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Enhancing Teaching through ICT Integration: Insights from Moroccan University English Language Professors

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Abstract: This article explores the positive impact of integrating Information and Communication Technology (ICT) in teaching, leading to improved teacher performance and increased student engagement. The study focuses on suggestions provided by instructors to enhance the use of technology in education. Data is collected through a questionnaire administered to Moroccan university English language teachers from Moulay Ismail University Faculty of Arts and Humanities - Meknes, and Sidi Mohamed Ben Abdellah Dhar - El Mahraz - Fes, serving as a case study. The Statistical Package for Social Sciences (SPSS) version 19 is employed for data analysis. The findings emphasize the importance of quality training, accessible ICT resources, and effective school policies as key factors in successfully integrating technology into education.

Keywords: Integration, Practice, Technology, Training, University.

1. INTRODUCTION

The integration of ICT not only enhances language skills but also provides students with a real-world context for practicing their English. This dynamic approach allows learners to apply their language knowledge and skills in practical scenarios, contributing to a more comprehensive language learning experience (Rahim and Chandran, 2021). Furthermore, technology's role in education has proven indispensable, particularly during times of crisis. The flexibility afforded by technology enables students to continue their learning journey irrespective of their location, schedule, or means. This adaptability, as highlighted by Bokayev et al. (2021), empowers students to learn anytime, anywhere, and at their own pace. Various modes of engagement, including text materials, television broadcasts, and online interactions, collectively contribute to skill development, heightened motivation, and the expansion of knowledge and imagination. Clearly, the integration of information technology into education is expected to improve learning and teaching processes in various ways. One of the fundamental reasons for incorporating ICT in education is to prepare the new generation for a workforce where ICT is increasingly prevalent. The main aim of this study is to present the recommendations put forward by university English language teachers to encourage the use of ICT in teaching. The research endeavors to address the following research question:

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RQ : What are Moroccan university English language teachers perceived suggestions for ways of improving the use of ICT for the enhancement of efficient teaching situations?

2. REVIEW OF THE RELATED LITERATURE

In recent years, there have been substantial technological advancements that have had a profound impact on various facets of our daily lives, as noted by Sungur and Ateş (2023). This evolution in technology extends to the realm of education, where the integration of innovative tools has become crucial for enhancing learning experiences. Emphasizing the vital role of teacher attitudes and innovative tools, it becomes evident that their collaboration is integral to the successful implementation of technology-enhanced learning experiences (Kianinezhad, 2023). Furthermore, the impact of technology on education is reflected in its ability to enhance the quality and quantity of teaching and learning. According to Choi and Joo (2021), technology contributes by providing dynamic, interactive, and engaging content. This, in turn, fosters a proactive teaching-learning environment, ultimately improving the overall educational experience. The interplay between technology, teacher attitudes, and innovative tools emerges as a driving force in reshaping and elevating the landscape of education in the contemporary era.

However, the integration of technology in education has proven to be a powerful tool for enhancing the efficiency and effectiveness of teaching (Taghizadeh and Basirat, 2022). Over the past two decades, "online programs have been rapidly growing globally and universities have been adopting learning-management systems to offer flexible, and online classes" (Son, 2019, p. 35). Among these advancements, it is crucial to recognize the pivotal role played by both teacher attitudes and innovative tools in the successful execution of technology-enhanced learning experiences (Koh et al., 2022). As online environments continue to evolve, acknowledging and addressing the concerns of instructors becomes essential for fostering a positive and effective transition to online structures in education. The incorporation of information and communication technology (ICT) has the potential to not only inspire but also motivate students in their English language learning pursuits (Tran, 2020). This is particularly relevant in the context of the unexpected shift to online formats by universities following the suspension of in-person classes. Instructors found themselves grappling with unforeseen changes and began exploring innovative strategies to establish effective connections with students and deliver high-quality instruction in this novel educational landscape (Nartiningrum and Nugroho, 2021). However, the integration of ICT in English language teaching poses significant challenges for EFL teachers and educators, as highlighted by Anas and Musdariah (2018). The hurdles encompass issues such as inadequate ICT facilities and a deficiency in ICT training. Overcoming these obstacles becomes imperative to fully harness the potential benefits of technology in language education.

