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Technology integration in foreign language teacher training programs: Exploring cutting-edge tools and applications for professional development

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ABSTRACT

The incorporation of technology into the training of foreign language teachers has garnered considerable interest among educators, who have increasingly acknowledged the inherent possibilities of innovative tools and applications in augmenting their professional growth. Notwithstanding, these tools allow educators to remain abreast of the most current pedagogical methodologies, augment their instructional expertise, and proficiently cater to the varied requirements of students. This study investigates the incorporation of these tools within the instructional program of educators specializing in foreign languages; with the ultimate aim of unveiling the views of relevant stakeholders on how these tools aid in strengthening their professional growth. The study involved the participation of 107 individuals, comprising both foreign language university lecturers and teacher trainers. Furthermore, a quantitative method of analysis was adopted in analyzing the research data that was collated through the use of an online questionnaire. Several significant findings were made from the research data which were presented and analyzed. The research findings revealed that technology integration seamlessly paves the way for the professional development of foreign language educators. Also, a comprehensive training program, provision of ongoing professional development opportunities, peer collaboration, and establishment of feedback and evaluation mechanisms can aid in countering major limitations of the implementation of technology integration.

KEYWORDS: technology integration, teacher's training program, technological tools and applications, foreign language, professional development

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1. Introduction

The pedagogical approach to foreign language education has historically been predicated upon conventional instructional methodologies and didactic resources. Nevertheless, the advent of the digital era has undeniably revolutionized the educational milieu, endowing educators with a plethora of advanced tools and applications to effectively facilitate the process of language acquisition and pedagogy. These programs not only augment conventional pedagogical approaches but also present novel prospects for collaboration, active involvement, and tailored learning experiences.

Within the realm of foreign language teacher training, the incorporation of technology into professional development initiatives has garnered heightened significance. It facilitates the continuous professional development of educators, enabling them to remain abreast of cutting-edge pedagogical methodologies, augment their instructional competence, and adeptly cater to the broad requirements of students.

According to Kimmons et al. (2020), the inclusion of technology integration in language teacher programs is a result of the constant challenges that educators encounter when attempting to integrate technology into their teaching practices. This is further acknowledged by Agyei (2013) who highlighted three basic reasons. Firstly, there is the perpetual struggle of adapting to ever-shifting professional demands, which are often influenced by political factors. Secondly, the landscape of educational technology is in a constant state of flux, demanding a continuous effort to keep up with the latest advancements and resources. Lastly, the diverse requirements across different subject areas and educational settings further complicate the endeavor of effectively incorporating technology into teaching practices. In light of this, teacher educators are confronted with the formidable challenge of anticipating the future utilization of educational technologies by their students, as well as the dynamic nature of technological advancements that may transpire throughout their professional trajectories. Henceforth, the arduous task lies in equipping aspiring educators with the necessary skills to adeptly incorporate technology into their pedagogical practices in a manner that is purposeful, efficacious, and enduring.

Some researchers (Koehler & Mishra, 2009; Puentedura, 2003; Harmes et al., 2016, etc.) have proposed relevant theoretical frameworks that can aid in the appropriate integration of technology in the professional training of language teachers. While Koehler & Mishra, (2009) proposed the use of Technological pedagogical content knowledge (TPCK) framework an extension of Shulman's pedagogical content knowledge theory, the Substitution – Augmentation – Modification – Redefinition theory (SAMR) initially proposed by Puentedura (2003). Others include Technology Integration Planning (TIP) by Roblyer & Doering, 2013), Technology Integration Matrix (TIM) by Harmes, Welsh, & Harmes et al., 2016), Technology Acceptance Model (TAM) by Venkatesh, Morris, & Davis, 2003), Levels of Technology Integration (LoTi) by Moersch ,1995), and Replacement – Amplification – Transformation (RAT) by Hughes, Thomas, & Scharber, (2006).

1.1. Problem statement

Existing literature has predominantly explored the integration of technology in the training program of foreign language instructors. Notable studies have also explored relevant technological tools and applications that allow educators to remain abreast of the most current pedagogical methodologies, augment their instructional expertise, and proficiently cater to the varied requirements of students. Nevertheless, researchers have yet to fully investigate and assess the views of foreign language university lecturers and teacher trainers on how these tools aid in strengthening their professional growth. This study aims to address this gap, hence providing valuable important insights to teacher educators, program designers, and policymakers, enabling them to make well-informed choices about the selection, implementation, and evaluation of cutting-edge tools and applications to facilitate effective technology integration in foreign language teacher training and professional development.

