

Experimentation of ICT for the Benefit of French as a Foreign Language Teachers

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Abstract

In a rapidly changing world where technology is advancing and digital integration is affecting all aspects of life, schools are no exception. To provide a quality education, they must address the needs of their students in order to prepare them for daily life. This has raised questions about the relationship between schools and technology. In the context of French as a Foreign Language (FFL) teaching, the use of ICT presents a promising opportunity to enhance language learning outcomes and support instructional practices. An examination of the current situation revealed that many French as a foreign language (FFL) teachers are uncertain about using Information and communication technology (ICT) in their lessons. As an experiment, we proposed providing training sessions to help participants understand and use MOOCs. The results showed that a combination of technological and pedagogical training can have a positive impact on the teacher's practices and the students' learning outcomes. To ensure the success of this approach, continued support is necessary to help teachers make the best use of digital tools such as e-learning, MOOCs, and the flipped classroom.

Keywords: ICT, E-learning, MOOC, Flipped classroom, FFL, Didactics.

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1. Introduction

Nowadays, digital technology has permeated all aspects of daily and professional life. In this sense, integrating technology into education is considered a necessary step in addressing the uncertainties of an unpredictable world and meeting the needs of our educational system (Collins & Halverson, 2018). The recent dynamic within our educational system regarding pedagogical innovation serves as a lever for the development and qualification of future citizens, so that they can face the challenges of tomorrow's society (El Aouifi, El Hajji, et al., 2021; El Hajji et al., 2016). In addition, the COVID-19 pandemic has challenged all educational systems, including those that were considered the most advanced. During the lockdown, we observed a lot of improvisation in decision-making, resources and practices implemented to ensure educational continuity. For this reason, during the last Covid-19 health crisis, the use of computer tools and distance learning allowed us to maintain educational continuity and save the school year despite the constraints we faced (Mimis et al., 2018).

In this context, we believe that it is necessary to re-evaluate our training practices with regards to teacher qualification, as well as the approaches and resources put in place to address today's and tomorrow's challenges. It is crucial to re-examine the pedagogical model to be adopted in a rapidly changing world. Thus, utilizing digital tools appropriately is essential for successful and high-quality teaching and learning.

Educational innovation has been a major concern of actors in the reform of the Moroccan educational system since the 1999 National Charter to the adoption of Law 51-17¹. The desire to establish a culture of innovation and introduce digital technology in the classroom becomes increasingly pressing to face the challenges of globalization and meet the needs of both practitioners and learners. The Covid-19 health crisis has forced educational actors to reevaluate their practices and design the classroom differently by integrating technology to ensure educational continuity and, in doing so, make learners autonomous in their learning.

It should be noted that during the pandemic, many FFL teachers admitted to difficulties and even inability to ensure educational continuity through technology. This is concerning as it can contribute to further instances of foreign language attrition (Schmid, 2023). In light of this marked reluctance, characterized by a lack of motivation and initiative, we question the real reasons for this worrying situation. Thus, as part of our research, we intend to focus on the contribution of training that combines the didactic-pedagogical dimension on the one hand and the technology dimension on the other.

Given this issue, and as part of educational innovation, we believe it is appropriate to implement an action plan to address the shortcomings faced by FFL teachers. The purpose of this research is to focus on the priority of training in the use of ICTs for teachers in their initial and ongoing training programs, in order to face the challenges of globalization and modernity, which never cease to surprise us with their new developments. As

¹ http://www.aneaq.ma/wp-content/uploads/2020/12/Loi-Cadre-51.17-Vr.Fr_.pdf

such, a constant reevaluation of the established pedagogical model must always be the concern of today's teachers, while also ensuring that the educators are able to anticipate the changes. This will be the key to a successful and efficient outcome.

In general, this research aims to achieve the following objectives:

- Appropriate and use information technology for didactic and pedagogical purposes in the teaching of FFL.
- Encourage the creation, innovation, and production of high-quality educational resources.
- Ensure pedagogical continuity in case of potential crises.
- Enable teachers to conceive classroom practices differently.
- Strengthen the engagement, motivation, and involvement of learners.
- Make learners autonomous in different learning situations.
- Promote individualized learning.

The remainder of this paper is structured as follows: Section 2 presents related works, Section 3 outlines the methodology pursued in this study, and Section 4 presents our experimental setup and provides a detailed discussion of the results. Finally, Section 5 concludes the paper.

