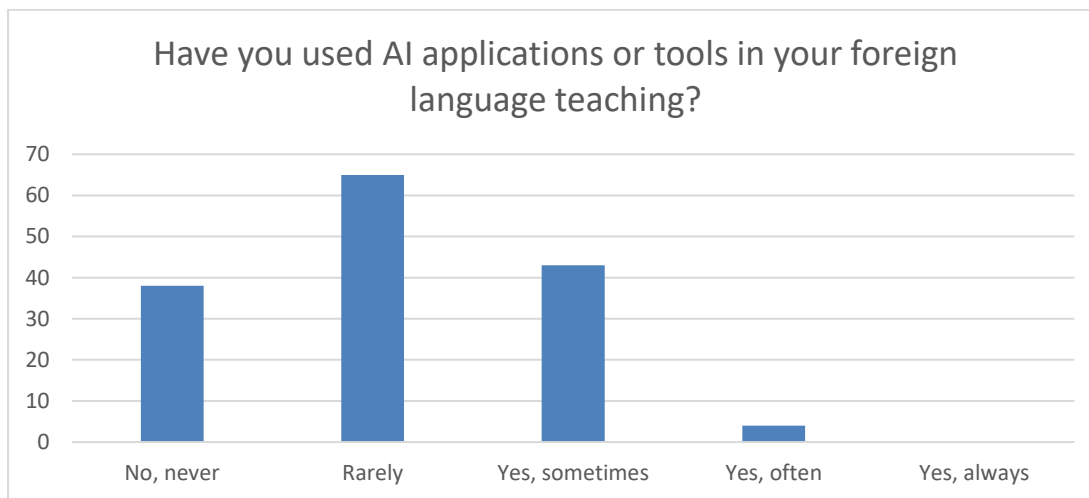
b) The second research question concerns the exploitation of the potential of AI applications in foreign language teaching. Six (6) sub-questions were given for this question:

b1) Regarding the extent of using AI in foreign language teaching.

**Table 5. The extent of using AI in foreign language teaching**

Have you used AI applications or tools in your foreign language teaching?	N	%
No, never	38	25,3%
Rarely	65	43,3%
Yes, sometimes	43	28,7%
Yes, often	4	2,7%
Yes, always	0	0%
Total	150	100,0%
Did not answer	0	0

Coefficient of variation (n) 0,821  
Coefficient of variation (n-1) 0,918  
Asymmetry (Pearson) 0,013



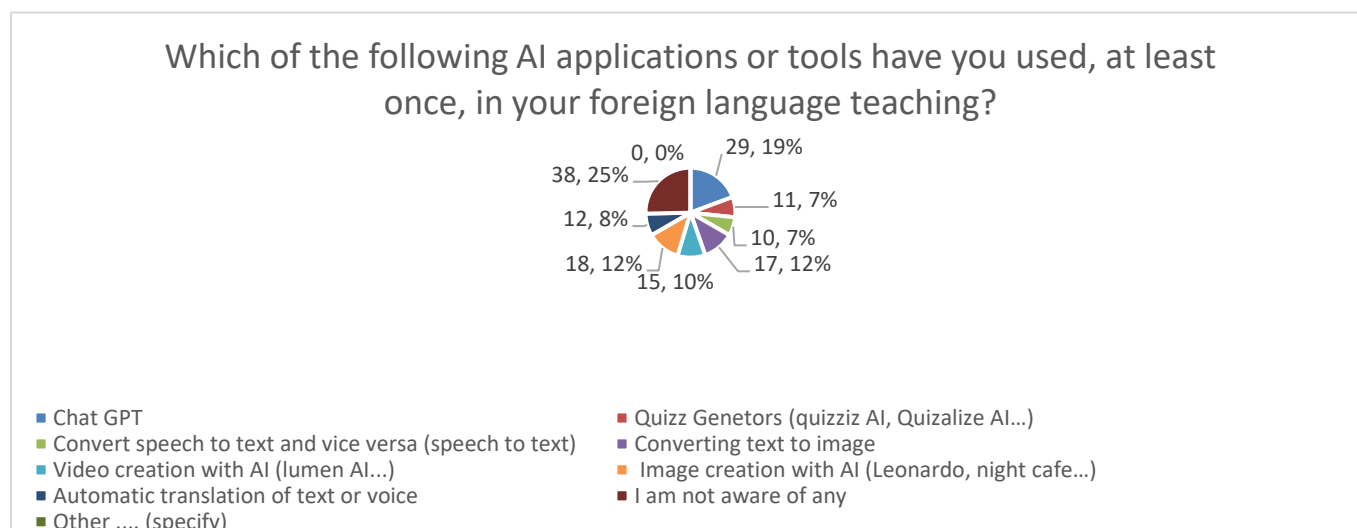
From the answers given to the question concerning the extent of use of AI tools and applications by the teachers in the sample, it is clear that a large percentage (68.6%) never or rarely used AI in foreign language teaching. Sometimes 28.6% have used it sometimes, while only 2.6% responded that they often use AI applications in teaching. This result shows that most of the sample teachers have not yet integrated AI applications in foreign language teaching.

b2) Regarding the AI applications or tools they know or have used.

**Table 6. The AI applications or tools they know or have used**

Which of the following AI applications or tools have you used, at least once, in your foreign language teaching?	N	%
Chat GPT	29	19,3%
Quizz Genetors (quizziz AI, Quizalize AI...)	11	7,3%
Convert speech to text and vice versa (speech to text)	10	6,7%
Converting text to image	17	11,3%
Video creation with AI (lumen AI...)	15	10%
Image creation with AI (Leonardo, night cafe...)	18	12%
Automatic translation of text or voice	12	8%
I am not aware of any	38	25,3%
Other .... (specify)	0	0%
Total	150	100,0%
Did not answer	0	0

Coefficient of variation (n) 0,629  
 Coefficient of variation (n-1) 0,667  
 Asymmetry (Pearson) 0,616



The 2<sup>nd</sup> sub-question refers to the AI applications used by the teachers in the sample. It is surprising that 25.3% do not know any of the applications in the list, while most of them have used Chat GPT (19.3%). The remaining answers refer to applications such as text-to-image



