

The Integration of Artificial Intelligence in The Teaching of French as A Foreign Language (FLE) at University: Student Perceptions and Didactic Challenges

Sonia SAOULI

Mohamed Khider University – Biskra –
SEPRADIS Laboratory, University of Biskra
sonia.saouli@univ-biskra.dz

Fatiha BOUDEBOUBA

Mohamed Seddik Benyahia University – Jijel –
fatiha.boudebouda@univ-jijel.dz

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Abstract

This study explores how twenty-five Master's (M1) students in French language didactics at the University of Biskra use artificial intelligence. Its main goal is to identify the most commonly used tools, highlight the perceived benefits for learning French as a Foreign Language (FLE), examine the difficulties students encounter, and clarify the role of the teacher within this evolving techno-pedagogical environment. A mixed questionnaire comprising ten questions was utilized to gather data that were subsequently analyzed descriptively. An analysis of the results showed that students are generally aware of the existence of some AI technologies, such as grammar checkers and chatbots, and have a predominantly positive opinion about their influence. The respondents believe that the mentioned tools are useful since they allow improving personalized learning, motivation, and learners' independence. Simultaneously, students have noticed some limitations, such as lack of proper training, reliability of answers generated by AI, and importance of human interaction during the learning process. In this regard, it is important to say that this research shows great prospects of AI for language teaching, but its successful implementation requires a competent approach.

Keywords: Generative artificial intelligence; FLE (French as a Foreign Language); Higher education; Autonomy; Technopedagogy.

Introduction

Artificial intelligence now plays a significant role in contemporary educational practices, particularly in the teaching of foreign languages. In higher education, it is often seen as a set of tools that can support learning, diversify teaching approaches, and facilitate the personalization of students' learning paths. However, in the context of French as a Foreign Language (FLE) classes, this development raises an essential question: how can these tools be integrated without diminishing the teacher's role or weakening the intellectual rigor expected in university learning?

This study is grounded in that perspective. It focuses on how Master's level (M1) students in French language didactics use AI tools, with the aim of understanding their practices, expectations, and concerns. Rather than presenting AI as a miracle solution, the study examines—through students' perceptions—the conditions for its meaningful, educational, and responsible use. This approach helps shed light on how AI is being incorporated into FLE learning and how it is, at least partially, reshaping the relationships between learners, knowledge, and pedagogical mediation. The research question can therefore be formulated as follows: to what extent do artificial intelligence tools contribute to learning French as a Foreign Language (FLE) in a university context, and under what conditions can they be used in a truly educational and effective way? This question calls for an analysis that is at once didactic, methodological, and ethical. It also points to the need to maintain a balance between technological innovation and human guidance.

The main objective of this study is to gather students' perceptions of a highly topical phenomenon that has profoundly transformed the educational system as a whole, rather than to directly assess their linguistic performance at the university level.

2. Conceptual Framework of the Study

Our analysis focuses primarily on generative artificial intelligence, as this is the form of AI most directly involved in students' practices of writing, correction, reformulation, and information searching. Generative AI can produce texts, simulate linguistic interactions, and provide rapid responses. It therefore represents a valuable pedagogical support for language learning; however, it does not guarantee the accuracy of content or its pedagogical relevance.

In any learning situation, students need to be supported and guided by the teacher in order to use these resources effectively and to ensure the greatest possible success within this new educational paradigm, which has become an essential component of the teaching–learning process in higher education.

To this end, in the teaching of French as a Foreign Language (FLE), AI can promote exposure to the target language, repetition, immediate feedback, and the personalization of learning activities. However, it may also encourage passivity, cognitive dependency, and excessive trust in responses that are sometimes inaccurate. The issue, therefore, is not the existence of the tool itself, but rather how it is integrated into a coherent, explicitly guided, and scientifically grounded pedagogical framework.

One of the major challenges lies in the development of learner autonomy. This autonomy should not be confused with solitary learning; on the contrary, it involves the ability to use available tools thoughtfully, verify information, revise one's work, and gradually construct knowledge. From this perspective, the teacher's role remains essential: they act as a mediator, regulator, and guarantor of learning quality. In this regard, UNESCO advocates for a human-centered approach based on data protection, equity, transparency, and the institutional validation of digital tools.

3. Definition of Artificial Intelligence

Artificial intelligence has been defined by numerous scholars across different fields of research; therefore, there is no single definition, but rather a plurality of approaches. In this

study, we have selected those that appear most relevant and most closely related to our research focus.

The researcher Ganascia (2022) , in his book *Intelligence artificielle : vers une domination programmée ?*, proposes the following definition: “AI is a scientific discipline that goes beyond mere technique” (Ganascia, 2022, p. 57). He further argues that AI should not be limited to the imitation of human intelligence, but that it profoundly contributes to transforming the humanities and social sciences by introducing an epistemological break in the sense of Gaston Bachelard.

In this perspective, artificial intelligence cannot be reduced to a set of technologies; rather, it is primarily defined as a distinct scientific field that reshapes the very foundations of knowledge.

