

Challenges of Integrating ICT With Education: Teachers' Insights

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Abstract

It is incontrovertible that today we live in a world where technology has entered all areas of our life. From the invention of film in 1922 through the introduction of the computer in the mid-1970s, technology has become increasingly important in our personal and professional lives, and learners have increasingly used it. A growing body of research can be found about integrating technology into language teaching. The given literature presents that technology can amplify the quality of the teaching and learning experience. Language teachers today must learn to take advantage of technology and integrate it into their teaching skills. However, numerous challenges restrict teachers from implementing information and communication technology (ICT) in their classrooms or developing supporting resources using ICT. Hence, this study aims at learning the perceptions of high school English teachers regarding the issues and barriers that prevent them from integrating ICT into the classroom.

Keywords: Education; Integrating; ICT; Teachers' Insight, Iraqi Kurdistan

1. Introduction

1.1 Integrating Technology in Language Teaching

Technology has long been used extensively in the field of education. It is a beneficial tool that could be a mediation to help language learners to learn effectively. Many researchers believe that integrating technology into the classroom can enhance the quality of teaching. Technology is a facilitating educational tool from which both teachers and students get plenty of benefits (Meyer et al., 2010; Yulin, 2013).

Research studies in education demonstrate that numerous educational technologies are available that instructors can integrate into their lesson plans to help them apply their teaching methods more easily. Using technology, teachers can help learners make connections to the outside world where the language is used for real tasks (Motteram, 2011). Based on my own experience in teaching, I can say that integrating technology motivates students to learn more and make them enjoy the classroom. English teachers can better organize their teaching materials, communicate with students more effectively, and retrieve their records of interaction with students when needed with the help of effective educational technology (Buabeng-Andoh, 2012).

Based on a study by Yulin (2013), learning with technology, and technology experience had a positive relationship with learners' motivation to learn English, and learning with technology was also a strong predictor desire to learn English. Likewise,

Van der Westhuizen et al. (2012) study shows that the integration of Digital Versatile Disc (DVD) technology effectively supports teaching and learning. One of advantages of this methods is that it can be successfully used in classrooms without access to electricity. Further, the students emphasized that the multimedia and learning content on the DVD (text, lectures, video and audio inserts, etc.) and the use of the DVD player contribute to meaningful learning. Most of the students in this study had a positive attitude about the integration of the DVD into teaching and learning.

Technology has a remarkable role in the process of teaching a foreign language. Both teachers and students get a great benefit from using technology in teaching and learning a foreign language. Altun's (2015) study in Erbil demonstrated that integrating technology in education leads to a good command of the target language. In addition, learners have a better opportunity to improve their foreign language skills. In the same fashion, the outcome of Abbas's (2021) study shows that the availability of technology devices positively impacts students in learning a second/foreign language and skills.

Technology creates opportunities for cultural competence to be highlighted and facilitated in the language classroom. In McKeeman & Oviedo's (2015) study, the Technology Evaluation Rubric for Cultural Competence (TERCC-P3) was developed to assist language teachers in determining whether a specific technology will promote planned outcomes and students' capacity to demonstrate cultural competence. According to the findings, using Web 2.0 tools like Animoto, Twitter, ThingLink, Visme, and Voice Thread in the classroom will help students

build their cultural competencies.

Moreover, technology can be a good assistant for children's dual language experiences. Technology tools give teachers a better chance to discover multilingual resources and design activities and materials quickly and inexpensively to be adapted to meet changing language needs. Nemeth and Simon's (2013) study proposes that utilizing technology can support children's dual language experiences because it gives access to language.

The use of technology is effective in a variety of content areas. A study by Hegelheimer and Fisher (2006) shows that applying technology can help create an innovative online grammar resource that raises learners' awareness of problematic grammatical features. Further, using IWRITE's Solutions section in this study, learners will learn to understand the terminology (or metalanguage) required to ask specific grammar questions.

Similarly, based on Verdugo and Belmonte's (2007) study, which was launched in six state schools in Madrid, internet-based technology improves listening comprehension in English as a Foreign Language. The finding reveals that even children of those teachers who used digital materials for teaching started from a slightly lower level of English compared to the children whose teachers did not use technologies, but in the end, their listening comprehension skills were improved, and they outperformed the children's whose teachers did not use technologies

In a similar vein, Meyer et al. (2010) found that students whose teachers provided them with the electronic portfolio tool ePEARL on a regular and appropriate basis, compared to students whose teachers did not use ePEARL, showed remarkable improvements in their writing skills on a standardized literacy measure and certain metacognitive skills measured via student self-report when compared to students whose teachers did not use ePEARL.