1.2. Research Questions

The following are the research questions developed to guide the foundation of this study.

1. What are the views of relevant stakeholders in the foreign language sector on technology integration in the foreign language teacher training program?
2. To what extent do the teacher trainers incorporate technological tools within the instructional program of foreign language educators for professional development?

2. Literature Review

The literature review section of this research offers a comprehensive exposition of related studies on the integration of technology in the realm of foreign language teacher training. A comprehensive examination and analysis of various theoretical frameworks about the integration of technology within the realm of education was subsequently reviewed to unveil the significance and applicability of these frameworks within the context of foreign language teacher training. Moreover, a substantial segment of the literature review is devoted to delving into the cutting-edge tools and applications that have played a significant role in the professional development of educators.

2.1. Technology Integration and Teacher Training Program

The integration of technology in education has presented significant challenges for researchers and training institutions. These challenges necessitate modifications in both the content of learning and the methods employed for facilitating learning (Voogt et al., 2013). However, this has led to the promotion of transformative learning through the accentuation of transdisciplinary thinking and the utilization of contemporary technologies in the facilitation of transformative teaching and learning in the 21st century (Mishra et al., 2009).

Nevertheless, the integration of technology into teacher training programs has emerged as a pivotal area of emphasis within the field of education. According to Habib et al. (2019), the rapid pace of technological advancements has made it imperative for educators to possess the requisite skills and knowledge to proficiently incorporate technology into their pedagogical approaches.

The concept of technology integration encompasses the deliberate and strategic integration of technology-related resources and tools within the educational lesson plan process, Caner & Aydin (2021). Within the realm of teacher training programs, the concept of technology integration encompasses the provision of educators with the necessary competencies, understanding, and instructional methodologies to proficiently incorporate technology within their educational environments. Rodrigues (2020) further aligns the concept of technology integration in a teacher training program with the concept of isomorphism. In this situation, the methods used by teachers in integrating technological resources and knowledge in students' learning programs are also applied in teacher training programs.

According to Sadik (2021), technology integration in teacher training programs can be in the form of curriculum alignment. Here, the curriculum instructs educators on how to improve learning outcomes by using technological tools in the classroom. Another method is a professional development workshop. The program provides professional development opportunities for educators in the form of workshops, seminars, or training sessions that focus on the effective use of technology in the classroom, Aşık et al. (2020). Training in the use of various technological resources in the classroom may be provided, including software, websites, Learning Management Systems (LMSs), An interactive whiteboard (IWB), also known as interactive board or smart board, Meta Training Systems (MTSs), and other devices.

Meanwhile, numerous scholars have postulated an array of factors that may exert a discernible influence on the efficacy of technology integration in teacher training programs. Kim, et al. (2013) categorized these factors into two. The first factor deals with environmental readiness and teacher knowledge, while the second factor is centered on teachers' beliefs. In line with the first factor, Kimav & Aydin (2020) maintained that it is vital to establish opportunities for teachers to acquire experience through the process of modelling, practicing, evaluating, and reflecting. The scholarly work further contends that factors such as human, institutional, and technical elements should be taken into account to ensure the success of the technology integration process.

Summarily, the successful incorporation of technology into teacher training programs necessitates meticulous preparation and thoughtful deliberation of various crucial elements. Başar & Şahin (2021) revealed that the key factors that contribute to the successful integration of technology in education encompass the alignment of technological tools with instructional objectives and desired learning results, the accessibility and adequacy of technological facilities, and the inclusion of continuous support and opportunities for professional development. The implementation of an extensive plan for integrating technology in education guarantees that educators are adequately equipped to effectively utilize the complete capabilities of technological tools within their instructional environments.

2.2 Exploring Different Frameworks for Effective Technology Integration in Teacher Training Program

The incorporation of technology into teacher training programs is an essential component in equipping educators with the necessary skills to proficiently utilize technology-based resources and tools in their instructional methods. To facilitate this process, arrays of frameworks have been proposed to provide guidance and structure for endeavors related to the integration of technology.

