EFL Teachers' Beliefs about Technology Integration into English Language Classrooms: A Case Study

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Abstract: In this era of information and communication technology boom, applying this advancement to all areas is a matter of course. This is a general tendency for technology integration into foreign language teaching at universities and schools in Vietnam. Following this trend, this paper reports the results of a study investigating teachers' beliefs about the effectiveness of technology application in English teaching at the university level. Two research instruments were a questionnaire and an interview. The results indicate that all participating teachers realized the significance and the trend of implementing technology into education and the advantages it brings to foreign language teaching and learning processes. These teachers, nonetheless, confessed their shortage of technical knowledge and skills and were satisfied with the sufficiency of technology equipment in the classrooms. Interestingly, despite these concerns, these teachers are still willing to apply technologies to their future teaching and strengthen their technology skills by self-learning and hopefully through professional training courses.

Keywords: teachers' beliefs, technology, integration, application, language classrooms

Introduction

The integration of technology into the contexts of language teaching and learning has been somewhat successful. Because instructors have such a huge capacity to impart beliefs to students, Yong and Cziko (2001) contend that teachers are a crucial component for successful technology integration into classrooms. Therefore, it is crucial to comprehend teachers' ideas, including prejudices and stereotypes regarding technology and technology use, as well as the connection between these beliefs and the practices they use in the classroom. On the other hand, teacher attitudes and beliefs are also significant variables in education, which is relevant to this study. The effectiveness of a teacher is significantly impacted by his or her stance on the pedagogy, method,

strategy, or instructional material that is used in the classroom (Başal, 2015; Biletska et al., 2021; Ding et al., 2019; Galvis, 2012; Hol & Aydn, 2020; Liu et al., 2017). As stated above, the current study intends to ascertain preservice EFL instructors' perceptions of and attitudes toward technology integration. As such, in line with this idea of technology integration.

This study explores the possible advantages and difficulties of utilizing technology in English learning. Studies on the advantages and challenges of incorporating technology in education and learning have been done, but there hasn't been much attention paid to how technology is used to learn English, particularly in Vietnam. The study investigates fresh perspectives on the advantages that users may obtain from utilizing technology in language acquisition. As a result, research must concentrate on how to integrate technology into English language instruction, particularly in Vietnam, and which obstacles must be overcome.

Theoretical Background

Effects of Using Technology in Language Classrooms

Teachers are urged to adopt a variety of cutting-edge teaching techniques that have recently been launched in foreign language programs. One generalization regarding the impact of technology integration in language learning environments is that it alters how children learn. As covered in the next sections, these changes take place in a variety of learning-related areas.

Involvement

One of technology's most notable benefits is that it fosters students' greater engagement, interest, and interest in the subject matter (Hill & Hannafin, 2001). In other words, learners' motivation increases since fun and games are introduced into the classroom. Creating well-structured tasks by teachers, such as problem-based projects, requires students to participate in worthwhile activities like searching the Internet for research for reports or practicing for presentation assignments. As a result, teachers successfully increase their pupils' motivation (Lin, 2009). Drayton, Falk, Stroud, Hobbs, and Hammerman (2010) contend that using systems like the Internet and email encourages students to learn with pleasure and act responsibly.

A Paradigm Shift in Teaching and Learning

An improvement in the learning environment that puts the emphasis on the student rather than the teacher is largely due to the integration of information technology in education. This tendency is the outcome of computers and other portable technology taking the role of traditional classrooms and learning environments as tools for learning and teaching. In a static environment where the instructor is the center of attention and the only source of knowledge, students no longer serve as passive information consumers. Instead, the classroom is transformed into a place where students are empowered to take ownership of their own learning through

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engaging activities. In other words, a more hopeful alternative is that the teacher takes on a different role - that of a facilitator who guides pupils toward an attainable objective as opposed to the traditional instructor.

An Evaluation Changes

Thanks to the use of technology in the classroom, students can learn in a way that improves their ability for critical thought. Students who are independent in their learning and in monitoring and evaluating their own progress are more likely to complete tasks effectively. Students become more conscious of the quality of their work and are better prepared to face criticism from classmates and teachers because their work will be seen by many people. In a meaningful sense, technology also gives teachers the opportunity to assess pupils' performance with objectivity and accuracy. When determining the outcomes, the opinions of the teacher, the students, and their classmates are all taken into account. The emphasis on student autonomy in 21st-century education is increased by this evaluation method.