2. Related works

Many researchers have studied the issue of integrating ICTs into education since the advent of new technologies (El Aouifi, Es-Saady, et al., 2021; Mimis et al., 2019).

Jacques Tardif (Tardif, 1998), emphasizes the dual benefit of technological tools for the learner, as they allow them to be autonomous in their learning, and for the teacher, as they become a mediator and companioner of their students. Houcine Samira, examined the beneficial effects of ICT, whereby the integration of technology increases teachers' enthusiasm towards lessons and improves learners' involvement (Houcine, 2011).

Regarding the Moroccan context, in their study (Biaz et al., 2009), Biaz, et al, examine the manner in which teachers are envisioning the integration of ICTs in their teaching practices, as well as the trends in terms of actual usage and training requirements, and the barriers that prevent a systematic integration of ICTs in the classroom. According to (Otroshi & Bourdet, 2012), the use of ICT in teaching French as a Foreign Language is very different from one university to another. The majority of university FFL professors are positive but wary of the use of ICT. However, authors reported that the major problem that limits the use of ICT in the teaching of FFL at universities is that there is no set policy regarding the development and support of new technologies for university professors. In his article (Mastafi, 2014), Mohammed Mastafi identifies five main categories of obstacles, namely: general obstacles related to the Moroccan educational system itself, obstacles related to the policy and strategy of implementing ICTs in education, obstacles related to support and professional development, cultural and linguistic obstacles, and finally obstacles related to technology infrastructure. In (Taib et al., 2021), authors indicate that learners feel a sense of community and belongingness when they participate in online class activities. Nonetheless, the learners require precise instructions to obtain a clear sense of direction. In (Mohammed et al., 2022), authors presented innovative approaches and pedagogical methods that were designed to enhance the quality of French education at the secondary level. These methods involved using ICT and adapting training, and were proposed with the goal of improving the teaching and learning experience.

We observe that most of the research conducted in the context of the pedagogical integration of ICTs focuses on describing the situation of this integration and its context, emphasizing the obstacles that hinder its success. Our research, aims to ultimately provide concrete implementation models that have been tested in the field, even to the point of generalizing them. This is why we have decided to work on only one subject matter in the first place, in order to measure the impact of the training we propose on both teachers and learners.

3. Methodology

The approach adopted during this research is both qualitative and quantitative as we will attempt to explore and understand the pedagogical models put in place by FFL teachers in regards to the use of ICTs in their professional practices. Several research questions were raised during this study:

- How to convert a teaching and learning activity into a web-based pedagogical unit?
- How to design MOOCs (Massive Open Online Courses) based on didactic sequences?
- How to experiment with them with learners?
- How to choose the appropriate digital tool?
- What are the impacts on teachers' practices?

In this view, to successfully conduct our research, we adopted the ADDIE (Aldoobie, 2015) instructional design model which consists of the following stages: analysis, design, development, implementation, and evaluation (See figure.1).

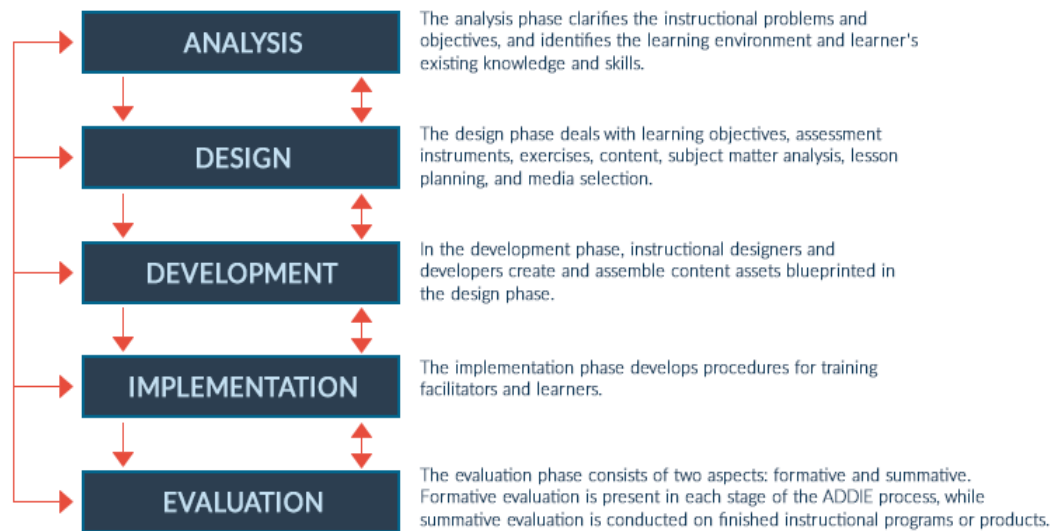


Figure 1. ADDIE Model (Aldoobic, 2015)