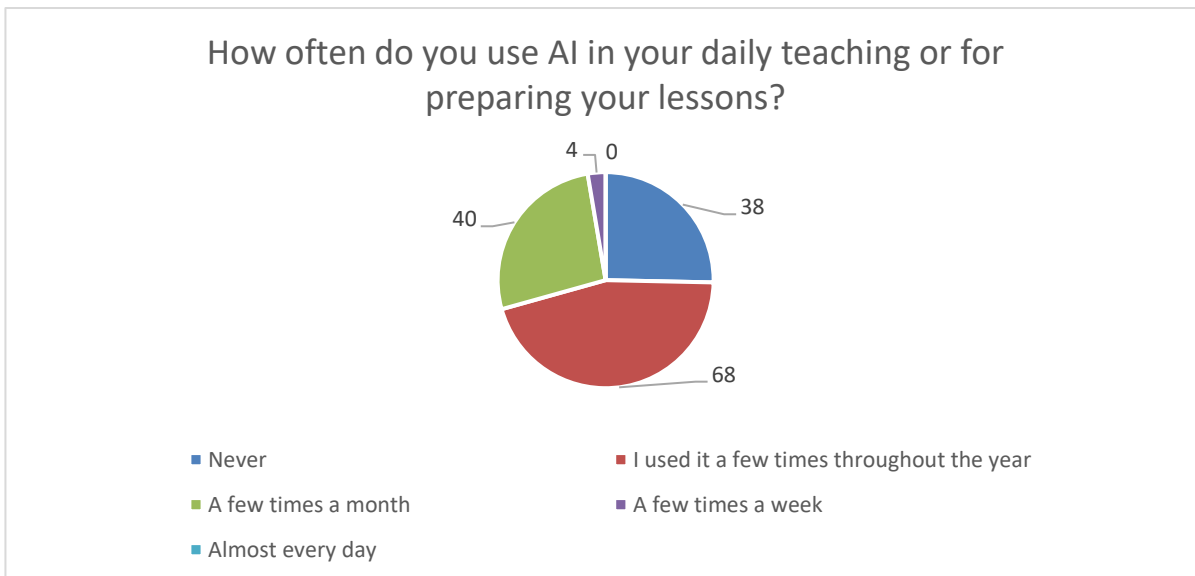
conversion (11.3%), video creation (10%), automatic translation (8%), creating quizzes with AI (7.3%), speech to text conversion (6.6%).

*b3) Regarding the frequency of using AI in foreign language teaching.*

**Table 7. The frequency of using AI in foreign language teaching**

How often do you use AI in your daily teaching or for preparing your lessons?	N	%
Never	38	25,3%
I used it a few times throughout the year	68	45,3%
A few times a month	40	26,7%
A few times a week	4	2,7%
Almost every day	0	0%
Total	150	100,0%
Did not answer	0	0

Coefficient of variation (n) 0,841  
Coefficient of variation (n-1) 0,940  
Asymmetry (Pearson) 0,147



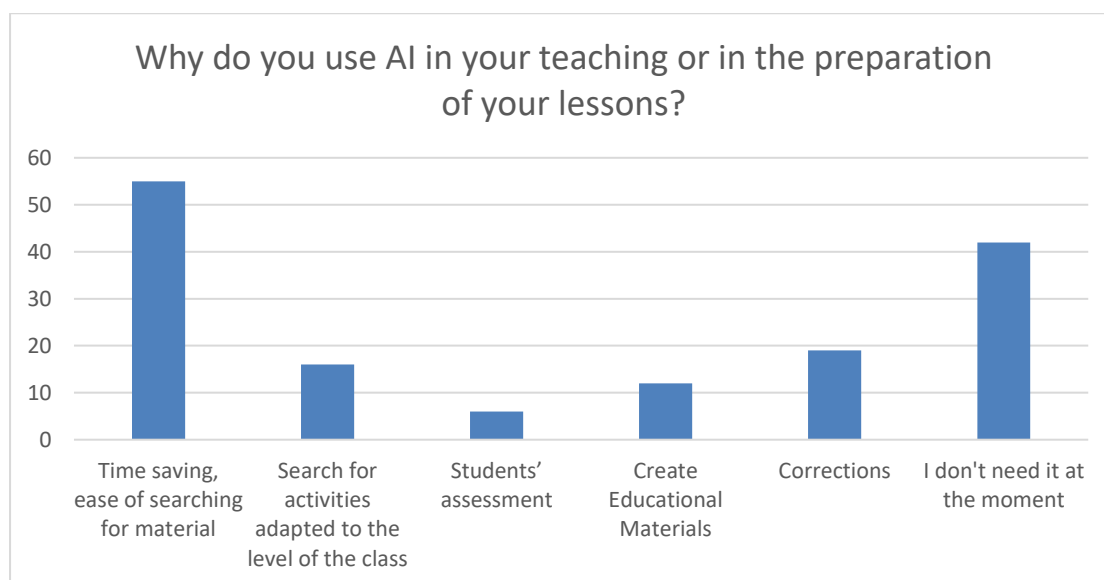
The 3<sup>rd</sup> sub-question refers to the frequency of using AI applications for teaching or preparing lessons. The majority (45.3%) used it a few times throughout the school year, 26.6% used it a few times a month and a small percentage (2.6%) answered that they use the possibilities of AI a few times a week. 25.3% never used AI tools and applications, and there was no response to the question about daily AI use.

*b4) Regarding the purposes of using AI.*

**Table 8. The purpose of using AI**

Why do you use AI in your teaching or the preparation of your lessons?	N	%
Time-saving, ease of searching for material	55	36,7%
Search for activities adapted to the level of the class	16	10,7%
Students' assessment	6	4%
Create Educational Materials	12	8%
Corrections	19	12,7%
I don't need it at the moment	42	28%
Total	150	100,0%
Did not answer	0	0

Coefficient of variation (n) 0,700  
Coefficient of variation (n-1) 0,766  
Asymmetry (Pearson) 0,682



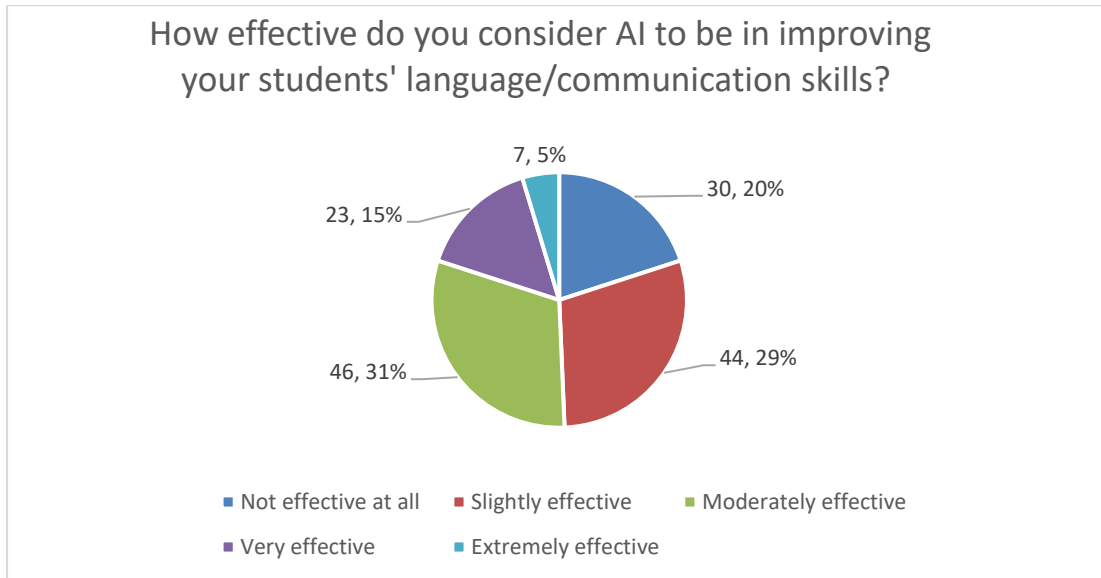
Sub-question 4 approaches the reasons why the teachers in the sample use AI in classroom teaching or lesson preparation. The majority responded for saving time and quick search for materials and resources (36.6%). A surprising 28% of respondents, a significant percentage, answered that they do not need AI tools for teaching the lesson. The remaining responses are divided: 12.6% for correcting papers, 10.6% for searching for activities adapted to the level of the class, for student assessment (4%) and for creating educational materials (8%).