In order to successfully implement technology tools in education, various researchers have put forth different suggestions. Moyle (2006) proposes that a transformational leadership style can be beneficial in developing effective ICT implementation. This leadership style involves several key elements of school leadership, including:

1. Develop a strategic plan that encompasses a clear vision, objectives, and well-defined strategies for technology integration.
2. Craft a vision statement that not only includes technology but also incorporates common staff data to support this vision.
3. Cultivate a school culture that fosters risk-taking, inquiry, and reflective practices in teaching, encouraging educators to explore innovative ways of using technology.

4. Adopt a whole-school approach to technology integration, seamlessly integrating technology into various school processes, making it an integral and natural part of teaching and learning.
5. Ensure the availability of suitable infrastructure, budget, and resources to support the effective use of technology in the school, providing teachers and students with the necessary tools and support for successful implementation.

Undoubtedly, an effective ICT policy is essential and indispensable. The importance of such a policy becomes evident in its impact on the integration and use of technology in teaching and learning (Vanderlinde et al., 2012). A well-crafted ICT policy provides guidance and direction for the proper utilization of technology tools and resources in educational settings, ensuring a cohesive and effective implementation. Moreover, instructors' attitudes towards technology play a critical role in its successful integration into education. Teachers who maintain a positive attitude towards technology are more likely to embrace and implement it effectively (Kreijns et al., 2013).

3. METHODOLOGY

The main purpose of the methodology is to serve as a roadmap for conducting the analysis. This section is dedicated to explaining the research methodology employed in this investigation.

3.1. Participants and setting

This study focuses on Moroccan university English language teachers, specifically those from Moulay Ismail University Faculty of Arts and Humanities in Meknes and Sidi Mohamed Ben Abdellah Dhar – El Mahraz in Fes. The research involves 46 participants who responded to a questionnaire as the primary data collection method. The questionnaire aims to gain insights into the perceived suggestions for the successful integration of technology (ICT) in education. The choice of these universities is based on convenience in terms of location for the researcher, ensuring easier access and survey delivery.

3.2. Instrument

In this study, the researcher uses a questionnaire as the primary data collection method, highlighting its widespread use and effectiveness in survey-based research. The questionnaire employs a five-point Likert Scale, ranging from 'strongly agree' to 'strongly disagree,' and is structured into two parts. The first section collects demographic information about teachers, including gender, teaching experience, and computer usage duration. The second part aims to gain insights from university English language teachers regarding suggestions for enhancing the use of information and communication technology (ICT) in teaching. Additionally, the questionnaire features three open-ended questions, providing respondents with the opportunity to contribute additional information.

3.3. Data Collection Procedure

The researcher conducted a pilot study with five volunteer university English language teachers from the target population to assess the instrument's suitability before actual data collection. The majority of participants were males (60%, n=3), while females represented 40% (n=2). During the pilot, respondents completed the questionnaire, offering feedback on unclear or inappropriate wording; some recommended using "Information and Communication Technology" instead of the abbreviation ICT. Following this input, the questionnaire underwent modifications. Subsequently, 49 questionnaires were distributed. The collection resulted in a 93.8% return rate. One incomplete questionnaire was excluded, and two participants declined to participate, yielding a total of 46 respondents. After collecting the questionnaires, participants were thanked for their participation. The process of establishing the content validity of the questionnaire involved a rigorous validation procedure, marked by

thorough consultations with experts in the field of educational technology. The engagement with these specialists ensured that the questionnaire effectively captured relevant and comprehensive aspects related to the study's focus. Besides, the questionnaire exhibited strong reliability, indicating a high level of internal consistency in its responses. This meticulous approach to validation instills confidence in the questionnaire's suitability for the present study, underscoring its capability to yield reliable and accurate data for analysis.

3.4. Data Analysis:

To address the research question, this study employed the Statistical Package for Social Sciences (SPSS) version 19 for data analysis, reflecting a quantitative research design that aligns with the nature of the instrument and collected data. The questionnaire's specific objective was to gather suggestions for enhancing the integration of ICT to improve teaching efficiency in Moroccan university English departments.