The same author explains in another study that artificial intelligence is based on the assumption that all cognitive abilities—particularly reasoning, calculation, perception, memory, and even scientific discovery or artistic creativity—can be described with such precision that it should be possible to reproduce them using a computer.

According to Stefan D. Popenici and Sharon Kerr, artificial intelligence can be defined as computer systems capable of engaging in human-like processes such as learning, adaptation, synthesis, self-correction, and the use of data for complex processing tasks (Popenici & Kerr, 2017, pp. 1–13). Based on this definition, it can be observed that AI may be used in language classrooms to develop tools and learning programs aimed at helping students master a foreign language.

Upon reviewing this definition, one comes to know that Jean-Gabriel Ganascia entertains an epistemological view that states that artificial intelligence is not only an area of research but also a powerful instrument which has the ability to institute changes in science. This enables researchers to study the effect of new technologies in society.

Finally, artificial intelligence is an interdisciplinary area focused on making computer applications that can facilitate or even enhance human cognitive functions. The definitions of the term are different, depending on the perspective. There are some definitions, which are technical, some definitions are cognitive, and there are epistemological definitions, as well. The important thing is that AI is the area of research with many opportunities for application, especially in higher education, a domain that is fundamental for the scientific community.

4. Kinds of Artificial Intelligence

At first, it is crucial to mention that artificial intelligence is a constantly developing technology that was recently introduced to the process of teaching and learning and has led to an involved transformation in higher educational institutions. Being treated as some sort of theories or techniques aimed at creating machines that can imitate human intelligence, artificial intelligence encompasses several types. The knowledge of the differences will help to understand its usage and potentials better. The mentioned types can be classified by the degree of their complexity:

4.1. Narrow AI: This type is the one that occurs most frequently. This type brings into being those AI technical means that are designed and made to accomplish some specific objectives and operate in limited conditions.

4.2. Strong AI: The other name for this category is Artificial General Intelligence (AGI), which allows solving a variety of tasks in a manner similar to the one a human being can perform. Strong AI is a theoretical idea, while many scientists consider that it is impossible to achieve this target in the current circumstances.

4.3. Superintelligent AI: This kind of artificial intelligence will exceed human abilities in most features, including creativity, choice-making process, as well

There are three categories that demonstrate how AI has progressed; it can do a specialized job, imitate the mind's cognitive actions, and achieve more than a human being.

In terms of technical classification, there are three main types of AI which can be identified as follows;

4.4. Symbolic AI: Symbolic artificial intelligence aims at replicating human thought and reasoning utilizing logic and probability principles. It was greatly boosted by the emergence of expert systems and decision trees in the 1980s and is still relevant today, especially within medical applications.

4.5. Numerical AI, or Machine Learning: Numerical artificial intelligence, particularly in its supervised type, aims to forecast outcome or reaction via algorithms produced by performing a series of mathematical calculations and statistical procedures whose parameters are changed with the help of massive data sets. Connectionist solutions, for instance, neural networks and deep learning, are among its examples. Owing to the complexity of the processes involved, such systems are often described as “black boxes.”

4.6. Generative AI: The last form of artificial intelligence—generative artificial intelligence—allows the immediate generation of different forms of information, such as texts or images.

5. The Use of Artificial Intelligence in Higher Learning Institutions

Artificial intelligence experts note that incorporating AI into teaching systems is vital in preparing citizens to become active members of the digital world instead of remaining silent consumers of technological advancements. The experts point out, based on the results of up-to-date research, that the incorporation of AI systems has the potential of improving the teaching process for both teachers and students.

In higher education, the integration of AI applications should currently be viewed as the provision of a set of tools designed to support both learners and teachers, thereby facilitating their interaction within the educational process. The benefits of these tools can be observed at different stages of the academic pathway: training, guidance, knowledge acquisition, and assessment. From this perspective, AI can contribute to automating and optimizing the overall management of learning, provided that a critical stance is maintained throughout the process in order to preserve the quality and intellectual integrity of acquired knowledge. Thus, several examples illustrate the use of artificial intelligence in higher education. It will be able to offer knowledge on different subjects and provide unique content creation at the same time. It will enable people to learn independently, as it can clarify some notions or expound

information on a certain topic. Moreover, it will help in the preparation of educational resources as using AI it will be possible to compose quizzes and exercises without any human help.

6. The Role of AI in Foreign Language Teaching and Learning

The integration of artificial intelligence into foreign language teaching has become a major and continuously evolving lever. It is characterized both by the diversity of technopedagogical tools it enables and by its ability to adapt to learners' varying needs. AI-based technologies—such as chatbots, learning platforms, and automated tools—allow for greater individualization across different stages of students' learning. These systems can adjust pedagogical activities, levels of difficulty, and learning resources in real time, according to each learner's pace and proficiency level.

Furthermore, AI fosters learner autonomy and enhances motivation through authentic and repeated interactions, such as simulated dialogues and interactive exercises. In addition, these tools support teachers in enriching their instructional practices in the language classroom.