Teachers using ePEARL in their classrooms reported improvements in their students through self-regulatory strategies: setting their own process goals, articulating assignment requirements, documenting strategies, providing constructive feedback to colleagues, revising their work using teacher and peer feedback, and evaluating their work. According to this study, when ePEARL is used frequently and integrated into classroom instruction, it improves students' literacy and self-regulated learning skills.

Technology can help students struggling with writing. A study by Fedora (2015) reveals that one way to lessen the struggle of students with special needs is to allow them to use voice recognition software installed on mobile media devices such as smartphones and tablets to help them complete extensive writing tasks. These tools can free students from the motor processes of writing or typing and allow them to focus on content. By using these accommodations, students can dictate a composition, view the text on the display screen, edit

the text, email the composition, or save it for future editing.

A learner's speaking proficiency requires not merely practicing a wide range of vocabulary but also confidence, which encourages the learner to express their thoughts (Jezhny & Bapir, 2021). Using technology improves students' confidence and ability to become better communicators when giving presentations. In Mundy et al. (2014) study, a technology-based speech-tutoring center was used. Students first use web-connected computers to view famous, effective, and properly structured presentations. Then, they create their presentations, which they deliver in a simulated classroom using video cameras and microphones. The students then view the recorded presentation while receiving feedback from the Lab staff. Both students who visited the Lab and students who did not were handed a questionnaire. The results demonstrate that students who went to the Lab and used technology scored much higher than those who did not.

Based on the study conducted in Israel at the Levinsky College of Education by Gotesman and Goldfus (2009) between 14 students assessed as dyslexics, computer technology interventions enhanced students' immediate and long-term academic reading performances. In addition, All the students admit that the use of assistive technology helps them to improve their reading fluency, learn, apply, develop, maintain and generalize new reading strategies, and become motivated to read in English. In other words, using technology improved their reading ability in English.

1.2 Obstacles to Using ICT in the Classroom

Though research studies in education show that the use of technology can support student learning, its usage is generally affected by certain obstacles. Educators need support for learning to use new technologies and acquiring skills in designing and implementing high-quality, student-centered projects.

Based on a study by Buabeng-Andoh (2012), there are personal, institutional, and technological factors that prevent teachers from using technology in teaching and learning processes, such as lack of teacher confidence; teachers' attitude, lack of pedagogical teacher training; lack of suitable educational software; limited access to technology; rigid structure of traditional education systems. In the same fashion, Agyei & Voogt (2011) stated that the factors that influence teachers' use of technology are the quality and quantity of their preservice technology experiences.

Suppasetserree and Dennis's (2011) study shows that most English teachers, in their study, do not implement educational technology in their classroom effectively due to excessive teaching loads, outdated equipment, lack of resources, and absence of guidance. Therefore, the researcher

suggested that time, effort, and resources are needed to bring teachers to a level of educational technology literacy.

Likewise, Hew and Brush (2007) stated that some general barriers that affect the integration of technology into the curriculum, namely: resources, institution, subject culture, attitudes and beliefs, knowledge and skills, and assessment. Hence, this study suggested some strategies to overcome such barriers, such as having a shared vision and technology integration plan, overcoming the scarcity of resources, changing attitudes and beliefs, conducting professional development, and reconsidering assessments.

Similarly, in Kazemi and Narafshan’s (2014) study in Iran though the majority of English Language teachers have positive attitudes and are interested in integrating technology into language teaching, rarely they use it. One of the crucial factors that made them avoid using technology in the classroom was their lack of their self-confidence. The findings show that most of the teachers do not have the required self-confidence to use technology. Further, some of them think by using technology in the classroom, they may face problems that they cannot correct. Furthermore, some others think that their learners are digital natives and digital immigrants, so they know less than their learners, which is why they avoid using technology in their classrooms. In the same way, a study by Choy, Wong, and Gao (2009) shows that student teachers in Singapore have appositive intentions to integrate technology to facilitate student-centered learning in their future teaching.