Our research methodology involves dividing the process into three distinct phases: preparatory phase (analysis and design), practical training phase (development, implementation), and synthesis phase (analysis and evaluation), which will enable us to gain a comprehensive understanding of the issue.

The preparatory phase of our research consists of four stages: firstly, the team held preliminary meetings to establish a general project design and a framework for work. Secondly, they selected and formed working teams, specifically consisting of French language teachers. The third stage involved programming and planning training sessions. Finally, administrative measures were taken to invite beneficiaries to attend in-person training.

In the practical training phase, the intended audience received two types of training: one focused on teaching methods and pedagogy, and the other on ICT/E-learning. The teachers were trained in five sessions (both in person and online), resulting in the creation of digital resources that were tested with the students (See figure 2). Concurrently, surveys were conducted with the teachers to analyze and evaluate the participants' performance and collect feedback after the MOOC experiment.

Finally, the evaluation phase present and analyze the research findings to identify recommendations.

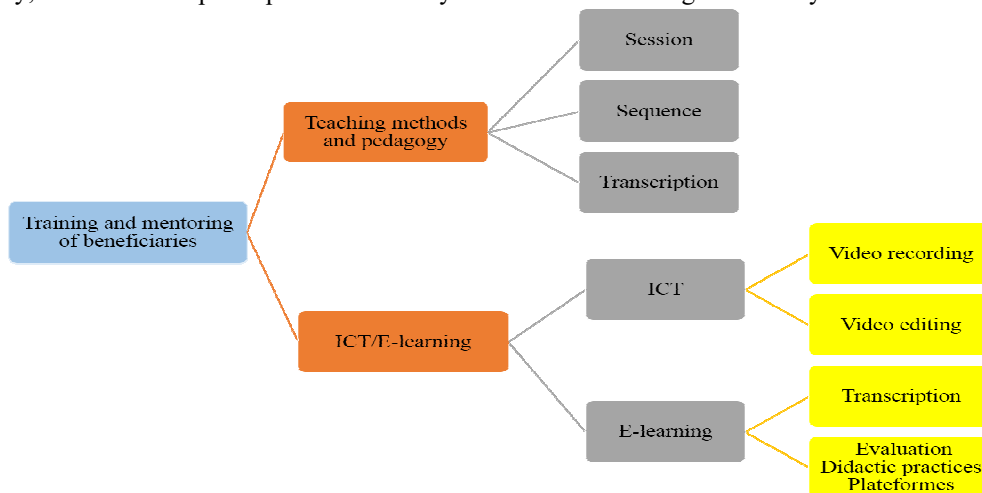


Figure 2. MOOC-FFL Training Organizational Chart

4. Experimentation and results

This section outlines the parameters of the experiment and describes the results obtained.

4.1 Experimentation setup

The sample of our research involves 29 secondary and vocational teachers with 1 to 11 years of experience, ensuring gender parity (15 female and 14 male teachers). This sample covers the 6 provincial directions of the Souss-Massa region. At the start of our survey, we selected 29 out of 52 initially targeted teachers, the

availability of the beneficiaries, and their degree of involvement and motivation. We aimed for a diverse population in terms of teaching cycle, experience, and rural and urban assignment locations. Our data collection approach is based on interviews, a questionnaire, direct observations, examination of developed documents, and testimonies from the beneficiaries.

In addition, the questionnaire was designed using Google Forms to address the research problem and the desired objectives. It consisted of two parts: before the training (9 questions) and after the training (19 questions), aimed at measuring the impact of our intervention on the beneficiaries' teaching practices. This is why we highlighted general questions about the use of ICT, the design of digital resources, and the reasons for reluctance to use these tools. To further increase the credibility of our survey and verify our hypothesis, we tasked the teachers with collecting audio and video testimonials from the learners to measure the impact of our ICT training intervention.