*b5) On the effectiveness of the use of AI in foreign language teaching and assessment.*

**Table 9. Effectiveness of the use of AI in foreign language teaching (language/communication skills)**

How effective do you consider AI to be in improving your students' language/communication skills?	N	%
Not effective at all	30	20%
Slightly effective	44	29,3%

Moderately effective	46	30,7%
Very effective	23	15,3%
Extremely effective	7	4,7%
Total	150	100,0%
Did not answer	0	0
	Coefficient of variation (n) 0,478	
	Coefficient of variation (n-1) 0,535	
	Asymmetry (Pearson) -0,384	



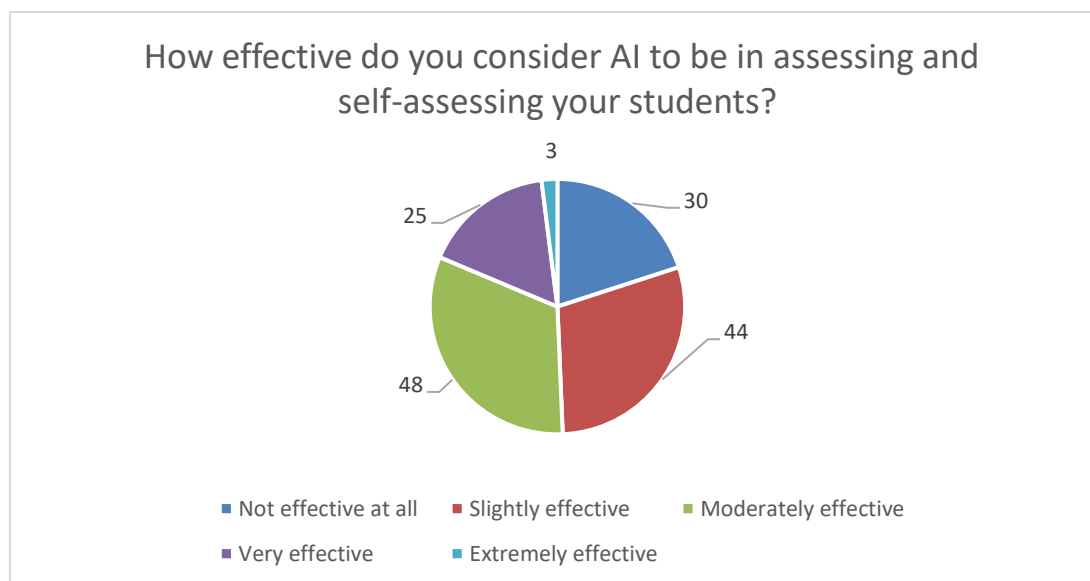
Sub-question 5 refers to the effectiveness of AI applications in improving students' language and communication skills. A very high percentage of teachers (79.9%) consider that the use of AI tools does not contribute to the development of students' language/communication skills, which obviously indicates that either they are not convinced of the potential of AI in language teaching, or they are not sufficiently aware of how to use it in teaching, or they consider that language learning needs natural, human interaction. A percentage of 15.3% consider AI to be very effective in cultivating language/communication skills and only 4.6% consider it to be totally effective. Questions clearly arise as to how AI applications can be pedagogically integrated into foreign language teaching.

*b6) Regarding the effectiveness of the use of AI in foreign language teaching and assessment.*

**Table 10. Effectiveness of the use of AI in foreign language teaching (assessment)**

How effective do you consider AI to be in assessing and self-assessing your students?	N	%
Not effective at all	30	20%
Slightly effective	44	29,3%
Moderately effective	48	32%
Very effective	25	16,7%
Extremely effective	3	2%
Total	150	100,0%
Did not answer	0	0

Coefficient of variation (n) 0,532  
 Coefficient of variation (n-1) 0,595  
 Asymmetry (Pearson) -0,552



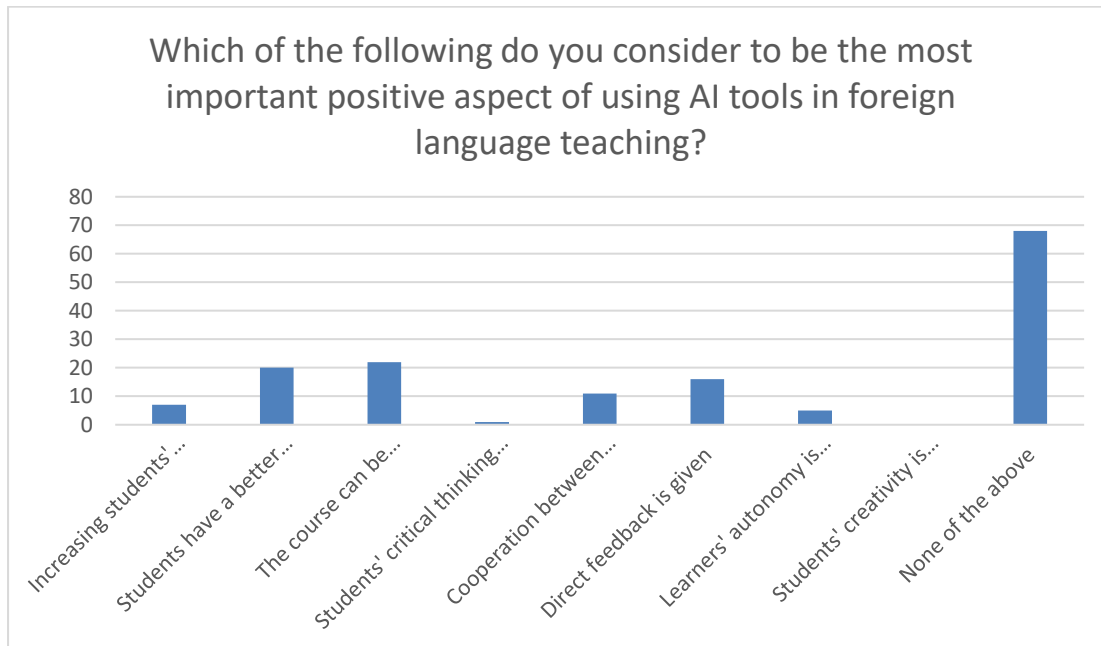
In sub-question 6, the answers of the teachers' respondents have the same distribution as in the previous question. The vast majority (81.3%) consider AI to be not at all to moderately effective for student assessment and self-assessment. This indicates that the teachers in the sample are unaware of the potential of many AI tools that provide direct feedback and self-assessment. 18.6% of the respondents consider AI to be very to extremely effective in assessing skills.