Collaborative and Communicative Learning Enrichment

The promotion of communication and collaboration between instructors and learners as well as among students both within and outside of the classroom is another advantageous aspect of using technology into language classes. In fact, new technology has made it possible for students to access a wide range of resources, including images and videos, as well as an infinite number of Internet users, including people outside of their school, like their peers from different institutions, subject matter experts, and members of interest groups. In other words, technology enables students to connect to the outside world, and as a result, their learning activities will involve a sizable number of people. Students' use of software and hardware to create and share items online serves as one example of this increased contact. These activities give students the ability to consolidate previously acquired knowledge and skills, apply these skills to those around them, and study, evaluate, and critique together. This improves students' sense of worth, self-assurance, engagement in group projects, and meaningful use of technology.

Language Proficiency Enhancement

All of the benefits of integrating technology into language courses that have been discussed thus far ultimately focus on the academic success of the students. Researchers claimed that when children are engaged in technologically advanced classrooms, their academic performance can be seen to improve in all subject areas (Means and Olson, 1997). Technology has certainly contributed to this advancement by altering pupils' attitudes toward studying and enhancing their self-confidence. Technology also encourages the social side of actual language use and empowers students to direct their own language learning process, which is uncommon in traditional classroom settings, by placing them in more real-world communication scenarios. In this approach, technology fully supports students' language learning and acquisition, and when used properly, it enhances language learners' academic performance. In a similar vein, Khan (2011) asserted that integrating technology

into language teaching and learning improves students' overall academic performance and language competency.

Teachers' beliefs

Definition

The meaning of the construct "teachers' beliefs" has generated debate among researchers. Creswell (2009), who is credited with providing one of the most comprehensive theoretical synthesises of teachers' attitudes, examined definitions from 20 different academics but was unable to come to a consensus.

Academics have tried to conceptualize instructors' thoughts despite the lack of agreement on a definition by examining common traits observed in various empirical studies. There are four distinguishable qualities of beliefs, as per Kvale's identification from the year 2000: "existential presumption," "alternativity," "affective and evaluative loading," and "episodic structure." First, there is a strong relationship between teachers' beliefs and what is referred to as "existential presumption," which is a subjective judgment about a learner's aptitude, maturity, etc. Thus, teachers' opinions about the existence of such entities are shown in relation to their pupils' academic accomplishments. Second, beliefs frequently contain a vision of an ideal or other state that contrasts with the current situation. Here, "alternativity" alludes to that. In this sense, beliefs serve to create objectives, carry out tasks, and arrange important knowledge and information. Thirdly, beliefs can be comprehended through subjective feelings, moods, and preferences-based assessments thanks to their "affective and evaluative components," or AECs. Last but not least, "episodic structure" refers to the finding that ideas are usually connected to specific, vividly recalled events. Another researcher, Creswell (2009), provided a broader list of sixteen "fundamental assumptions that may reasonably be made when initiating a study." Creswell and Kvale are different in a few ways, including the following: a) Beliefs have a big influence on conduct since they are affective and judgemental in character. B) Beliefs rarely change as people age, and C) beliefs act as lenses through which new information or experiences are interpreted or processed. Williams and Burden (1997) state that beliefs have a greater influence on teachers' pre-class preparation, decisions, and overall classroom practice than knowledge because they "tend to be linguistically bound, to be formed promptly in life, and to be resistant to change" (p. 56).

From the discussion above, it can be concluded that teachers' beliefs influence their decisions, evaluations, and perspectives on teaching and learning. As a result, knowing what assumptions underlie teachers' decisions to integrate technology-based activities in their courses will come from analyzing their ideas about how technology is applied in the classroom.

Teachers' Beliefs and Integration of Technology

Lately, technology implementation is an essential part of successful teaching. However, the successful integration of educational technologies depends largely on the attitudes of educators, who eventually determine

how they are used in the classroom. In fact, "although the conditions for successful technology integration finally appear to be in place, including ready access to technology, increased training for teachers, and a favourable policy environment, high-level technology use is still surprisingly low" (Ertmer, 2005, p. 2). This is partly because the fact that most foreign language teachers lack knowledge of how to use technology effectively in education. Nevertheless, Hill and Hannafin (2001) found that despite a proper training shortage, English language teachers were willing to implement technology in their classrooms and some of them utilized some types of technology to promote students' linguistic skills. In a quantitative study with one hundred Arab teachers, Göktürk (2012) found that teachers incorporated various technologies in their class activities to enable students' learning.