4. RESULTS.

4.1. Demographic characteristics of the respondents

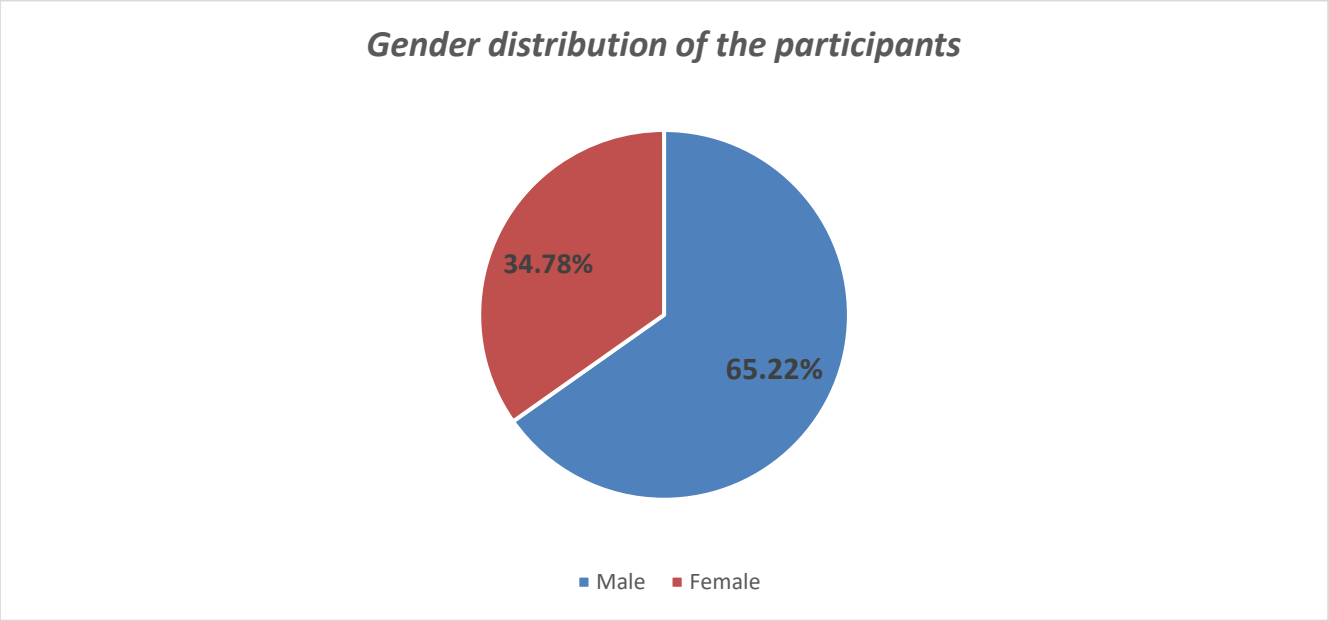

Figure 1. *Distribution of Participants by Gender***.**

Figure 1 presents the findings, indicating that 65.22% of the teachers were male, while 34.78% were female.

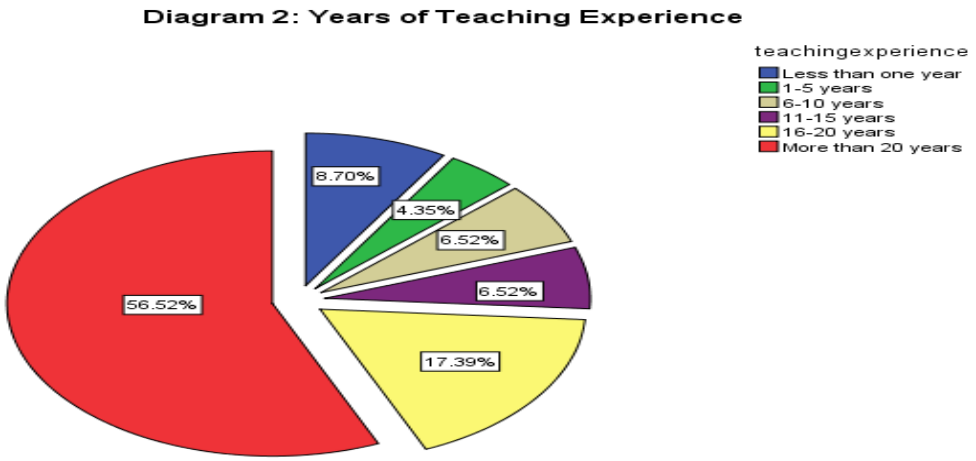

Figure 2. *Distribution of Participants by Years of Teaching Experience.*

The data in Figure 2 clearly shows that a significant majority of the participants, specifically 86.9%, have more than five years of teaching experience. Conversely, only a small proportion, accounting for 13.1% of the respondents, reported having five years or less of teaching experience.