c) The third research question is about the positive aspects of the pedagogical use of AI applications. For this question, nine (9) options were given as shown in the table below:

**Table 11. Positive aspects of pedagogical use of AI applications**

Which of the following do you consider to be the most important positive aspect of using AI tools in foreign language teaching?	N	%
Increasing students' interest and motivating them to participate	7	4,7%
Students have a better understanding of the lesson	20	13,3%
The course can be adapted to the needs of the students	22	14,7%
Students' critical thinking is enhanced	1	0,7%
Cooperation between pupils is enhanced	11	7,3%
Direct feedback is given	16	10,7%
Learners' autonomy is developed	5	3,3%
Students' creativity is enhanced	0	0%
None of the above	68	45,3%
Total	150	100,0%
Did not answer	0	0

Coefficient of variation (n) 1,176  
 Coefficient of variation (n-1) 1,248  
 Asymmetry (Pearson) 1,832



A very high percentage (45.3%) consider that there is no positive element in the use of AI tools in foreign language teaching. This percentage indicates teachers' fear and/or ignorance of anything new. Traditional teaching offers security and certainty and a refusal to accept the introduction of new data in foreign language teaching is apparent. 10.6% believe that feedback can be given, a figure that seems to fall within the 18.6% of the previous question on learner self-evaluation. Importantly, 13.3% think that AI techniques can help students to understand the lesson better. A small percentage (4.6%) considers that students are motivated, and their interest is raised. A surprising 0.6% related to the enhancement of critical thinking. The teachers in the sample consider that critical thinking is not reinforced and that students remain inactive and passive listeners. Regarding students' creativity, it is surprising that no teacher answered positively.

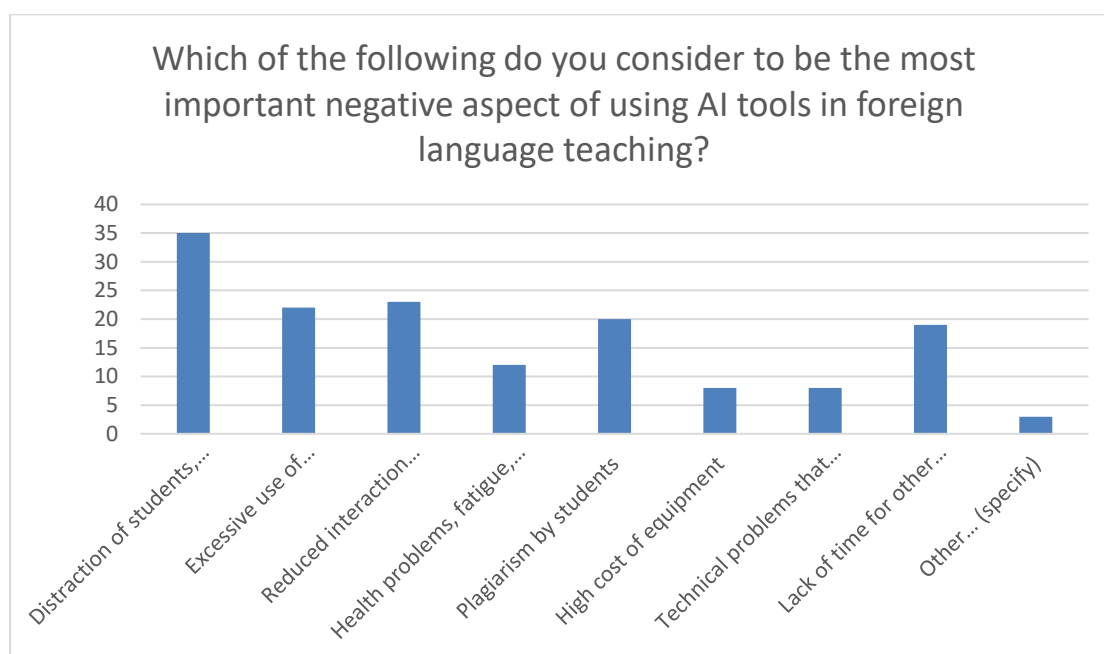
d) *The fourth research question relates to the negative aspects of and concerns expressed by the respondent teachers regarding the use of AI tools and applications. A set (9) of nine options corresponds to this research question.*

**Table 12. Negative aspects and concerns regarding the use of AI tools and applications**

Which of the following do you consider to be the most important negative aspect of using AI tools in foreign language teaching?	N	%
Distraction of students, inability to concentrate on the essence of the lesson	35	23,3%
Excessive use of technology, addiction, dependence	22	14,7%

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Reduced interaction between students and between students and teacher, lack of personal contact	23	15,3%
Health problems, fatigue, passivity	12	8%
Plagiarism by students	20	13,3%
High cost of equipment	8	5,3%
Technical problems that arise (poor connection, lack of a technical manager, lack of appropriate equipment...)	8	5,3%
Lack of time for other activities (music, theatre, sport, cinema...)	19	12,7%
Other... (specify)	3	2%
Total	150	100,0%
Did not answer	0	0
	Coefficient of variation (n) 0,559	
	Coefficient of variation (n-1) 0,592	
	Asymmetry (Pearson) 0,367	



In this question, the teachers in the sample consider that the most important negative element when using AI tools in foreign language teaching is distraction and the inability to concentrate (23.3%). This is followed by the reduction of personal contact between students and between students and teachers (15.3%). This is followed by the issue of addiction and dependency due to excessive use of digital technologies (14.6%) and the issue of plagiarism, which seems to be a concern for teachers (13.3%). A percentage of 12.6% consider that other activities, such as sport or cultural activities, which are important for pupils' leisure time, are neglected. Cost (5.3%) and technical problems (5.3%) seem to be low, which is confirmed by the fact that Greek schools, especially after the pandemic and compulsory distance learning, have been adequately equipped. 3 teachers responded to the "other" option. The negative elements they highlighted are a) the weakened role of the teacher, b) the fact that students no longer write by hand and this affects their cognitive development and c) the book should not be replaced by screens because it sharpens thinking. Screens create passive citizens.