Corresponding to these ideas about teachers' beliefs and the relationship between teachers' beliefs and their technology integration, this research focused on examining the beliefs of teachers at a public university about using technology in their classes to obtain an understanding of underlying thoughts that influence their teaching practice with regards to technology implementation.

Utilizing technology effectively in the classroom has become crucial in recent years. However, the attitudes of educators, who ultimately decide how they are utilized in the classroom, have a significant role in the effective implementation of educational technologies. In reality, "high-level technology use is still surprisingly low," even though "the requirements for successful technology integration finally appear to be in place, including ready access to technology, increased training for teachers, and a favorable policy environment" (Ertmer, 2005, p. 2). This is partially due to the fact that few foreign language teachers are proficient in integrating technology into the classroom. However, English language teachers were willing to use technology in their classrooms, and some of them used specific types of technology to support students' linguistic skills, according to research by Hill and Hannafin (2001). Goktürk (2012) discovered that teachers used a variety of technology in the classroom to support student's learning in a quantitative investigation with 100 Arab teachers.

In accordance with these theories regarding teachers' beliefs and the connection between teachers' beliefs and their use of technology, the goal of this study was to examine teachers' attitudes toward using technology in the classroom at a public university in order to gain insight into the underlying ideas that guide their teaching practices.

Method

Participants

Interviews with participants in person are used in the present qualitative research to collect data and information. The study tries to pinpoint the advantages and challenges that English language learners have when learning the language technologically, along with some of the difficulties associated with accomplishing this.

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A total of twenty English language teachers were requested to participate in the study by the researcher, but five of them declined for personal reasons. All of the participating instructors, who have at least three years of experience teaching university English, are female in-service educators. They all graduated from reputable Vietnamese academic universities with teaching degrees.

Research Instruments

Teacher Surveys

The first tool utilized was a survey with a Likert-scale based on the teachers' attitudes about the use of technology in education today, the advantages of integrating technology into classrooms, and their abilities to use technology in their classrooms. There were 24 questions on the questionnaire, with answers ranging from strongly disagree (1) to strongly agree (5). The author created it, and it was given to the teachers for their feedback on the validity and content before they began to provide their responses. The questionnaire was then modified and given to the teachers once more.

Semi-structured Teacher Interviews

In this study, semi-structured interviews were used to collect data by having genuine talks with the participants. The 10 participating teachers, who also responded to the survey, provided valuable insight into how they view the integration of technology directly into teaching and learning in this example. The educators also provided some insight into their use of technology in the classrooms.

Table 1. Research Questions and Instruments

Research questions	Methods/Instruments
1. What are ELF teacher's beliefs about technology integration into English language classrooms?	Quantitative: Questionnaires Qualitative: Semi-structured Interviews

Results

Teachers' Beliefs about Technology Use in Education Today

The study's instructors, in general, had positive attitudes toward the use of technology in the classroom, which was a key conclusion. In the age of contemporary technology, all fifteen teachers viewed the use of technology as essential. They appeared to take the use of technology in teaching and learning as something that comes naturally. Additionally, as the survey's results indicated, the majority of instructors thought that the use of modern technology in classrooms was limitless. Teacher 3 gave the following explanation: "Because it's our society's way of life now and in the future."

More than half of the teachers countered that creativity was a key component in a teacher's ability to successfully integrate technology into the classroom. One component of this problem can be that teachers need to be astute enough to choose the most appropriate and useful technology, or a combination of these tools, to use in a certain educational activity. In many circumstances, it is ineffective to duplicate the same program into a

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different context. The teachers also understood that they needed to modify their instruction to match the needs of the new technologies rather than continuing to teach in the same manner as in the conventional sessions. Nearly all of the participating teachers agreed that students also adjust to what they are being taught.

Teachers' Beliefs about Benefits of Technology Integration into their Classrooms

According to the participating teachers, using technology in the classroom has several advantages for both teachers and pupils. First off, all of the teachers agreed that technology supported advancements in both teaching and learning. Regarding the benefits to children, the clear majority of the teachers claimed that implementing technology in their classrooms improved students' academic performance overall, motivation, comprehension, collaborative learning, and language-learning outcomes. From the interviews, several teachers made it quite evident how they supported their pupils' learning through technology.