4.2. The findings related to the research question.

Descriptive statistics, such as frequencies and percentages, are computed to provide a comprehensive overview of the results obtained. These statistics serve to summarize and describe the data in a meaningful way.The data collected through the survey questionnaire is then utilized to address the following research question:

RQ : What are Moroccan university English language teachers perceived suggestions for ways of improving the use of ICT for the enhancement of efficient teaching situations?

The research question is assessed through thirteen items in the questionnaire. The participants were requested to provide their suggestions and opinions by rating each item on a scale ranging from 1 to 5, where: 1 = Strongly disagree 2 = Disagree 3 = Undecided 4 = Agree 5 = Strongly agree. By using this scale, the researchers can gauge the participants' attitudes and perceptions regarding the effective integration of ICT in teaching practices. The responses to these items will help to uncover valuable insights into the participants' views and preferences for enhancing the use of technology in education.

Table. 1 *Response frequencies for availability of good quality training*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	3	6.5	6.5	6.5
	Agree	12	26.1	26.1	32.6
	Strongly agree	31	67.4	67.4	100.0
	Total	46	100.0	100.0	

The findings from the table indicate a clear trend, with the majority of respondents, amounting to 93.5%, expressing agreement or strong agreement with the notion that the availability of good quality training can foster a successful learning environment when using ICT. Conversely, only a small proportion, 6.5% of the participants, disagreed with the statement. This high level of agreement emphasizes the significance of providing adequate

and effective training to educators for successfully integrating ICT into the learning process. The positive response from the vast majority of participants underscores the importance of professional development and support in ensuring that technology is optimally utilized to enhance the educational experience.

Table. 2 *Response frequencies for organizing conferences where teachers can share ideas and experience*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	2	4.3	4.3	4.3
	Agree	20	43.5	43.5	47.8
	Strongly agree	24	52.2	52.2	100.0
	Total	46	100.0	100.0	

The results reveal that an overwhelming majority of participant teachers, specifically 95.7%, advocate for organizing conferences where educators can share ideas and experiences, considering it a valuable means of cultivating a conducive learning environment when using ICT. In contrast, only a very small percentage, 4.3% of the respondents, disagreed with the idea. The high level of agreement among participants underscores the importance of fostering collaboration and knowledge exchange among teachers through conferences.

Table. 3 *Response frequencies for encouraging teachers to exchange materials with their colleagues*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	2	4.3	4.3	4.3
	Agree	20	43.5	43.5	47.8
	Strongly agree	24	52.2	52.2	100.0
	Total	46	100.0	100.0	

Upon closer examination of the results, it is evident that a substantial number of teachers, 44 in total, expressed agreement or strong agreement, while only 2 instructors chose to disagree. This discrepancy highlights a significant majority in favor of the idea that encouraging teachers to exchange materials with their colleagues can lead to a favorable learning environment with the use of ICT.The overwhelming support for this proposition indicates that teachers recognize the value of sharing resources and materials amongst themselves. Such collaboration can enhance the effectiveness of ICT integration in the learning process, allowing educators to access diverse perspectives and innovative approaches to teaching with technology. The strong consensus in favor of this practice suggests that fostering a culture of material exchange among teachers is likely to contribute positively to the overall learning experience with the utilization of ICT.

Table. 4 *Response frequencies for the idea that teachers should not be afraid of using ICT*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	1	2.2	2.2	2.2
	Agree	19	41.3	41.3	43.5
	Strongly agree	26	56.5	56.5	100.0
	Total	46	100.0	100.0	

Table 4 clearly illustrates the participants' attitudes towards the statement proposing that to foster a successful learning environment with the use of ICT, teachers should not be

afraid of technology. The majority of respondents, comprising 56.5%, expressed strong agreement with the statement, and an additional 41.3% agreed with it. Conversely, only a very small percentage, 2.2% of the participants, strongly disagreed with the statement. The substantial agreement among the participants suggests that most teachers recognize the importance of embracing technology and overcoming any apprehensions they may have.