In sum, the role of AI in foreign language education is primarily defined by human-machine complementarity, enabling students to learn in new ways and to become creative agents in their educational journey in the digital age.

6.1. AI in the Teaching and Learning of French as a Foreign Language (FLE)

In a university context, the integration of artificial intelligence has greatly supported both teachers and students in their academic paths by providing a wide range of pedagogical resources and spaces for knowledge exchange through online educational platforms. This new learning paradigm thus offers diverse student profiles the opportunity to learn and develop their skills in both spoken and written language.

Moreover, numerous researchers confirm the advantages of these tools in the teaching and learning of French as a foreign language. From this perspective, AI introduces a new, innovative form of instruction in the FLE classroom and transforms teaching practices. Consequently, today's teacher must master these tools to ensure effective monitoring of students' progress and, therefore, to assess their performance accurately.

In its current state, AI has proven effective in optimizing learning pathways and providing support to university teachers in adapting program content to students' needs. Hence, there is a clear need to implement continuous professional development for educators, which has become essential given the rapid advancement of technologies in the educational system.

6.2. The New Role of University Teachers in the Digital and AI Era

In higher education, integrating artificial intelligence into learning programs has become an educational necessity, particularly following the COVID-19 pandemic. Indeed, the ability of AI systems to support learners presupposes that they are clear about their motivations and possess sufficient skills to effectively organize their research. Therefore, methodological guidance becomes essential at this stage.

In this context, the university teacher evolves into a *technopedagogue*, whose role is not only to transmit knowledge but also to shape students' relationship with knowledge. In a world where AI is accelerating paradigm shifts, educators must learn to master technological tools in order to identify and leverage the opportunities they offer.

However, human mediation remains indispensable. It plays a crucial role in guiding learners during their initial steps and in helping them reach deeper levels of understanding and critical engagement that are difficult to achieve independently.

Among the most widely used language-learning applications by university students are tools such as ChatGPT-4, Grammarly, Google Bard, Quizlet, and many others, which support writing, interaction, memorization, and autonomous learning.

6.3. AI in the FLE Classroom: Issues and Challenges

Are you a school student looking for a new opportunity for a rethink of the teaching and learning methodology of French as a foreign language? The use of computer-aided learning can suggest many new possibilities in terms of personalization of learning processes for higher education students. It allows them to develop and use programs and content that meet the students' specific needs and requirements in our digital age.

The implementation of new technologies in education carries certain problems. One of the main issues is how to handle these tools effectively in the classroom without disregarding the basic educational techniques of FLE at the university level.

6.4. Contributions of AI to Instructional Design

Generative AI is currently the application with the greatest impact on instructional design. These impacts primarily affect both teachers and students. AI capabilities are diverse: it can generate structured lesson plans, syllabi, glossaries, learning support documents, summarize academic articles, and even critique textual content. However, it is important to emphasize that the application of AI-generated outputs may present certain limitations in specific learning contexts.

According to AI specialist Cristol (2024, p. 7) several instructional design tasks can be carried out by AI, including:

- **Content writer:** AI helps formalize training materials based on oral input, adds hyperlinks, references citations from presentation materials, and assembles them into multimedia learning resources.
- **Instructional assistant AI:** AI supports reflective practices and generates learning questions, assessments, and feedback activities.
- **Relational system analyst AI:** AI analyzes group interactions and provides suggestions to enhance collaborative engagement.
- **Exercise and protocol generator (collective intelligence):** AI creates and combines exercises and facilitation protocols, enabling the visualization of various possible training models.

Overall, while AI offers powerful support for instructional design, its effective use requires critical oversight to ensure pedagogical relevance and contextual appropriateness.

Building on all these tasks, it can be emphasized that artificial intelligence is leading to a significant transformation of the instructional designer's role into that of a **learning ecosystem designer**. This new role goes beyond the mere production of content; the designer becomes an architect of the pedagogical landscape, actively contributing to the creation of environments

that foster knowledge construction. Moreover, by relying on AI, they design systems that allow each student to shape their own personalized learning environment.

Within these pedagogical activities, university students—like teachers who already use AI-generated data to develop instructional content—can also be guided to take part in the progressive construction of their own knowledge by using AI effectively throughout their learning journey. In this sense, why not use generative AI creatively, enabling students to become central actors in the learning process? This aligns with the fundamental mission of higher education educators: to help shape future citizens capable of engaging actively in a modern, technology-driven society.

6.5. Autonomy in the Age of AI: Implications for Students in Higher Education

In the context of universities and in the era of AI technology, autonomous learning has undergone a transformation and has been evolving into new forms of teaching and studying FLE. By being more accountable for their education, the university student has gained the status of being the “architect of their learning path,” where the student needs to utilize AI tools in creating their own understanding while being in control of the objectives and success criteria of the learning journey.

It is important to recall that autonomy in learning requires active engagement, involvement, and initiative on the part of the student. In this framework, the learner becomes the primary agent of their own education. As researcher Barbot (2000) points out, “Autonomy is both a goal and a means of acquiring the ability to communicate and to learn [...]. The learner learns; no one can do it in their place, and the teacher must resist this temptation. The teacher is only a support for learning.”