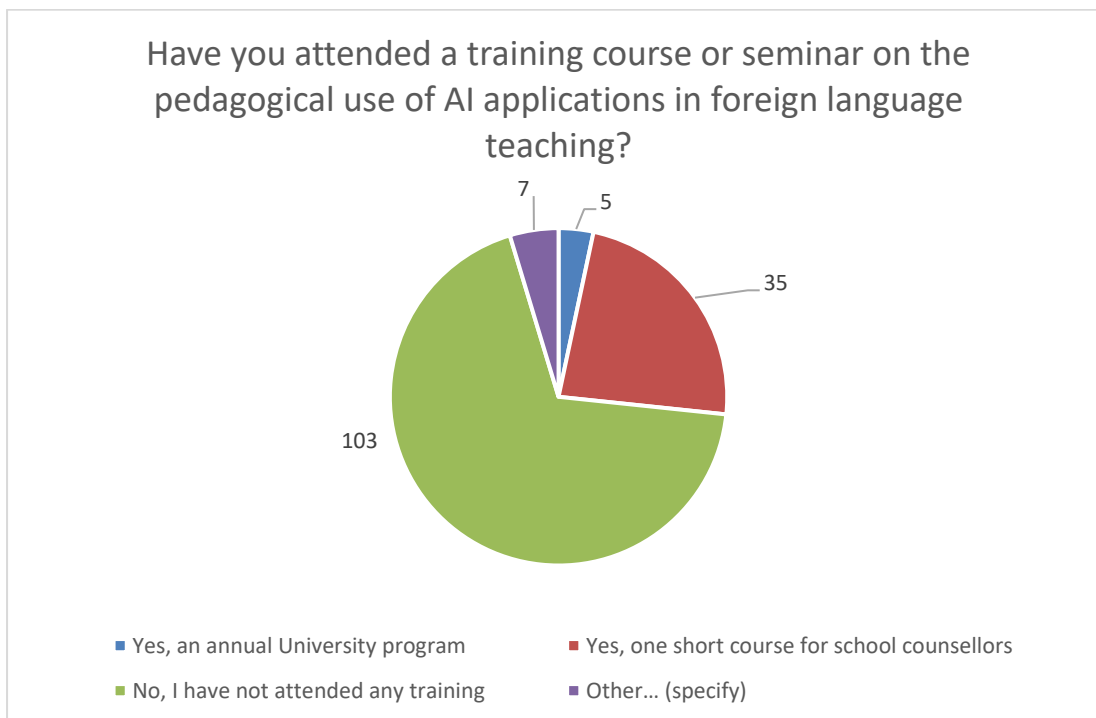


e) Finally, the fifth research question related to training in terms of pedagogical framework of teaching practice with AI applications) 5 (five) sub-questions were asked for the relevant axes:

e1) As regards training in the use of AI in foreign language teaching

**Table 13. Training in the use of AI in foreign language teaching**

Have you attended a training course or seminar on the pedagogical use of AI applications in foreign language teaching?	N	%
Yes, an annual University program	5	3,3%
Yes, one short course for school counsellors	35	23,3%
No, I have not attended any training	103	68,7%
Other... (specify)	7	4,7%
Total	150	100,0%
Did not answer	0	0
		Coefficient of variation (n) 1,057
		Coefficient of variation (n-1) 1,220
		Asymmetry (Pearson) 0,877



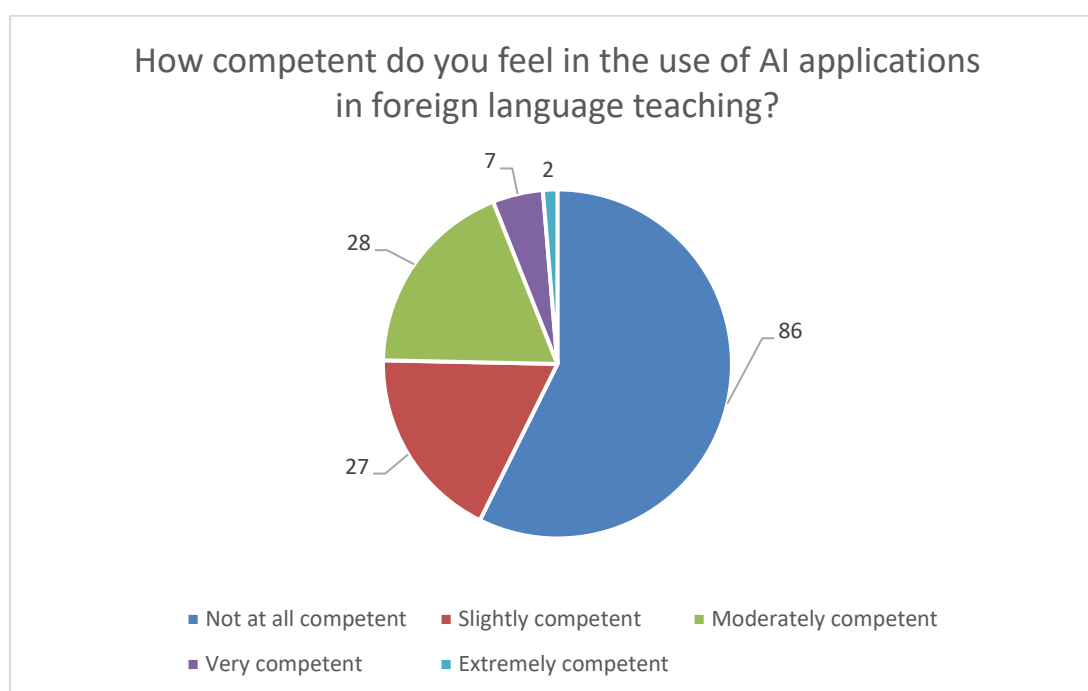
In the 1<sup>st</sup> sub-question of the 5<sup>th</sup> research question, teachers were asked to indicate whether they had received training on AI. It turns out that a large percentage (68.6%) had not attended any training program. 35 teachers (23.3%) attended some short-term training organized by a school counsellor and 3.3% attended an annual training from a university institution. There were 7 teachers who chose "other". In their answers, we record a) seminars organized by the National eTwinning Agency (2 responses), b) hybrid training on digital media organized by the Ministry but there was only one session on the pedagogical use of AI, c) in trainings by the Erasmus+ office, d) in transnational meetings with partnership schools where workshops on AI in teaching were held, and e) in-school training by the school director or the IT teacher (2 responses).

e2) *In terms of general competence*

**Table 14. General competence**

How competent do you feel in the use of AI applications in foreign language teaching?	N	%
Not at all competent	86	57,3%
Slightly competent	27	18%
Moderately competent	28	18,7%
Very competent	7	4,7%
Extremely competent	2	1,3%
Total	150	100,0%
Did not answer	0	0