Table.5 *Response frequencies for the idea that classroom design should be appropriate to use the ICT*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	15	32.6	32.6	32.6
	Strongly agree	31	67.4	67.4	100.0
	Total	46	100.0	100.0	

Regarding the statement, "The classroom design should be appropriate to use ICT," the responses from the participants show a clear trend. The majority of respondents, 67.4%, expressed agreement with the statement, indicating that they believe classroom design plays a crucial role in effectively using ICT. Additionally, a significant proportion, 32.6% of the participants, strongly agreed with the statement, further reinforcing the importance of an appropriate classroom layout to facilitate the integration of technology. This high level of agreement suggests that teachers recognize the significance of designing classrooms in a way that accommodates and supports the use of ICT tools. An appropriate layout can optimize the implementation of technology, making it easier for teachers and students to engage with digital resources and facilitate a more seamless learning experience. The positive response from the majority of participants highlights the impact of classroom design in creating an environment conducive to effective ICT integration in education.

Table.6 *Response frequencies for the idea that each classroom should be equipped with at least one computer*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	14	30.4	30.4	30.4
	Strongly agree	32	69.6	69.6	100.0
	Total	46	100.0	100.0	

The results clearly indicate a unanimous consensus among all the participants, with 69.60% strongly agreeing and 30.40% agreeing with the statement that each classroom should be equipped with at least one computer if teachers intend to integrate ICT tools in their classes. The overwhelming agreement among the respondents emphasizes the critical role of computers as essential tools for incorporating technology into the teaching process. Having at least one computer in every classroom provides teachers with the necessary resources to seamlessly integrate technology into their lessons, enhancing the learning experience for students.

Table. 7 *Response frequencies for the idea that each classroom should be equipped with the Internet*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	1	2.2	2.2	2.2
	Agree	12	26.1	26.1	28.3
	Strongly agree	33	71.7	71.7	100.0
	Total	46	100.0	100.0	

The data in Table 7 clearly demonstrates an overwhelming agreement among the respondents, with 97.8% indicating that each classroom should be equipped with the Internet for the successful implementation of ICT in classes. This high percentage of agreement highlights the fundamental role of the Internet in effectively integrating technology into the teaching and learning process. On the other hand, only a very small minority, 2.2% of the participants, expressed disagreement with the statement. This low level of disagreement further reinforces the widely accepted view that providing Internet access in classrooms is essential for leveraging the full potential of ICT tools and resources.

The near-unanimous agreement among the participants underscores the critical importance of having Internet connectivity in classrooms as a foundational element for successful ICT integration. The positive response from the majority of respondents indicates a shared understanding of the transformative impact that Internet access can have on teaching practices and learning outcomes.

Table. 8 *Response frequencies for the idea that the number of students should be decreased*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	1	2.2	2.2	2.2
	Disagree	2	4.3	4.3	6.5
	Agree	11	23.9	23.9	30.4
	Strongly agree	32	69.6	69.6	100.0
	Total	46	100.0	100.0	

The results clearly demonstrate that a significant majority of participant teachers, accounting for 93.5%, propose that the number of students should be decreased to effectively utilize ICT in their lessons. This substantial percentage of agreement emphasizes the belief among teachers that smaller class sizes are beneficial for incorporating technology into their teaching practices. On the other hand, a minority of participants, 6.5%, indicated their disagreement with the statement. Despite this small percentage of disagreement, the overwhelming consensus in favor of reducing class sizes indicates that teachers recognize the advantages of having fewer students in the classroom when using ICT. Smaller class sizes can enhance personalized instruction, increase student engagement, and allow for more individualized attention, all of which contribute to a more successful integration of technology in the learning process. Overall, the findings support the idea that decreasing class sizes is perceived as conducive to the effective use of ICT in teaching and learning.