4.2 Results and discussion

4.2.1 Testimonials from teachers and survey results before training

Our investigation, which relied on a questionnaire, revealed that during their initial training, 97% of teachers had been trained in using ICTs in the classroom. However, in practice, the use of these tools remains below the level required by the current context, as only 29% of teachers reported having created digital resources for their students.

Statistics show a lack of motivation and awareness among teachers regarding the importance of ICTs in improving the conditions of FFL learning. This finding is persistent even though 70% of educational institutions are equipped with IT rooms.

The Covid-19 health crisis has revealed the lack of qualification of teachers in the use of ICT to ensure pedagogical continuity, since only 29% of them had already experimented with virtual classes before the lockdown. Thus, during the lockdown, teachers were forced to question their classroom practices, including the tools and didactic resources they use. In this context and to cope with this unexpected situation, teachers tried to stay in touch with their students via the most popular social network, namely WhatsApp, with a percentage of 89.29%, to the detriment of other applications such as e-learning, platforms, Skype, etc (See figure 3).

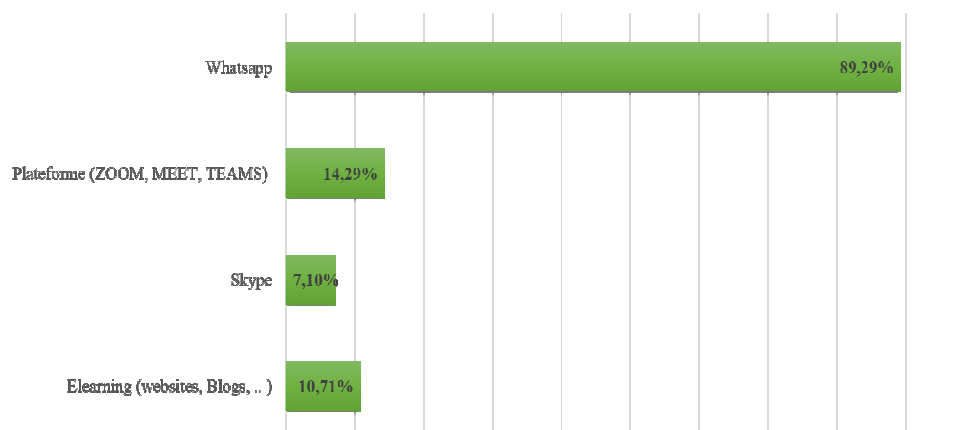


Figure 3. Tools used during the pandemic

The teachers believe that the reason why they do not systematically use ICT in their teaching practices is due to several factors. These include a lack of equipment for both teachers and students, which 92% of teachers consider as a hindrance. Additionally, 91% of teachers mentioned a lack of familiarity with educational software, and 76% cited a lack of proficiency in computer tools as another reason for the non-use of ICT.

According to the findings of our survey and the various interviews we conducted with the target population of this research, we would like to point out that the lack of training remains the main reason for the reluctance to integrate ICT into classroom practices. Additionally, the majority of teachers interviewed expressed their need for training on the use of new information and communication technologies for didactic and pedagogical purposes in teaching French as a foreign language.

4.2.2 Testimonials from teachers and survey results after training

The training program provided to teachers as part of this research revealed a great awareness among them of the benefits of ICT in innovating and improving their professional practice. Most teachers emphasized that this training session was of great importance (71%) and believe that the allotted time was insufficient (96%).

According to those interviewed, the use of ICT is primarily limited to the development of PowerPoint presentations (100%), followed by platforms (60%), personal blogs (57%), distance learning (52%), MOOCs

(39%), and others (27%) (See figure 4).