The SAMR Model: The SAMR Model, an acronym for Substitution, Augmentation, Modification, and Redefinition, is a conceptual framework that delineates the various levels of technology integration in education. This model, proposed by Dr. Ruben Puentedura (2003) provides a systematic approach to understand how technology can be utilized to enhance and transform traditional teaching and learning. Nevertheless, it proffers a comprehensive framework for assessing the degree of technological integration within pedagogical methodologies and further classifies the utilization of technology into four distinct tiers: substitution, augmentation, modification, and redefinition. While substitution entails employing technology as a direct replacement for conventional tools. Also, augmentation involves enhancing traditional practices by incorporating technology. Modification encompasses the substantial redesigning of tasks through the integration of technology. Lastly, redefinition entails the creation of novel possibilities and transformative experiences facilitated by the utilization of technology. Nevertheless, Asik et al. (2020) claimed that the SAMR model catalyzes the educators to advance their pedagogical practices by ascending to elevated tiers of technological integration, thereby fostering more profound and transformative learning experiences. On the other hand, Başar & Şahin (2021) argued that this model is deficient, such that it could not account for differences in classrooms, curricula, and student backgrounds.

The TPACK framework: The Technological, Pedagogical, and Content Knowledge model was proposed by Mishra & Koehler (2009). The framework focuses on the importance of combining the three facets of education: namely technology knowledge (TK), pedagogical knowledge (PK), and content knowledge (CK). However, the TPCK framework advocates for teachers to skillfully combine technological tools with traditional pedagogical strategies and subject-area expertise.

One of the primary concerns regarding the TPACK framework is the absence of a universally acknowledged conceptualization. The initial conceptualization presented by Mishra and Koehler (2009) focuses on the notion of Technological Pedagogical Content Knowledge (TPACK) as teachers' comprehension of the interconnected knowledge domains of technology, pedagogy, and content within particular contexts. The second conceptualization, known as the ICT-TPACK framework developed by Angeli and Valanides (2009), posits that TPACK is comprised of distinct knowledge domains that can be cultivated and assessed independently of each other. The elaborated TPACK model, as conceptualized by Cox and Graham (2009), represents an extension of the initial TPACK framework. Here, TPACK is seen as the understanding of how to effectively integrate subject-specific or topic-specific activities with topic-specific representations by utilizing emerging technologies to enhance student learning.

The Technology Integration Matrix (TIM): Many organizations, including schools and governments, have created Technology Integration Matrices (TIM) that offer a series of stages teachers can follow to enhance their technology integration skills. However, the TIM model developed by the Florida Center for Instructional Technology (Florida Technology Integration Matrix) 2011, is aimed at offering a rubric for evaluating the extent to which teachers and students incorporate technology in their instructional practices, with a focus on transformative teaching that promotes active learning, critical thinking, creativity, and communication. The matrix offers a comprehensive depiction of the various stages of technology integration, commencing with the initial entry level and progressing sequentially towards adoption, adaption, infusion, and ultimately transformation.

Although the Technology Integration Matrix (TIM) offers a commendable framework for evaluating the incorporation of technology in education, Rodrigues, A. L. (2020) posited that the framework might not fully consider the swift progression of technological innovations and nascent tools. In the absence of a deliberate emphasis on professional development, it is plausible that the TIM framework may not sufficiently facilitate the professional development of educators in effectively harnessing technology to augment the pedagogical process.

The RAT (Replacement Amplification Transformation) Model: This model was introduced by Hughes, Thomas, & Scharber (2006). It provides a systematic framework for evaluating educators' competence in

incorporating technology into the classroom situations. Lestarina et al. (2022), argued that that this model primarily emphasizes the outcomes of technology integration rather than the actual process involved or accounts for instructors' prior expertise. In light of this, Heath et al. (2022) claimed that the model can only be used to learn specifics about educators' technology integration with regard to instructional procedures.

3.Research Methodology

3.1. Study Approach

The research utilized a quantitative research design. A quantitative research design gathers and analyses numerical data. However, through statistical analysis, it seeks to uncover connections, patterns, and trends. Based on the objectives and sampling method adopted in this research, the current study employed a descriptive-statistics approach; wherein central tendencies were used in analyzing and interpreting data. Furthermore, a sample of 107 (one hundred and seven) relevant stakeholders in the foreign language educational domain was randomly selected for the study.

3.2. Study population

The participants for this research comprise foreign language teachers and teacher trainers. The sample size for the study was 107 individuals, all of whom came from different parts of the world and had quite different histories and life experiences. Meanwhile, each of these participants provided relevant insight into the integration of technology in the teacher training program.