Table. 9 *Response frequencies for the idea that teachers who make use of ICT in their lessons successfully should be given a certificate or financial incentive*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	5	10.9	10.9	10.9
	Disagree	16	34.8	34.8	45.7
	Agree	11	23.9	23.9	69.6
	Strongly agree	14	30.4	30.4	100.0
	Total	46	100.0	100.0	

The data in Table 9 shows a slight diversity in teachers' responses regarding the statement suggesting that successful use of ICT by teachers should be rewarded with a certificate or financial incentive. Approximately 54.3% of the participants agreed with the statement, indicating that they believe such recognition or incentive could encourage instructors to integrate ICT in their lessons effectively. On the other hand, a significant portion of respondents, 45.7%, disagreed with the statement. This disagreement suggests that not all

teachers perceive certificates or financial incentives as a motivating factor for incorporating technology in their teaching practices. The mixed responses from the participants indicate that while some teachers may find the idea of recognition or financial rewards encouraging, others may not consider it a significant motivating factor for using ICT in their lessons.

Table. 10 *Response frequencies of faculty policy*

	Strongly disagree		Disagree		Undecided		Agree		Strongly agree	
	F	%	F	%	F	%	F	%	F	%
Encourage collaboration and sharing between faculty members	0	0	1	2.2	0	0	16	34.8	29	63
Encourage faculty to assess the impact of technologies on learning	0	0	1	2.2	0	0	18	39.1	27	58.7
Encourage faculty discussions about teaching, learning and technology	0	0	2	4.3	0	0	13	28.3	31	67.4

The results presented in Table 10 reveal a strong consensus among the participants regarding the importance of faculty collaboration and discussion in promoting a successful learning environment with the use of ICT. For the first item, nearly all the respondents, 97.8%, expressed support for the statement suggesting that encouraging collaboration and sharing among faculty members can foster a positive learning milieu with the use of ICT. Only a small proportion, 2.2% of the participants, disagreed with this statement. Similarly, for the second item, 97.8% of the participant teachers believe that encouraging faculty to assess the impact of technology on learning is a crucial step in inspiring other teachers to use ICT in their lessons. This high level of agreement highlights the recognition among educators that evaluating the effectiveness of technology integration can serve as a powerful motivator for its adoption. Additionally, for the third item, 95.7% of the participants think that encouraging faculty discussions about technology is a key factor in cultivating a successful learning environment with the use of ICT. This indicates that teachers recognize the value of open dialogues and exchange of ideas regarding technology, which can lead to innovative approaches and improved practices in the classroom.

The overwhelming support for these statements emphasizes the importance of fostering a collaborative and supportive culture among faculty members to effectively integrate technology into the teaching and learning process. The positive responses from the participants underscore the significance of involving faculty in discussions, assessments, and collaborations related to technology integration, as this can contribute to a more successful and meaningful use of ICT in education.

5. DISCUSSION

The results of the present study reveal a range of valuable suggestions put forward by the participants to improve and encourage the use of ICT tools in teaching. Notably, the overwhelming majority of the participants, highlight the significance of availability of good quality training as a critical element for teachers' successful integration of technology in their classrooms. Additionally, several participants propose the organization of conferences as a means to encourage a successful learning environment with the use of ICT. Such conferences can serve as platforms for instructors to share ideas and experiences, fostering collaboration and knowledge exchange among educators.

Moreover, the participants, suggest the importance of inspiring teachers to exchange materials with their colleagues as a means to effectively integrate technology in their teaching practices. This practice can enhance resource-sharing and promote innovative approaches to teaching with technology. Furthermore, the participant teachers recommend that teachers should not be afraid of utilizing ICT in their classes, which is crucial for successful technology integration. Overcoming fear and building teachers' confidence in using technology aligns with the participants' belief in creating a conducive learning environment with the use of ICT.

In conclusion, the study's findings highlight the importance of providing adequate training and professional development for teachers to effectively integrate technology in their classrooms. It emphasizes the significance of collaborative efforts, resource-sharing, and teacher confidence in technology use. These recommendations are in line with the objective of preparing students for a technological society and ensuring they receive quality education facilitated by skilled and confident teachers. The findings of the research highlight the importance of not only providing training but also ensuring the availability of adequate ICT resources for successful technology integration in teaching.