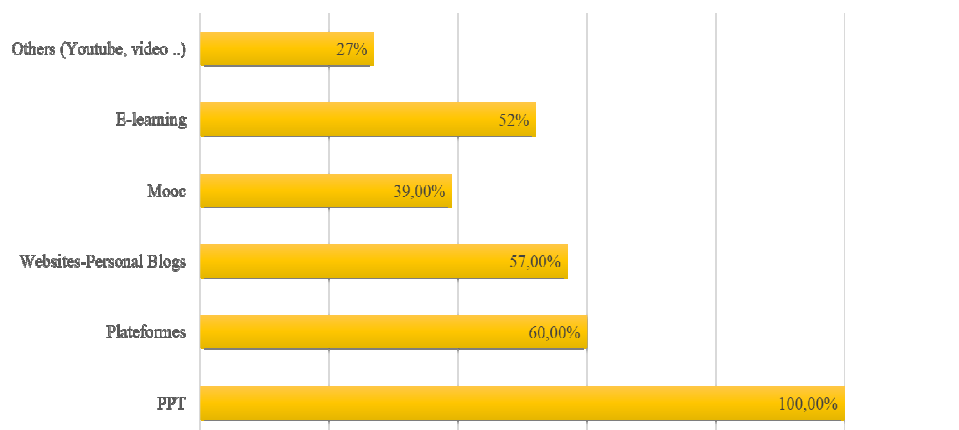


Figure 4. Rate of ICT usage

According to the survey and in the development of digital resources, teachers use these applications in the following order: didactic tools (87%), presentation software (80%), video editing (67%), and online educational websites (63%).

Based on the testimonials of teachers, the integration of ICT in the classroom allows for a different approach to teaching and learning French as a foreign language. The teacher's role is to make the student active, motivated, and autonomous through new teaching methods such as flipped classroom and e-learning. Indeed, knowledge construction is done in a playful way using digital resources that facilitate access to information, sharing and dissemination.

The majority of teachers surveyed confirmed their use of ICT in classroom practices, especially first in oral activities, followed by language sessions, and finally in the study of texts (See figure 5). The tools implemented in order are: paper worksheets, laptops, and smartphones.

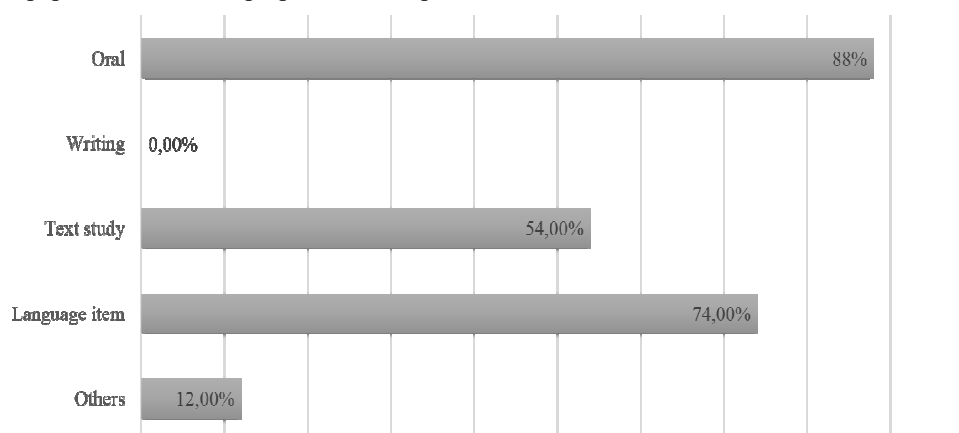


Figure 5 Rate of Pedagogical Practices of ICTs FFL

The frequency of computer tool usage in teaching is as follows, according to the interviewees: 60% use it occasionally, 25% use it several times per week, 12% use it once a week, and 2% use it daily.

97% of teacher's state that the use of ICT in the classroom has a positive influence on learners and plays a crucial role in the teacher-learner relationship, particularly in terms of motivation (97%), communication (87%), autonomy (34%), and concentration (27%) (See figure 6). According to 100% of the teachers, the use of ICT leads to a significant improvement in students' learning since, on the one hand, it promotes collaborative work and, on the other hand, it facilitates sharing and discovery of other knowledge.