Coefficient of variation (n) 0,996  
Coefficient of variation (n-1) 1,113  
Asymmetry (Pearson) 1,061



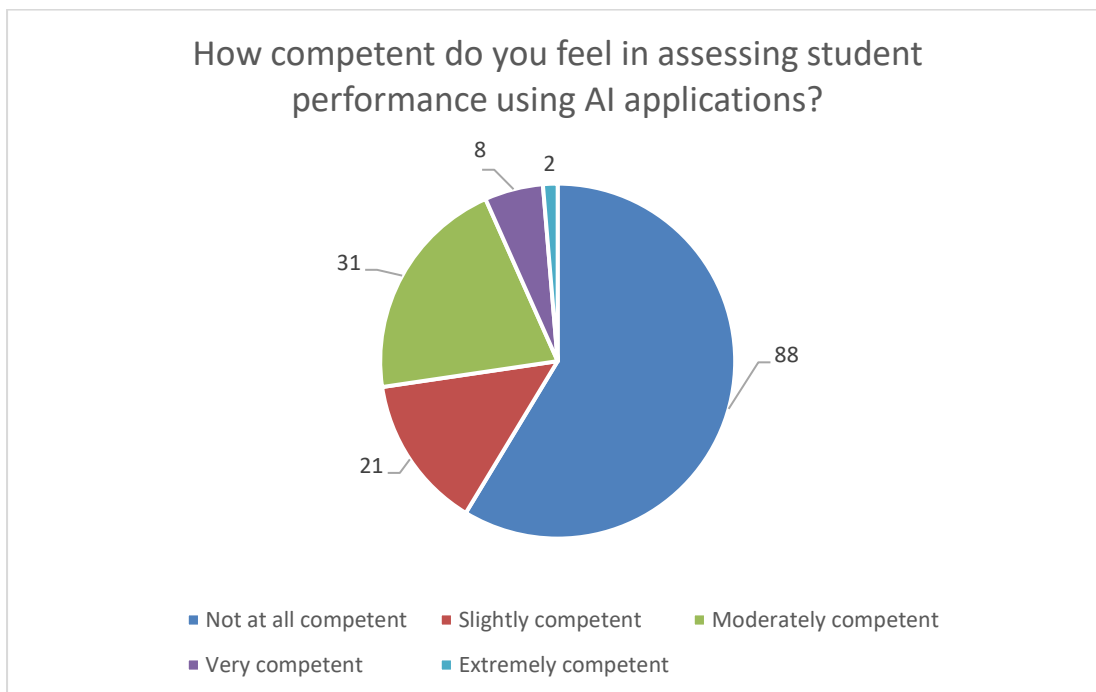
In the second sub-question regarding the adequacy of the use of AI applications in the classroom, the vast majority (57.3%) of the sample teachers do not feel at all competent, which indicates the need for continuous training and support. 36.6% feel minimally to moderately competent. That is, overall, 93.9% of the teachers feel that they cannot adequately meet the pedagogical use of AI applications. Nine (9) teachers (5.9%) feel very and completely competent. This question reveals, on the one hand, the need for further training, and on the other hand, the expected insecurity of teachers in the face of new data that overturn the framework of current teaching, which may have been enriched with digital media, new supervisory tools, alternative teaching techniques, but AI applications are something that require a different handling and a different mentality.

e3) In terms of competence for student assessment.

**Table 15. Competence for student assessment**

How competent do you feel in assessing student performance using AI applications?	N	%
Not at all competent	88	58,7%
Slightly competent	21	14%
Moderately competent	31	20,7%
Very competent	8	5,3%
Extremely competent	2	1,3%
Total	150	100,0%
Did not answer	0	0

Coefficient of variation (n) 1,024  
Coefficient of variation (n-1) 1,144  
Asymmetry (Pearson) 1,118



Similar data are obtained from the answers to this question. A large percentage (87.9%) of the teachers in the sample feel not at all to moderately competent to assess their students with AI applications. Only ten (10) teachers (6.6%) feel competent to adopt and apply AI techniques to assess students. The need for systematic training arises.

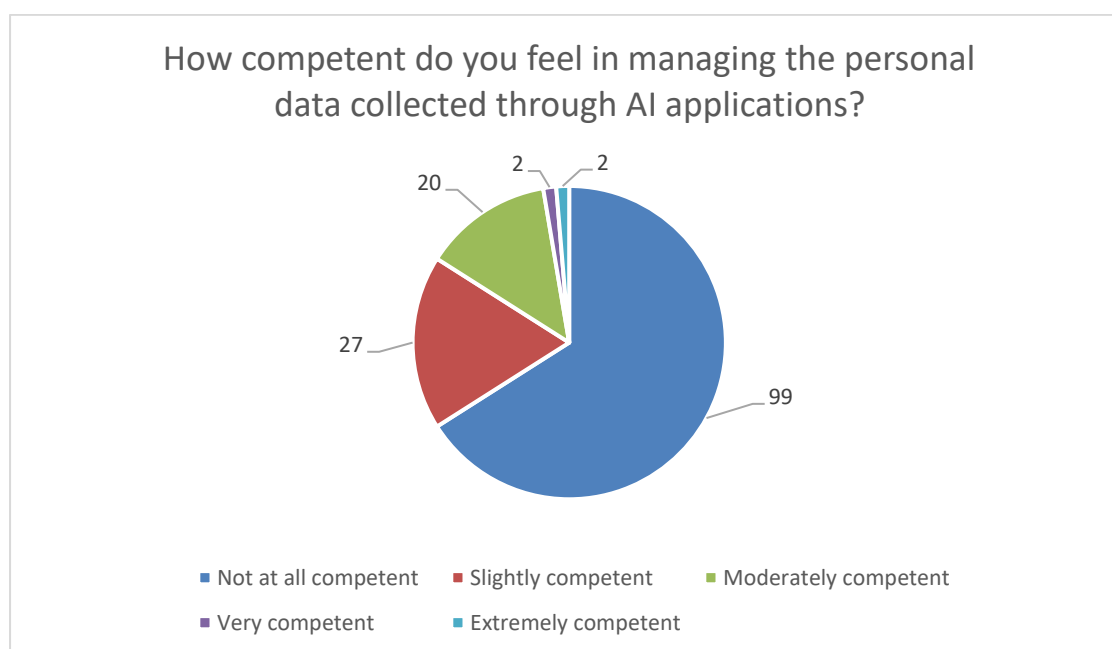
e4) Regarding the management of personal data

**Table 16. The management of personal data**

How competent do you feel in managing the personal data collected through AI applications?	N	%
Not at all competent	99	66%

**Integration of Artificial Intelligence in Foreign Language Teaching: Exploring Views and Beliefs of Greek Foreign Language Teachers**

Slightly competent	27	18%
Moderately competent	20	13,3%
Very competent	2	1,3%
Extremely competent	2	1,3%
Total	150	100,0%
Did not answer	0	0
	Coefficient of variation (n) 1,196	
	Coefficient of variation (n-1) 1,337	
	Asymmetry (Pearson) 1,228	



The issue of personal data is very important and is not only related to the topic under investigation but is also related to the integration of digital media and technologies in teaching in general. Teachers are concerned, and quite understandably so, because handling the personal data of minors needs knowledge and responsibility. A high percentage (97.3%) of teachers in the sample emerge that they feel insecure about issues such as device protection and digital identity management issues. They are not aware of practices to avoid threats or bad behavior online, which highlights the role of training. It is important to stress that teachers feel inadequate and need targeted training and scientific guidance to develop appropriate strategies.