3.3. The Study Sample

The sample for the research comprised 59 foreign language teachers and 48 foreign language teacher trainers from diverse geographical locations. Nevertheless, the participants were selected through various online channels including social media, professional organizations and online forums that specifically target individuals, especially language teachers with the knowledge of technology integration. On the other hand, these participants were also engaged in an online survey in the form of a Google document. The sample population demonstrated variability in terms of demographic factors, including age, gender, and educational background. The following table presents the relevant demographic information of the research participants.

Table 1: Demographic Variables

Category	Variables	Frequency	Percentage
Gender	Male	42	39.3%
	Female	65	60.7%
Age	20-29 years	5	4.7%
	30-39 years	12	11.2%
	40-49 years	35	32.7%
	50 years above	55	51.4%
Academic Qualification	Bachelor's Degree	9	8.4%
	Master's Degree	41	38.3%
	PhD.	57	53.3%
Proficiency in Multiple Languages	French	15	14.0%
		28	26.2%
	Spanish	64	59.8%
	English		

From the above table, it can be noted that the age of the study participants ranges from 20 to 50 years and above. The gender distribution of participants in the study was balanced, with 60.7% identifying as female and 39.3% identifying as male. The respondents of the study demonstrated competence in a variety of languages, with English being the predominant language at 59.8%, followed by Spanish at 26.2%, and French at 14%. The research conducted in this study followed ethical guidelines during the data collection process. The researchers obtained informed consent from every participant and implemented measures to safeguard the anonymity of the collected data, thereby upholding confidentiality.

3.4. Study Instrument

The research made use of an online questionnaire in the collection of data. The five-point Likert Scale questionnaire was given to each research participant to share his/her varied opinions on the subject matter. Furthermore, the questionnaire comprises two main parts. The first part deals with the relevant information about the individuals who participated in the research. The subsequent section which is subdivided into two aligns with the main objective of this research. The first subpart explores the views of relevant stakeholders in the foreign language sector on technology integration in the foreign language teacher training program. Also, the last subpart investigates the extent to which the incorporation of technological tools within the instructional program of foreign language educators leads to their professional development.

3.5. Data Analysis

The quantitative data collated from the online survey were summarized using descriptive statistics, including frequencies, percentages, means, and standard deviations. However, the statistics will offer a comprehensive analysis of trainees' perspectives, proficiency in technological competencies, and existing methodologies for the integration of technology.

4.Results

This segment encompasses figures and tables that elucidate the frequencies and percentages of the respondents' reactions. The queries have been formulated to address the two fundamental research inquiries that this study seeks to resolve.

4.1). What are the views of relevant stakeholders in the foreign language sector on technology integration in the foreign language teacher training program?

The survey items that are contained in the above research question are listed below:

1. It prepares teachers to embrace new pedagogical methods of effective teaching and learning.
2. Technology integration in teacher training programs promotes transformative learning.
3. Understanding technological tools such as Google Classroom, google Documents, power point among others aids teachers in attaining their learning objectives.
4. The limited availability of technological tools affects the effective integration of technology in teacher training programs.
5. Teachers' attitudes and beliefs influence the effectiveness of technology integration.
6. Resistance to change and the willingness of teachers affect the effective implementation of technology integration.

Table 2. Technology Integration in Foreign Language Teacher Program

Survey Items	SA	A	N	SD	D	Mean	S.D
Q1	27.1%	23.4%	14.0%	18.7%	16.8%	3.11	0.93
Q2	31.8%	16.8%	23.4%	9.3%	18.7%	3.31	1.04
Q3	26.2%	24.3%	14.0%	16.8%	18.7%	3.02	0.97
Q4	29.9%	28.0%	11.2%	16.8%	14.1%	2.60	1.20
Q5	18.7%	28.0%	20.6%	18.7%	14.0%	3.15	0.89
Q6	34.6%	18.7%	9.3%	23.4%	14.0%	3.45	1.12

SA= Strongly Agree, A= Agree, N= Neutral, SD= Strongly Disagree, D= Disagree, Mean, S.D= Standard Deviation

The data from the above table is summarized as:

- About 50% of the research participants affirmed technology integration prepares teachers to embrace new pedagogical methods of effective teaching and learning. While 14% of the popular assumed a neutral stance, 35.3% of the population rejected this assertion. The mean value which is 3.11 shows that there is a moderate agreement among the participants on the effectiveness of technology integration.
- In terms of promoting transformative learning, an average proportion (53.6%) of the participants confirmed the positive impact of technological integration. Subsequently, 23.4% of the respondents remained neutral while 28% rejected this claim. However, the mean value which is 3.31 indicates moderate agreement among the participants.
- Based on the findings of the third item, it is evident that there exists a degree of consensus among the participants (mean value of 3.02) regarding the notion that the comprehension of technological tools facilitates teachers in achieving their educational goals. Nevertheless, a significant proportion of participants maintain a neutral (14%) or dissenting perspective (35.5%). The presence of diverse responses (standard deviation of 0.97) indicates a range of viewpoints regarding the efficacy of comprehending technological tools in attaining educational goals among educators.
- A considerable proportion of participants (57.9%) expressed strong agreement that the restricted accessibility of technological resources impedes the successful incorporation of technology within teacher training programs. Also, 11.2% of the participants maintained. While the remaining participants rejected this claim. However, the mean score of 2.60 suggests weaker agreement.
- While the percentage of those who affirmed that understanding technological tools such as Google Classroom, Google Documents, and PowerPoint among others aid teachers in attaining their learning objectives is not up to 50%, 32.7% of the participants rejected this view. Nevertheless, the mean value of the presented data (3.15) indicates a moderate agreement among the participants.
- There is a significant proportion of participants, specifically 34.6% and 18.7% who agreed and strongly agreed, respectively, that resistance to change and willingness of teachers affect the effective implementation of technology integration. Meanwhile, the calculated mean value, which is 3.45 denotes a discernible degree of consensus, on average, among the participants. The calculated standard deviation of 1.12 indicates a discernible degree of dispersion in the collected data, implying a moderate level of variability in the responses.

4.2. To what extent do the teacher trainers incorporate technological tools within the instructional program of foreign language educators for professional development?

The survey items in the second research question are as follows.

1. Technology integration enables teachers to acquire various skills for professional development.
2. It enables teachers to know how to use educational tools in preparing, assessing, and providing the students with activities for teamwork.
3. It increases the efficiency and productivity of foreign language teachers.
4. A lack of technological competence can hinder teacher trainers in the effective implementation of technology integration.
5. Language assessment tools, online learning platforms and video conferencing tools prepare teachers for professional development.
6. Lack of profound assessment and feedback systems on the understanding and experience of these tools can hinder the professional development of language teachers.

Table 3. Technology Integration for Professional Development

Survey Items	SA	A	N	SD	D	Mean	S.D
Q1	25.4%	27.4%	25.2%	11.7%	10.3%	3.47	0.92
Q2	28.0%	20.6%	19.7%	19.6%	12.1%	3.24	1.05
Q3	26.2%	24.3%	19.6%	14.0%	15.9%	3.35	0.98
Q4	28.0%	29.65	10.7%	12.15%	19.6%	2.75	1.12

Q5	18.7%	26.2%	29.9%	16.8%	8.4%	3.21	1.08
Q6	28.0%	26.8%	15.0%	10.6%	19.6%	3.02	1.15

The above table aligns with the second research question, and is summarized ad under:

- The majority of the research participants (more than 50%) affirmed that technology integration aids in the acquisition of necessary skills by foreign language teachers for their professional development. While 25.2% of the population maintained a neutral stance, the remaining percentage refuted this claim. Also, the mean value which is 3.47 shows that there is a high level of agreement among the participants.
- The subsequent survey items, which are two, three and five provided evidence of the effectiveness of the integration of technological tools in teacher training programs. However, more than 50% of the research participants confirmed this evidence, and a lesser percentage of the population which is not up to 35% did not align with this assertion.
- There is a high proportion of affirmation among the respondents on some limitations of the incorporation of technology in the teacher training program. However, these limitations are evident in the fourth and sixth survey items. While more than 50% of the participants acknowledge these limitations, and less than 35% of the participants did not accept this assertion.

5. Discussion

This research investigated the perspectives of foreign language teacher trainers regarding the incorporation of technology in foreign language teacher training programs, as well as the significance of technological tools in the professional growth of language educators. However, two relevant research questions were developed to guide the attainment of the major goal of this research. These research questions include, 'the views of relevant stakeholders in the foreign language sector on technology integration in the foreign language teacher training program' and 'to what extent do the teacher trainers incorporate technological tools within the instructional program of foreign languages educators for professional development'. The research participants were able to share their views based on the survey items which were developed from the above research questions. Nevertheless, their responses provide insights into multiple facets of the incorporation of technology and its influence on teacher preparation and professional development.