Consequently, the learner's role is not gone with the adoption of AI technologies; it is rather strengthened by this technology because AI provides advanced options for self-learning. When mastered correctly, these high-technology tools give students a sense of responsibility for their academic destiny.

6.6. Limitations and New Didactic Perspectives

This research was conducted in a university context with a limited number of students. It is based on a mixed-methods questionnaire (both qualitative and quantitative), which does not allow the findings to be generalized to other academic fields or institutions. The objective is therefore to provide a focused insight into the practices and perceptions of the students surveyed, without claiming broader generalization.

Nevertheless, these limitations open the way for further research avenues, such as examining the impact of AI on students’ written productions or conducting more in-depth evaluations of its actual didactic effects in the language classroom.

At the same time, AI offers new didactic perspectives for university students’ learning, including:

- The creation of immersive learning environments
- The development of critical thinking and problem-solving skills
- Easier access to a wide range of pedagogical resources
- The provision of personalized educational materials

- Enhanced integration into the professional world through entrepreneurial collaboration
- The promotion of startup projects, which have significantly expanded in higher education and have enabled both teachers and students to develop professional competencies

In this regard, researcher Holmes (2019, p. 13) explains that the fundamental objective of artificial intelligence is to personalize learning, optimize the management of pedagogical tasks, and ensure continuous support for students. In doing so, AI helps address the broader challenges of education, particularly in a context marked by the transformation of learning materials in the digital age.

7. Methodology Adopted in This Research

The study is based on a sample of 25 students enrolled in the first year of a Master's program in French didactics at Mohamed Khider University of Biskra. This sample consists of 20 female students and 5 male students who agreed to participate in the research.

Data were collected using a mixed questionnaire composed of ten closed, semi-open, and open-ended questions. The questionnaire focused on AI usage, the most commonly used tools, perceived advantages, encountered difficulties, the impact on learning, the role of the teacher, learner autonomy, and the pedagogical challenges associated with these technologies. The aim was to gather students' perceptions of a contemporary phenomenon rather than to directly assess their linguistic performance.

The responses were analyzed descriptively, using frequencies and percentages. This methodological approach makes it possible to identify general trends; however, it also has certain limitations and opens up new perspectives for future research, which will be discussed at the end of this study.

7.1. Data Collection

To carry out this research, a questionnaire was administered to Master's level (M1) students in French didactics in order to understand how they use AI in their university studies and to what extent it has become essential in learning French as a foreign language (FLE).

The questionnaire consisted of ten varied questions, including open-ended questions, closed questions, and multiple-choice questions.

✓ Réponses des étudiants en termes de pourcentages

- Question 1 : Avez-vous déjà utilisé des outils d'intelligence artificielle (IA) dans votre formation universitaire ?

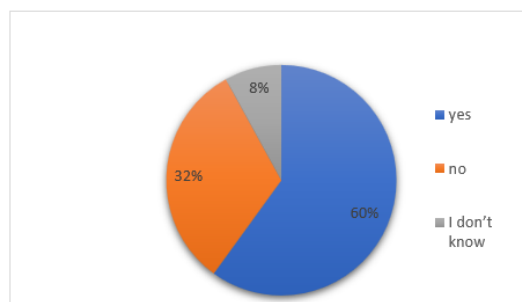


Figure 01. Students' Responses Regarding the Use of AI in Their University Education

Regarding the first question, 60% of the students reported having already used AI in the context of their studies. In contrast, 32% indicated that they had never used such tools, while 8% did not respond to this question.

The collected data show that AI is widely used by university students during their training. The gap between users and non-users highlights the importance of introducing students to the use of these technologies.

Question 2: Which AI-based tools do you use most often for learning FLE? (Multiple answers possible)

- Conversational chatbots
- Spell checkers / grammar checkers
- Text generators (ChatGPT, Gemini, Perplexity, etc.)
- Other (please specify)

Regarding the second question, the results show that 48% of students use spelling and grammar checkers, 20% rely on chatbots, and 32% use text generators in their learning process.

These findings indicate that students primarily use AI to improve linguistic accuracy and facilitate written production, two essential aspects of learning French as a foreign language. The lower use of chatbots suggests that oral interaction still plays a secondary role in their practices, while the use of text generators reflects a tendency to rely on AI as a writing aid.