*e5) Regarding the future of AI in foreign language teaching (open question)*

- In what ways will AI influence the role of the teacher?

A very high percentage of the teachers surveyed (140 teachers, 93.3%) answered this question, which is free expression. The majority of those who responded (130 teachers, 92.3%) expressed great concern and worry about the invasion of AI in teaching and even more so in foreign language teaching and foresee a shrinking role of the foreign language teacher. However, there are 10 voices of teachers (7.1%) who believe that AI brings something new to foreign language teaching and the foreign language teacher must adapt to the new situation by finding ways to increase students' interest and motivation. The qualitative analysis of the answers given reveals the following: Teachers who think that the role of the teacher will change and feel insecure about the future of the profession develop the following arguments: a) students' critical thinking and creativity will be lost, b) there will be no authentic material, since everything will be done

with artificial intelligence, c) no language skills of students will be developed, even oral interaction can be done with AI tools, d) the motivation to learn and the interest in learning a foreign language and knowing a different culture will be lost, e) there will be no need to recruit foreign language teachers and teachers currently working in schools will feel tired and exhausted from the constant effort to adapt to new situations, f) students will become addicted to convenience and superficial and ephemeral knowledge and violence will increase, g) students will forget to write by hand and this will be destructive to brain function, h) there will be no need for books and exposure to screens and the convenience of AI will turn students into passive and opinion-free citizens. The arguments of teachers who seem optimistic can be summarized as follows: a) we have to be flexible and adapt to new circumstances in a changing world, b) training plays a very important role and we have to seek it and keep up to date, c) there will always be a need for a foreign language teacher, as AI can only provide a support, personalization and personalized teaching will always be done by the teacher, d) anything new brings fear, so teachers have to overcome fear and go along with the possibilities of AI by exploiting the positive aspects, e) students must be at the centre and it is up to teachers to teach them the correct use of all new applications. As an indication, here are some of the answers given. Permanent English language teacher teaching in secondary education with 15-20 years of service stresses: *"... AI is here to stay. New applications and new challenges in education will appear all the time and I believe that slowly the manual will be replaced by screens. This worries me very much. Students are becoming alienated, they are constantly in front of screens, and they have forgotten how to open and flip through books. They only scroll on their phones and see quick information that they immediately forget. There are now many incidents of bullying and violence in our schools, I believe that even though everything in the classroom is done in front of the screen, this will be negative for the students and for the whole of society. Our role is unfortunately constantly being weakened. Students do not listen to us, they do not see us, they are dependent on devices, and they already use Chat GPT to give answers and solve exercises. Imagination, authenticity, critical thinking, and reflection will unfortunately be lost. All this worries me a lot."* Contractual teacher of French in primary education with 0-10 years of service reports: *"... I see my students having a mobile phone in the classroom when it is forbidden. And yet they have it. I try to make my lessons engaging with interactive quizzes, crosswords, songs, and videos, yet I see that they are hardly motivated to learn. With AI in the classroom, new horizons are opening, but I'm not sure we can convince students of the value of knowledge, study, effort, synthetic and critical thinking. I believe that the situation will only get worse. No one will care about the book or the teacher, everything is now easy. A few days ago, I asked them for a very simple written production, an invitation, the majority of the class brought me a text that was copied past from the Chat Gpt. The question is what kind of future citizens we want in society. And of course, in the future, there won't even be a need to communicate in a foreign language. In travel, study, maybe even work everything will be done with AI tools. Who will need a foreign language teacher? We contractual teachers will lose our jobs."*

Similar concerns, fears and frustration are expressed by a permanent German teacher in primary education with 15-20 years of service: *"... I feel that it is very difficult to motivate my students, unfortunately, the daily preoccupation with screens and social networks has made them passive and the joy of discovery, knowledge and creativity has been lost. They quickly lose interest, even in something new, because they have become addicted to the speed of changing images and the abundance of information. One day I asked them in groups to create a poster for a festival in Germany and the reaction was strong. Why make a poster and add titles and pictures when we can ask the AI to create one in a minute? So, we are not using language and we are not developing any language, communication and practical skills. I believe that with the uncontrolled use of AI applications, everything will become artificial, knowledge, language, learning, and communication. There will be nothing natural,*

*spontaneous and authentic". Below are some of the responses from teachers who see the optimistic side of integrating AI tools into language teaching. A contractual English language teacher in primary education with 0-10 years of service reports: "... I believe that we have to adapt to the new situation and not see everything in black. AI gives us infinite possibilities, we can save time, organize our material, and find ideas. As long as this is done with a critical eye, of course. There will always be a need for a professor. The teacher is the one who will handle the data and use it to the benefit of the class. It is the same for our students. We will show them how to use AI applications to get in touch with the foreign language. What we need is training, technical knowledge, seminars, applications and examples in the classroom. We cannot ignore the power of technology. There will always be the need for a human being to manage the lesson, the foreign language teacher, and the native speaker of the language will always be useful but will also have the help of artificial intelligence. We have to move forward and be optimistic." This view converges with the view of a contractual French language teacher in secondary education with 0-10 years of teaching service he says: "... artificial intelligence can be a valuable assistant and "critical friend" of the foreign language teacher, as long as it knows how to manage data, information and infinite possibilities. Most importantly, we save time, correct quickly, and find exercises. What we need to teach our students, and it is difficult, is not to resort to the easy solution without critical thinking. They should learn to evaluate the material and content, not to copy, and not to get addicted to the ease of searching. We need first the Ministry of Education to train us, to have experienced trainers show us how we can integrate AI into our classrooms pedagogically and scientifically, and we will do it. The teacher is the living part of teaching, his role will be strengthened, and we should not feel disappointed or think with sadness. Every new thing brings anxiety and fear. But we should not be afraid".*

## **5. DISCUSSION**

The following discussion is developed around the 5 dimensions of the research:

- a) Defining AI: AI is defined as something new that is disruptive and requires vigilance and alertness on the part of teachers. Concerns are expressed about the new strategies that teachers need to develop in the classroom in order to be able to respond. Similar research in the international arena by Cheng et al., (2023) confirms the above finding. In the Greek context, this is confirmed by research by Desyllas (2022) and Varmazi (2022), where the respondent teachers formulate a similar definition of AI.
- b) Exploiting the potential of AI applications in foreign language teaching and effectiveness: The teachers in the sample overwhelmingly have not integrated AI into their teaching. They are aware of some applications, however, the majority responded that they do not need to use AI applications in foreign language teaching, while those who have used it did so to save time. Concerns are expressed about the effectiveness of these applications in improving students' language skills, but also about their evaluation. A similar study by Desyllas (2022) presents concerns and worries of Greek teachers regarding AI tools, although, in this study, teachers seem rather positive about its pedagogical use.
- c) The positive elements of AI in foreign language teaching: The teachers in the sample express denial and do not find positive elements, except for the direct feedback and the possibility of adapting the lesson to the particular needs of each student. AI does not enhance critical thinking and does not motivate, according to the responses given. In a similar study by Desyllas (2022) in Greece, teachers expressed concerns about the socialization of students. In other studies, teachers consider that with AI they become alienated and miss happy moments with friends away from screens (Bittencourt et al., 2020; Varmazi, 2022).
- d) The negative aspects of AI in foreign language teaching: In this question, teachers consider that with AI students cannot concentrate on the lesson, there is a risk of addiction, and the issue



of plagiarism is also highlighted. They also mention a) the weakened role of the teacher, b) the fact that students no longer write by hand, and this affects their cognitive development and c) the book should not be replaced by screens because it sharpens thinking. Screens create passive citizens. Similar research by Hwang et al., (2020) confirms the results.

e) AI training and future role of the teacher: Teachers state that they feel insecure and need training. Regarding the future role of the foreign language teacher, voices are expressing strong concern and dissatisfaction because the role of the teacher will be reduced and there may be no need for foreign language teachers in the future, but there is also a percentage of teachers who believe that the role of the teacher will become more dynamic and evolve. Similar research by Desyllas (2022) in Greece confirms the very important role of training and the strong desire of Greek teachers to be trained.

## **6. CONCLUSION**

In conclusion from the data analysis and the discussion that followed, we conclude the following: a) the teachers in the sample seem to be negative about the integration of AI applications and tools in foreign language teaching and express concerns about the development of their profession (reduction of jobs, limited role, there will be no need to learn a foreign language, anxiety about new practices), b) they consider that AI does not enhance students' critical thinking, they become passive listeners, indifferent to knowledge and to school. Also, students' creativity is not enhanced, and there are doubts about the development of language and communication skills, c) they believe that students become addicted to easy and quick information, there is a risk of addiction, and they also consider the issue of plagiarism and handwriting to be very important. Students only type and scroll and soon they will not know how to handle pencil and paper. This may in the future be dangerous for the development of cognitive functions. There are teachers, especially younger and contractual teachers, who believe that flexibility and adaptation to the new situation are needed in order to maintain the important role of the teacher as a link between knowledge and the pupil. They all seek systematic training and express concerns about the issue of personal data. Overall, we conclude that there is distrust, strong concern and anxiety from the majority of teachers, which needs to be taken into account by educational policymakers so that the introduction of AI can be done in a systematic and meaningful way for the whole educational community.

## **REFERENCES**

- Bourguignon, C. (2003). L'apprentissage des langues par action. Dans : *L'approche actionnelle dans l'enseignement des langues. Onze articles pour mieux comprendre et faire le point*. Édition : Maison des Langues.
- Bittencourt, I. I., Cukurova, M., Muldner, K., Luckin, R., & Millán, E. (2020). *Artificial Intelligence in Education: 21st International Conference, AIED 2020, Ifrane, Morocco, July 6-10, 2020, Proceedings, Part I* (1.). Springer International Publishing AG. <https://doi.org/10.1007/978-3-030-52237-7>
- Cheng, E. C. K., Wang, T., Schlippe, T., & Beligiannis, G. N. (2023). *Artificial Intelligence in Education Technologies: New Development and Innovative Practices: Proceedings of 2022 3rd International Conference on Artificial Intelligence in Education Technology* (1st Edition 2023). Springer Nature Singapore.
- Cohen, L., Manion, L., & Morrison, K. (2018). *Research Methods in Education* (8th ed.). London: Routledge <https://doi.org/10.4324/9781315456539>
- Common European Framework of References for Languages: Learning, teaching, assessment (2020), European Council, Strasbourg.
- Desyllas, I. (2022). *Artificial Intelligence as An Innovation Strategy In The Educational Process*. Diploma Thesis, University of Piraeus, Greece.

### **Integration of Artificial Intelligence in Foreign Language Teaching: Exploring Views and Beliefs of Greek Foreign Language Teachers**

- Fang, L., Povey, D., Zhai, G., Mei, T., & Wang, R. (2022). *Artificial Intelligence: Second CAAI International Conference, CICA I 2022, Beijing, China, August 27-28, 2022, Revised Selected Papers, Part I (1.)*. Springer. <https://doi.org/10.1007/978-3-031-20497-5>
- Hwang, G., Xie, H., Wah, B. W., & Gašević, D. (2020). Vision, challenges, roles and research issues of Artificial Intelligence in Education. *Computers and education. Artificial intelligence*, 1, 100001. <https://doi.org/10.1016/j.caeai.2020.100001>
- Institute of Educational Policy, (2021). *New Curriculum for teaching foreign languages in the Lyceum/Common Program for teaching and assessing foreign languages in Greece*, Greece, and Athens.
- Koutsogiannis, D. (2017). *Framework of principles for the creative use of digital media in education*. Retrieved January 16, 2024, from <https://www.academia.edu/34673980/>
- Mitsikopoulou, V. (2022). Introduction to the educational scenario: design principles, theoretical framework, and evaluation. B2 Level training material, Foreign Language Cluster. *Practice: Training of Teachers on the use and application of digital technologies in teaching practice - Level 2 ICT Training/B cycle*.
- Papadopoulou, M., Karava, E. (2020). The role of digital literacy in preparing students for the use of Information and Communication Technologies (ICT). *Pedagogical Issues*, 73, 59-80.
- Papadopoulou, M., Papanastasiou, E. (2020). The role of the teacher in the era of information and communication technologies. *Educational Technology and Training*, 21(2), 215-228.
- Țală, M. L., Müller, C. N., Năstase, I. A., State, O., & Gheorghe, G. (2024). Exploring university students' perceptions of generative artificial intelligence in education. *Amfiteatru economic*, 26(65), 71-88. <https://doi.org/10.24818/EA/2024/65/71>
- Varmazi, A. (2022). *Perceptions Of Primary and Secondary School Teachers On Artificial Intelligence As A Tool Support For Teaching*. Diploma Thesis, University of Macedonia.

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