The primary objective of teachers worldwide is to support students' learning while inspiring them to become successful contributors to society in the future. The findings of this study indicate that teachers face higher demands due to changes in students' needs and advancements in technologies. To meet these demands, teachers must receive good quality training in using technology tools in their lessons. Additionally, they are advised to adapt their instructional activities to cater to the individual needs of their learners. This implies a necessity for educators to have a deeper and more comprehensive understanding of the subjects they teach. The study highlights the variations in teachers' opinions regarding their suggestions for the successful integration of ICT tools in education. From the findings, it can be inferred that teachers who prioritize understanding how their students learn, rather than focusing solely on their teaching methods, are more likely to effectively use technology tools in their classrooms. This aligns with the idea that student-centered teaching approaches can be enhanced by the thoughtful use of technology to support and enhance learning experiences.

Conversely, the results also reveal that teachers who are hesitant or afraid of using technology tools tend to avoid their integration in the classroom. These teachers may lack the confidence or skills to handle situations where technology instruments may not function as expected during a lesson. This fear of technical challenges can discourage them from embracing technology in their teaching practices. Furthermore, the study shows that large class size can be a significant hindrance to the integration of ICT in education. Teachers often find it challenging to effectively utilize technology tools in classrooms with a large number of students. The crowded setting may limit their ability to implement interactive and technology-based teaching methods, leading to a perception that technology does not add substantial value in such contexts.

6. CONCLUSION, IMPLICATIONS AND RECOMMENDATIONS FOR FURTHER RESEARCH

The implementation of information and communication technology in education is a complex process that demands specific skills and competencies from instructors. Based on the statistical analysis of the survey data, the study draws the following conclusions:

1. Availability of Training: Teachers recommend the provision of comprehensive training programs to equip educators with the necessary skills and knowledge to effectively use technology in their teaching practices. Proper training empowers teachers to confidently integrate ICT tools into their lessons and enhance the learning experience for students.
2. Availability of ICT Resources: Access to adequate ICT resources, such as computers, internet connectivity, and relevant software, is deemed essential by teachers. Having the necessary technological infrastructure ensures smooth and efficient technology integration in classrooms.
3. Effective School Policy: Teachers stress the need for supportive and well-designed school policies that promote and facilitate technology integration. Effective policies should address various aspects, including resource allocation, professional development opportunities, and incentives for teachers who embrace innovative technology-based teaching methods.

By considering and implementing these suggestions, Moroccan universities can create an enabling environment for successful ICT integration in teaching. Empowering teachers through training and providing them with the necessary resources and supportive policies will contribute to enhanced educational experiences and prepare students for the challenges of a technologically advanced world.

6.1 IMPLICATIONS

Based on the results of this study, several implications related to technology implementation in Moroccan higher education English departments can be summarized as follows:

• The research findings should serve as inspiration for teachers to actively participate in technology-related training. This will enable them to understand when and how to effectively use technology in their classrooms, catering to differentiated learning styles.

• To successfully integrate technology, teachers need to acquire technological knowledge and competence. Schools should prioritize providing adequate training to educators to foster their understanding of the significance of ICT in education, preparing learners for the demands of the 21st century.

• The research aims to boost teachers' technological confidence, ensuring they feel comfortable and capable in utilizing technology in their teaching practices.

• The study identifies a lack of materials as a barrier to technology integration in the classroom. Thus, it is crucial to equip classrooms with the necessary technological tools and resources to facilitate seamless technology implementation.

• Large class sizes can hinder opportunities for students to ask questions and engage with technology effectively. Addressing the challenges posed by large classes is vital to create a conducive environment for technology-enhanced learning.

6.2 RECOMMENDATIONS FOR FURTHER RESEARCH

Drawing from the study's findings and implications, we can highlight several suggestions regarding the integration of technology in English departments within Moroccan higher education:

- Conduct longitudinal studies to assess the long-term impact of technology training on teachers' practices and students' learning outcomes.
- Investigate personalized technology training programs tailored to different teaching styles, ensuring that educators are equipped with tools that align with their preferred approaches to cater to diverse student needs.
- Extend research to explore the specific challenges and benefits of technology integration in different academic disciplines within higher education, considering subject-specific needs and requirements.
- Investigate strategies aimed at boosting teachers' confidence in utilizing technology, addressing psychological barriers and promoting a positive mindset towards technology adoption.
- Research ways to create educational materials and resources that support technology integration in classrooms, considering the specific needs and contexts of Moroccan higher education English departments.

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