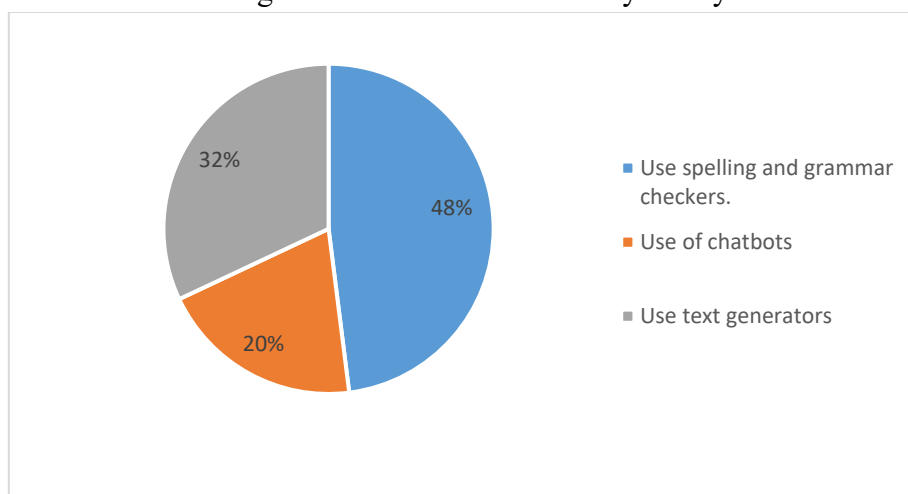


Figure 02. AI-Based Tools Used for Learning Purposes

Question 3: In your opinion, what are the advantages of integrating AI in the FLE classroom? (Multiple answers possible)

- Personalization of learning pathways
- Fast correction of exercises
- Easier access to resources
- Increased interactivity
- Improved motivation

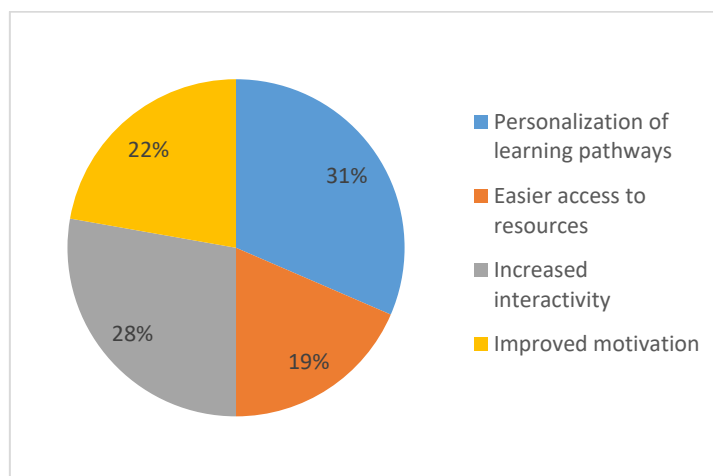


Figure 03. Advantages of AI Integration According to Students

With respect to this issue, the analysis indicates that 68% of respondents chose the first choice, with the fourth one selected by 60% of the participants, whereas 40% opted for the third choice, 48% of which stated that AI plays a role in enhancing motivation.

The significant level of agreement regarding the major benefits suggests that AI has the potential to revolutionize the process of learning French, as well as make it more versatile in terms of the methods used and materials employed.

Question 4: What difficulties do you encounter when using AI tools for learning FLE?
(Multiple answers possible)

- Technical difficulties
- Lack of training
- Reliability of generated responses
- Lack of interaction with teachers
- Other (please specify)

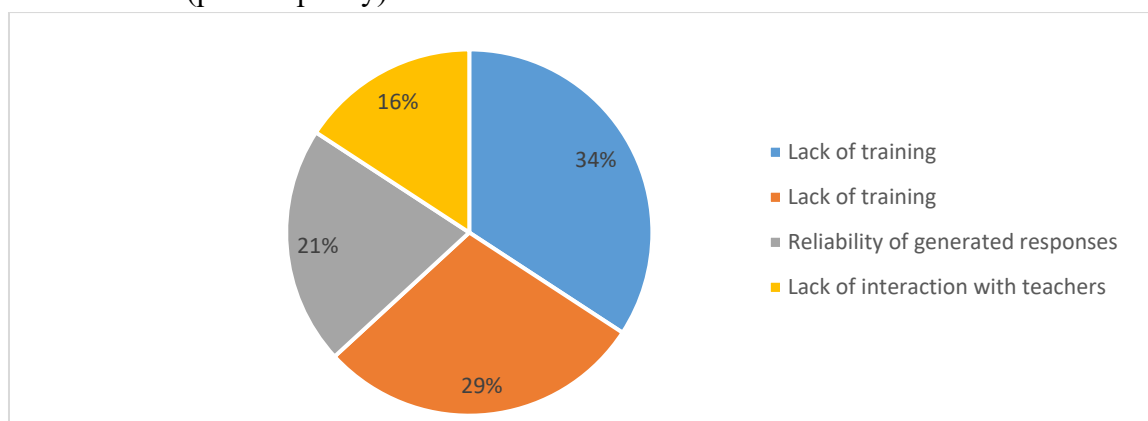


Figure 04. Difficulties Encountered When Using AI

For the fourth question, 52% of students selected the second option, namely the lack of training. In addition, 44% reported technical difficulties, 32% highlighted the lack of reliability of generated responses, and 24% pointed out the insufficient interaction with teachers.

Question 5: In what way does AI influence your learning French?

Examples of what learners might say:

The use of AI gives me personalized learning according to my level, which makes it more effective.

With the help of AI, I can learn French whenever I want without being dependent on the teacher and schedule.

AI is helpful in correcting my mistakes at once in terms of grammar, conjugation, pronunciation.