Technology is such an amazing tool, says Teacher 7:

> *"The activities we offer students help them become more involved and give them the chance to interact with real language."*

Teacher 9 says:

> *"Using computers in language classes is a good idea. My students are able to simply switch into different groups to make conservations thanks to the language acquisition and instruction software that has been placed on the computers. They are really interested in these computer-based activities. They actually interact as well."*

Almost all teachers who were asked how technology helped them in their language classes said it helped them develop their curricula, pay attention to their students, use effective teaching methods, treat students with special needs, evaluate students' performance, and expand their information sources. Most importantly, it helped them stay motivated as teachers. According to some teachers who were questioned, lectures became more authentic and vivid with computer-assisted slide show presentations that included illustrated graphics and sound to interest pupils in the courses. Teacher 10 remarked.

> *"I can flexibly create different fascinating activities and entice students to join in thanks to flexible software like Hot potatoes, Toondoo, and Movie maker."*

Teachers' Beliefs about their Skills in Using Technology in Education

The perspectives of the teachers were largely congruent when it came to the use of their technological talents in the classroom. Only one teacher claimed to be comfortable using technology-based activities in her courses and to have sufficient knowledge of contemporary technology. The remaining fourteen teachers, on the other hand, admitted that they lacked computer expertise and proficiency, which made it much more difficult for them to create teaching materials and exercises than in conventional classes. Teacher 2 stated:

> *"I lack computer abilities, therefore it can be difficult for me to handle the resources I discover online. To adapt those resources to my pupils' level takes a lot of time."*

Those sentiments show that the teachers' lack of proficiency with technology was a challenge when they tried to

integrate it into their lesson plans. The fifteen teachers all agreed that one challenge was the necessity for them to stay current on technological advancements in order to offer students with the support and facilitation they require in order to meet the needs of digitally mature learners.

Additionally, every interviewee cited a lack of training and technological resources, such as computers and Internet access, as a barrier that prohibited them from integrating computer-based activities into their lessons. Teacher 5 emphasized:

"I feel I have gained skills by myself more than in training."

Teacher 8 explained.

"Whenever I want to show something on the Internet as an illustration for my explanation, I have to turn on the Cellular Data in my mobile phone and connect the computer to this phone in order to access the Internet,"

However, the majority of the instructors acknowledged they enjoy creating technology-based activities in their language classrooms when questioned about their opinions on using technology in the classroom. Teacher 4 said:

"I think I have a positive attitude towards the integration of computing resources in the teaching-learning process, despite the current difficulties and limitations."

In the interviews, those instructors also expressed their desire to use technology in their lessons going forward and their willingness to improve their technological know-how and competencies through self-learning and, if practical, training programs.

Discussion

The findings of this study generally confirmed a number of factors that had been discovered in earlier studies. First, the results were consistent with the literature about a paradigm change in teaching and learning that was previously highlighted. The participants employed technology because it improved a variety of learner-related aspects and because it offered a more effective teaching method, just like the teachers in earlier studies. They were also hindered by a lack of trust in their computer literacy and skills, a lack of access to suitable equipment, and a lack of professional support. The participating teachers also stated that they would be willing to continue integrating technology into their classrooms despite the limitations on professional development opportunities and the physical teaching environment.

Conclusion

The study's findings showed that each participant instructor was conscious of the value and wide use of technology in education as well as the benefits that technology might bring to their language classrooms. However, many expressed concern about their own knowledge and abilities in the field as well as the lack of digital tools in classrooms. But they also expressed a desire to employ technology in education in the future. This suggests that even though there are a variety of factors influencing instructors' decisions about the use of

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technology, personal opinions were still the main consideration. Another inference about why the teachers continued to take the initiative to learn about it themselves despite receiving limited support can be formed from the teachers' intention to use technology in future teaching and eagerness to develop their technological abilities. They most likely did so because they recognized its value to them and, more importantly, to their students. The participants continued to look for opportunities to participate in professional training programs in the intention of enhancing their technology knowledge and skills to handle any difficulties they may have had integrating technology. As a result, training must include practical sessions that demonstrate to teachers how to successfully use the technology into classroom activities rather than being restricted to a mere introduction to how it works.

Recommendations

Research limitations must be disclosed in order for new research to be established on a more reliable foundation. There are two main limitations to the current study. To begin with, additional participants would have increased the generalizability of the findings. Additionally, suppose a comparative investigation is to be carried out in contexts beyond classrooms. In that case, the quantitative findings may have been supplemented by qualitative data as well as tools such as semi-structured interviews with some of the study's participants. Therefore, larger studies using a variety of research approaches should be used in future studies to produce more conclusive and reliable findings.

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