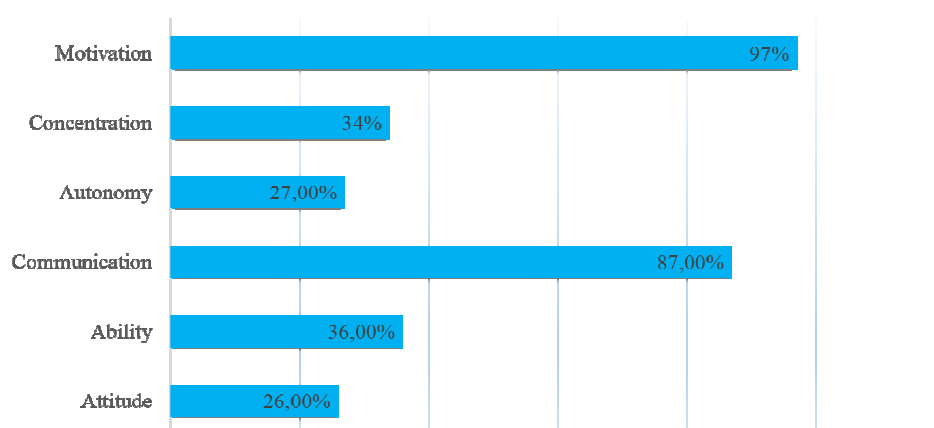


Figure 6. Degree of positive impact on the learner

The survey revealed that obstacles related to the integration of ICT/ICTE in the teaching process are primarily due to the lack of continuing education for teachers (97%), followed by a lack of equipment and infrastructure in schools (80%), and finally some recurring difficulties related to slow internet network speed (71%). According to the results of our survey, between 76% to 100% of teachers feel capable of teaching a class using digital tools by creating and editing documents related to learning and/or evaluation situations. In fact, this ease of integrating ICT for educational purposes is reflected in the use of various platforms in their classroom experiences, notably Hotpotatoes (87%), Kahoot (83%), Google classroom (67%), Edmodo (36%), Padlet (24%). The learning activities in which they use these platforms are as follows: homework (88%), oral presentations (81%), written presentations (80%), text analysis (67%), assessment (54%), flipped classroom (29%), language learning (12%).

At the level of digital resource productions after training and experimentation, we note that more than 47 activities were carried out as part of this research. Out of a sample of 29 teachers who benefited from the training, 4 did not produce any activity, 10 carried out only one activity, 8 developed two activities and 7 succeeded in producing more than three activities. Disparities in achievements can be explained by some constraints related to a lack of equipment or internet in schools (See table 1).

Table 1. Number of activities carried out.

Number of Products per Teacher (Video, Capsule, other Activities).	0	1	2	3 et +
Number of products	4	10	8	7
Total number of products	0	10	16	21
TOTAL of activities	+ 47			

4.2.2 Testimonials from learners after the experimentation.

Most of the students who benefited from the experiment emphasized the positive impact of ICT on learning, the classroom atmosphere, and the teacher-student relationship. From their perspective, these students believe that the technology implemented makes access to knowledge easier and supports motivation by making the learning process more enjoyable and attractive. In fact, ICT facilitates the breaking down of classroom walls, ensures pedagogical continuity, especially in the context of flipped classrooms, and also allows learners to work at their own pace. Through applications, interactive exercises, and online courses, students develop their interaction with their peers and strengthen their linguistic and communication skills through the elaboration of presentations and the sharing of information related to their course.

In this regard, the teacher is compelled to modify their stance insofar as they become an animator, accompanier, and facilitator who guides their students both in-person and at a distance. This posture gives them the possibility to help students acquire not only knowledge but also know-how, know-being, and know-how-to-act through playful and group activities.

However, some learners have raised some constraints related to technical means such as a lack of laptops, internet access problems, etc.

5. Conclusion

Nowadays, innovation in the field of language teaching, particularly in FFL, has become a crucial professional competence. The teacher cannot fulfill their role of accompanying, motivating, and making their learners autonomous to face a changing and new world without it. As part of our research, we found that it is important to question the approaches and methods used for both the construction of learning and teaching techniques. In

terms of teacher qualification, the reform of the educational system in Morocco focuses on training in the use of digital tools for pedagogical and didactic purposes for language teaching. However, in terms of classroom practices, there is an urgent need for training for teachers that combines the use of ICTs with didactic-pedagogical dimensions. During the experimentation of some digital tools in the classroom such as software, applications, platforms, MOOCs, etc., the impact on the learners was positive based on their testimonials and those of their teachers. This makes access to knowledge easier while supporting student motivation and making the learning process more fun and appealing. It is undeniable that teachers are forced to modify and vary their positions in order to help students develop their skills by offering various learning opportunities in person and/or remotely using digital tools. Therefore, it is desirable to schedule ongoing training sessions for FFL teachers to better equip them and improve their performance. This research has also proved that, in addition of an initial and continuous training in ICT, the FFL teachers are in need of adequate support in order to integrate ICT in their teaching practice, especially while the beginning of their career.

Future research on the use of ICT in French as a Foreign Language (FFL) teaching could focus on a range of topics. The effectiveness of virtual reality (VR) technology and the exploration of the impact of gamification on FFL learning outcomes could be other directions to enhance our understanding of how technology can be used to support FFL learning and teaching.

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