AI gives me different and practical exercises and therefore makes learning more enjoyable.

AI gives me various resources, for example, texts, videos, tests, and translations.

AI allows me to read a text that is adapted to my level and to get an explanation of it instantaneously.

Concernant les données recueillies, 40% des participants ont choisi la première réponse, 30% la deuxième, 55% la troisième, 15% la quatrième, 60% la cinquième, et enfin, 25% ont opté pour la sixième et dernière réponse.

Ces résultats montrent que l'IA est perçue avant tout comme un outil de soutien pédagogique polyvalent car il favorise au premier rang la personnalisation des apprentissages, l'autonomie des étudiants, et permet également l'accès élargi aux différentes ressources. L'aspect ludique reste moins central, d'après les participants, mais contribue à la motivation.

Question 6: Can AI replace the role of the teacher in FLE classrooms in the future?

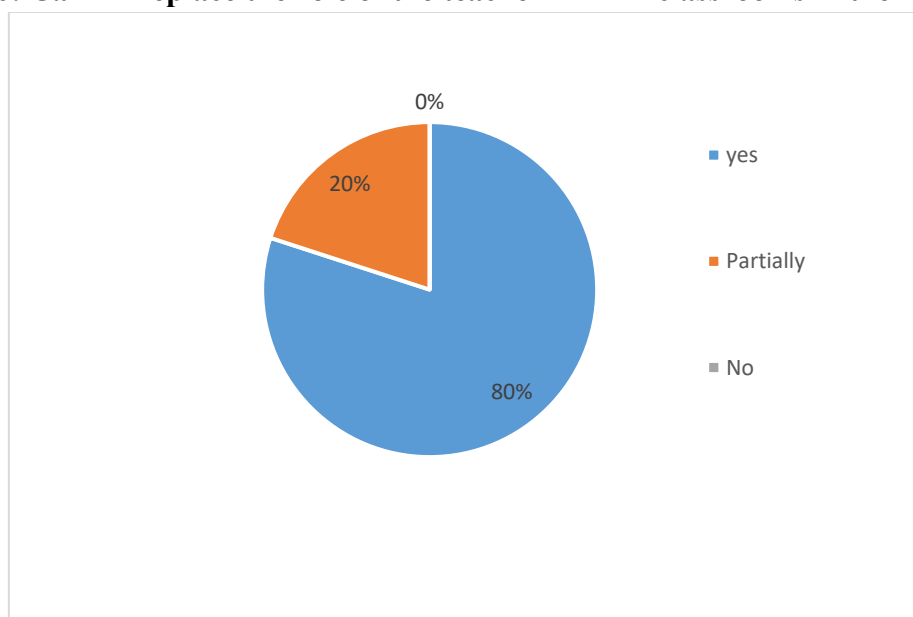


Figure 05. Students' opinions on the replacement of the teacher by AI in FLE classrooms

For the sixth question, 80% of students state that AI cannot replace the teacher under any circumstances. Moreover, 20% believe that this substitution could be partial, while no student expressed a favorable opinion toward such a possibility.

These results show that AI is not perceived as a substitute for the teacher. On the contrary, the teacher retains a central role, particularly for human interaction. AI is therefore recognized for its usefulness, but within a logic of complementarity rather than replacement.

Question 7: Would you like to see more integration of AI in FLE courses at university?

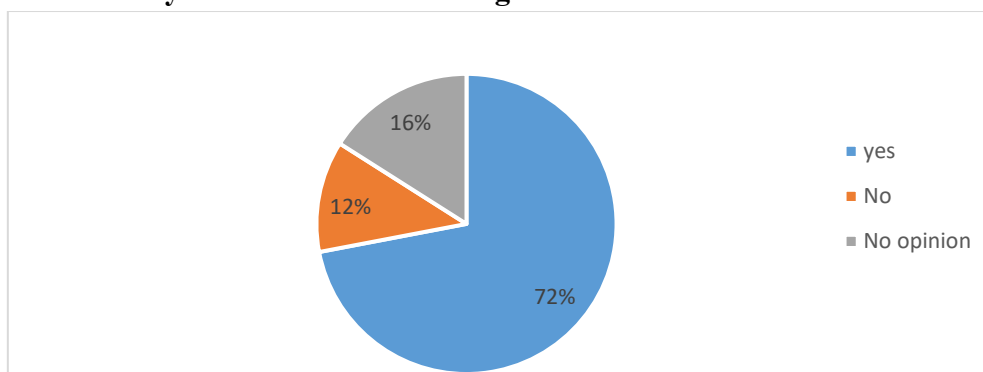


Figure 06. Students' opinions on the integration of AI into FLE courses at university

For the seventh question, 72% of students are in favor of integrating AI into their learning of French as a foreign language (FLE) at university. In contrast, 12% express disagreement, while 16% did not provide an opinion on the matter.

The results obtained from participants indicate a strong potential for the integration of AI into FLE courses at university. The main reason why a majority of students (72%) support this integration is that they perceive AI as a pedagogical support tool that enhances their learning, particularly through grammar and spelling correction tools, which are widely used by students.