Following the significant results made from the survey items which were contained in the first research question, the findings can be summarized into two, which include the advantages of technology integration and limitations of technology integration. With regard to the advantages of technology integration in foreign language teacher training, the study indicates that this approach enables foreign language teachers to embrace new pedagogical methods of effective teaching and learning which in turn promotes transformative learning. According to Rodrigues (2020) transformative learning, in its essence, denotes a cognitive process wherein individuals experience a profound and significant alteration in their cognitive frameworks, belief systems, and epistemological constructs, thereby leading to a comprehensive and holistic reconfiguration of their perception and comprehension of the intricate fabric of reality. In line with this assertion, Agyei (2013) maintained that technology integration is a very valuable asset that empowers educators to modify and embrace innovative pedagogical methods. Furthermore, the research emphasized the understanding of these technological tools such as Google Classroom, Google Documents, and Power Point among others by foreign language teachers to achieve learning objectives. Specifically, the understanding of these tools is in two ways. Firstly, the teacher trainers acquire knowledge of these technology tools before incorporating them into the training program of foreign language teachers. Subsequently, the foreign language teachers in turn learn about these technologies and how to use them in teaching their students. Furthermore, Kimav & Aydin (2020) claimed that the knowledge of these technologies enables the teacher to know the appropriate tools and time to implement the integration.

Regarding the limitation of technology integration, the research highlighted the unavailability of appropriate technology, teachers' attitudes and beliefs, resistance to change and unwillingness on the part of the teachers, as the factors that hinder effective integration of technology in teacher training programs. According to Sharma and Barrett (2007), teachers may harbor unfavorable attitudes towards the utilization of technology due to their past negative encounters, limited understanding, or apprehension towards technological tools. On the other hand, Liang (2021) believed that resistance to change and unwillingness among teachers can be

traced to a lack of training. The scholarly work claimed that some educators don't make use of school-supplied technology not out of timidity but because "they are not convinced of its usefulness" for the kids who would be utilizing it. Regarding this, Agyei (2013) suggested that language teachers should be persuaded by school administrators on the efficacy of the use of technological tools.

Concerning the second research inquiry, the findings indicated that a significant proportion of respondents concurred with the notion that the incorporation of technology within teacher training programs facilitates professional development of foreign language teachers. This implies that technology integration enables teachers to acquire the necessary skills for professional development. Kimav & Aydin (2020) believe that the acquisition of these skills enables teachers to know how to use educational tools in preparing, assessing, and providing students with activities for teamwork and also increase their efficiency and productivity. Another limitation of technology integration unveiled in this second segment of the research is the lack of a profound assessment and feedback system on the understanding and experience of these tools by language teachers. The importance of comprehensive evaluation and constructive criticism cannot be overstated for educators to ascertain their competence in utilizing technology and to pinpoint specific domains necessitating enhancement. Meanwhile, Caner and Aydin (2021) suggested that language teachers' programs should incorporate comprehensive training programs that encompass not only the introduction of technology tools but also the provision of practical experience and guidance on their proficient integration. Educators must be afforded the chance to engage in practical exercises utilizing various instructional tools within simulated or authentic classroom settings, while also receiving constructive feedback from seasoned mentors or trainers.

Summarily, language educators should have access to ongoing professional development opportunities to continually enhance their knowledge and skills in utilizing technology tools. These opportunities encompass various activities such as workshops, seminars, conferences, or online courses, which specifically emphasize the integration of technology in language teaching. Frequent updates regarding emerging technologies and optimal methodologies can assist educators in remaining well-informed and adjusting their instructional approaches accordingly.

6. Conclusion

The concept of technology integration encompasses the deliberate and strategic integration of technology-related resources and tools within the educational lesson plan process. Furthermore, the inclusion of technology integration in language teacher programs is a result of the constant challenges that educators encounter when attempting to integrate technology into their teaching practices. Through the utilization of technological tools, educators can offer genuine and immersive language experiences, tailored and adaptable learning experiences and collaborative connections. Nevertheless, the absence of a comprehensive evaluation and feedback mechanism about educators' comprehension and proficiency in utilizing these resources may impede their professional growth. As such, it is imperative to establish comprehensive training programs, provide ongoing professional development opportunities, foster peer collaboration, and create communities of practice. Furthermore, it is also crucial to establish feedback and evaluation mechanisms to evaluate the competence of educators in utilizing technology and provide guidance for their professional development. Promoting and supporting research endeavors and scholarly pursuits can effectively augment individuals' expertise and make valuable contributions to their respective fields.

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