Question 8: According to you, which uses of AI could best improve the learning of French as a foreign language (FLE)?

- Adapting course content to students' levels
- Analyzing and correcting students' errors in real time
- Creating immersive virtual environments, such as role-playing activities
- Enabling students to connect with learners worldwide to exchange, practice, and learn together
- Generating personalized exercises

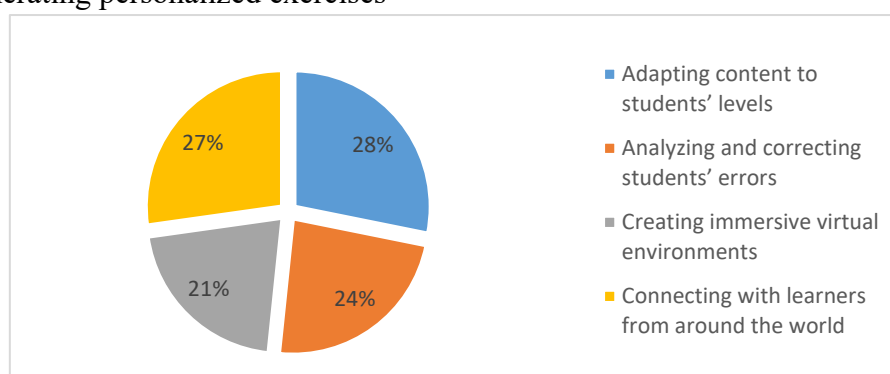


Figure 07. The Use of AI in Improving FLE Learning

Regarding the eighth question, the results reveal a diverse distribution of students' choices. Indeed, 60% of them selected the first option, while 50% chose the second. The third option was selected by 45% of participants, the fourth by 58%, and finally, the fifth option received the support of 66% of students.

These results show that AI is not merely a single-purpose assistant, but rather a set of pedagogical solutions that contributes to improving French language learning by enriching the learning experience from multiple perspectives.

Question 9: Do you think that the integration of AI promotes learner autonomy?

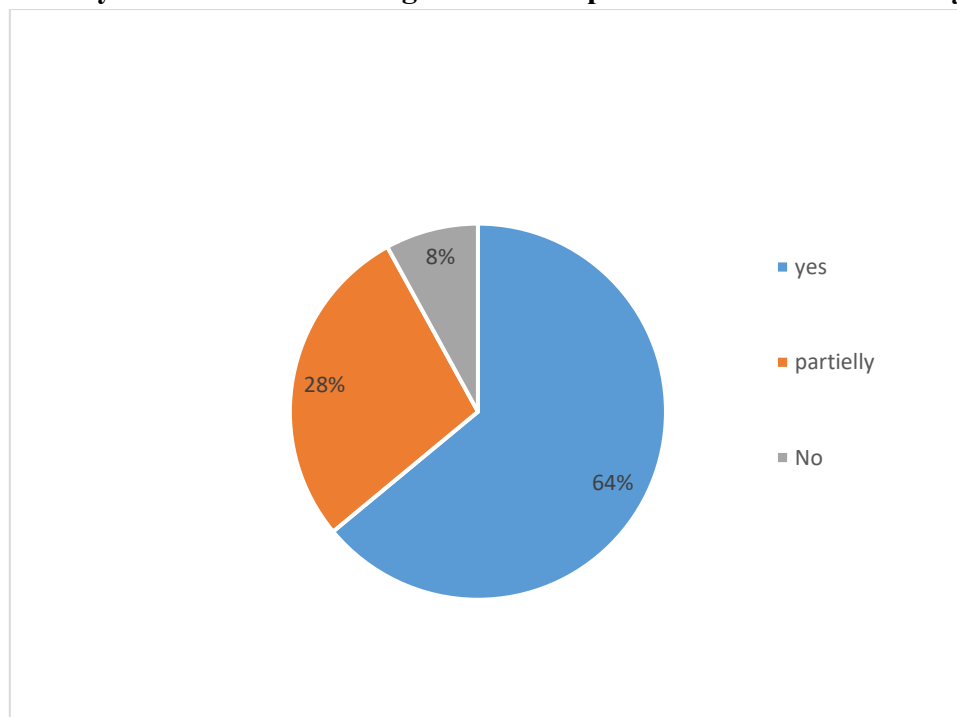


Figure 08. The Integration of AI and the Promotion of Learner Autonomy

Regarding the ninth question, the results obtained indicate that 64% of students believe that the integration of AI into the learning process promotes the development of learner autonomy. Furthermore, 28% of participants consider that this impact is only partial, while 8% do not perceive any effect in this regard.

These results indicate that AI promotes autonomy in French language learning by allowing students to manage their progress and resources more independently. AI therefore appears to be a tool that facilitates learning; however, its effectiveness depends on how it is integrated into the educational framework.

Question 10: What new pedagogical challenges do you identify with the arrival of AI in the FLE classroom?

Possible responses:

- Using AI tools critically and effectively
- Maintaining human interaction
- Ensuring the reliability of corrections
- Receiving regular training on new tools and technologies

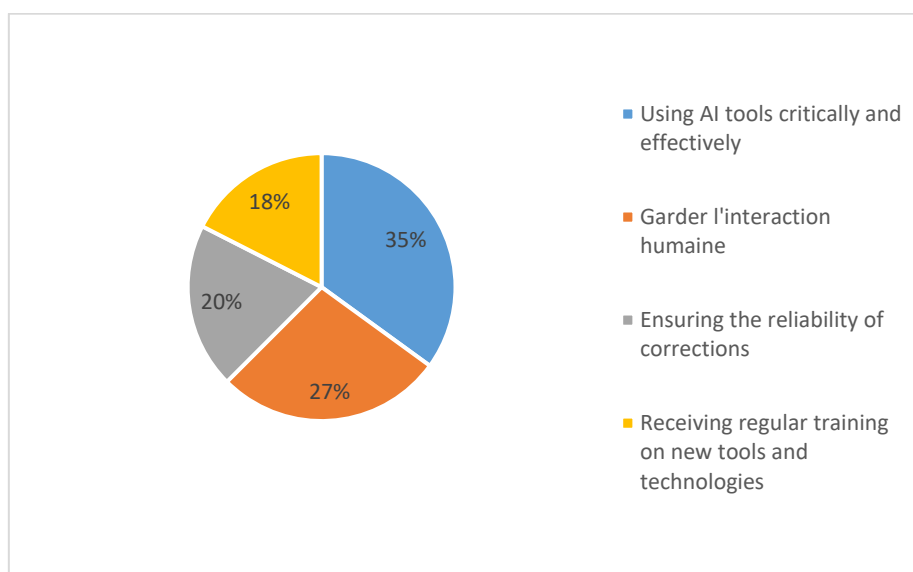


Figure 09. New Challenges Identified by Students with the Introduction of AI in the FLE Classroom

In reference to the tenth and last question, the first possible response - the critical use of digital tools - was chosen by a total of 56% of the students. Moreover, 44% of them opted for the answer preserving the value of human interaction in the process of learning, while 32% pointed out the necessity to ensure the correctness of the corrections made, and 28% insisted on regular training concerning new tools.

Being aware of the potential of AI implementation in the university setting, students consider it to be a pedagogical innovation and understand the challenges and limitations concerning its application.

8. Discussion of the Findings

The results obtained confirm that generative AI is gradually becoming an important support tool in university learning; however, it is not yet fully integrated in a reflective or institutionalized manner. Its uses remain largely focused on practical functions, such as correcting, reformulating, quickly searching for answers, or generating exercises. This reflects a logic of immediate assistance rather than a structured didactic use.

One of the major contributions of AI lies in its ability to support personalized learning and provide readily available assistance. However, this apparent effectiveness should be approached with caution. The speed of response does not necessarily guarantee accuracy, depth, or pedagogical appropriateness. Students must therefore learn to question, compare, verify, and critically reuse the information provided. Without such a critical approach, AI use may become superficial or even counterproductive.

In this context, the role assigned to the teacher represents a particularly significant aspect. It shows that students recognize the importance of human mediation in FLE learning. The teacher does not disappear with the emergence of AI; rather, their role is redefined as that of a guide, regulator, and guarantor of the learning process. This perspective aligns with UNESCO's recommendations, which emphasize the importance of maintaining human-centered

governance of digital tools and preserving values of equity, inclusion, and academic integrity within any teaching and learning framework.

Conclusion

The questionnaire results reveal a growing acceptance of AI tools, with strong expectations regarding personalization and self-correction, while also highlighting the irreplaceable role of the teacher, who remains an essential partner in supporting students throughout their various learning pathways. Similarly, students emphasized the importance of autonomy in this AI-based learning environment, which provides them with opportunities to construct their own knowledge. They also confirmed the effectiveness and diversity of resources offered by AI as major pedagogical supports in the FLE classroom, contributing to the enrichment of course content. On the other hand, they identified the lack of training, both for teachers and students, as well as the reliability of these technological tools, as challenges that still need to be addressed.

Overall, the responses highlight the necessity of preserving the human and critical dimensions of the teaching process in the face of the automation and speed enabled by AI tools.

AI represents an effective opportunity in higher education, as it has, in our view, transformed pedagogical practices in the digital era and enabled university students to become more actively engaged in their learning by developing critical thinking skills and participating in a creative learning environment involving various stakeholders.

Furthermore, it should be emphasized that artificial intelligence constitutes a potential tool for enhancing research capacities, provided that it is used appropriately in different scientific contexts. To achieve this, effective use of AI by learners requires a clear understanding of their motivations, as well as the mastery of techniques that enable them to organize their research activities efficiently. In this perspective, methodological guidance remains essential throughout the learning process.

Therefore, integrating AI into FLE teaching and learning represents a significant advantage for university teachers seeking to diversify their pedagogical resources in the digital age, as well as for students aiming to develop professional skills capable of meeting the emerging needs of today's job market.

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