Initiating and implementing educational technology in a school’s program depends strongly on the teachers’ support and attitudes. Based on my teaching, I believe that teachers’ concerns, beliefs, intentions, and attitudes are important factors that influence integrating ICT in teaching. Because if teachers’ attitudes are positive toward the use of technology, they can easily provide useful insight into the integration of technology into teaching and learning processes. However, if teachers have negative attitudes toward technology, providing them with excellent technical facilities may not influence them to use it in their teaching (Zuniga, 2009).

Yang and Huang’s (2008) study of English teachers in Taiwan shows that despite pressure on schools to

increase the application of technology, the adoption of teaching and learning has been limited. Most teachers use traditional technology to support existing curricula within their established classroom routines and do not engage in many productive ways of incorporating technology into their range of classroom teaching. English teachers who utilize Internet technology as a tool for mediating language learning seem to be learning from technology rather than learning with technology.

2. Methodology

The validity questionnaire was used to show teacher perception toward using ICT and the obstacles that prevent them from integrating it into their teaching. Thirty-two high school English teachers from Erbil, Kurdistan region of Iraq, participated in this study (17 male and 15 female). The participants were randomly selected from Erbil, the capital of Iraq Kurdistan, to answer the questionnaire.

The questionnaire contained five main elements and was prepared and designed in English. On the other hand, to obtain the goal of this paper, the outcomes achieved from parts two and four are provided in the following section.

Part two included three multiple-choice questions on teachers' familiarity with ICT, while part four included eight questions about the issues that prevent teachers from using ICT in their education. Each item in section four designed on a five-point Likert agreement scale, where one = strongly disagree, two = disagree, three = undecided, four = agree, and five = strongly agree. The five-point Likert scale was used because it is considered one of the most widely used Likert scales in education.

Frequencies, percentages, and means for each item were calculated during the study's analysis phase and presented in tables.

3. Results

The results and findings of this study are shown in two different sections. In the first section, teachers’ familiarity with ICT is analyzed. The second section categorizes barriers that prevent teachers from using ICT.

Teachers’ familiarity with ICT

Table1. Teachers’ familiarity with ICT

| Items | Variables | Frequency | Percent % |
|---|---|--------------------|----------------------------|
| How is your personal Experience with ICT? | Frequent user Confident user Limited user Never used | 10 13 9 0 | 31.3 40.6 28.1 0 |
| How do you judge yourself in using ICT in your classes? | Frequent user Confident user Limited user Never used | 2 3 13 14 | 6.3 9.4 40.6 43.8 |
| How do you think of other teachers’ Familiarity with ICT? | Frequent user Confident user Limited user Never used | 3 22 7 0 | 9.4 68.8 21.9 0 |

This section which is related to the teachers'

familiarity with ICT, includes three items. The first item deals with the teachers' personal experience

with ICT; their response to this item indicated that (71%) of the English high school teachers, which is the majority, considered themselves to be frequent or confident users of ICT. This indicates that English high school teachers have obvious familiarity with ICT, though it doesn't mean that they are integrating ICT in their teaching and are following new teaching trends by integrating ICT in their curriculum. Merely (28%) of the participants responded that they are limited users of ICT, and none of them responded that they don't have personal experience with ICT. When the teachers were asked to judge themselves concerning integrating ICT in their teaching, the majority (83%) acknowledged that they never used it in their classes or prefer to use it rarely in the classes. Table one and Figure one estimated that English high school teachers believed that other teachers (78%) have familiarity with ICT. They don't believe that there is a teacher that is unfamiliar with ICT in this century of technology. Table one showed that participants believed that teachers have clear familiarity with ICT, but they aren't integrating it into their classes, or they use it very little. Actually, the outcome of this item remains consistent with the outcome of the item that is gained from the first section.

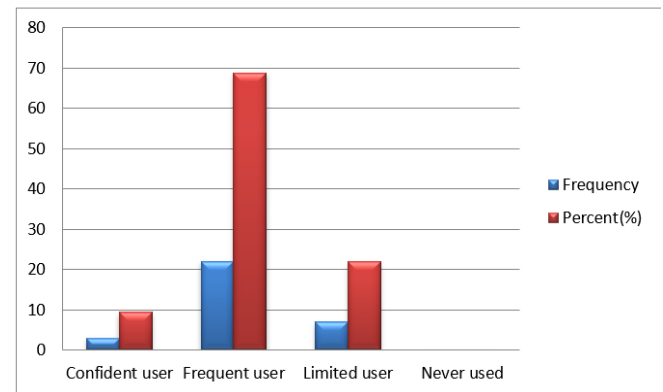
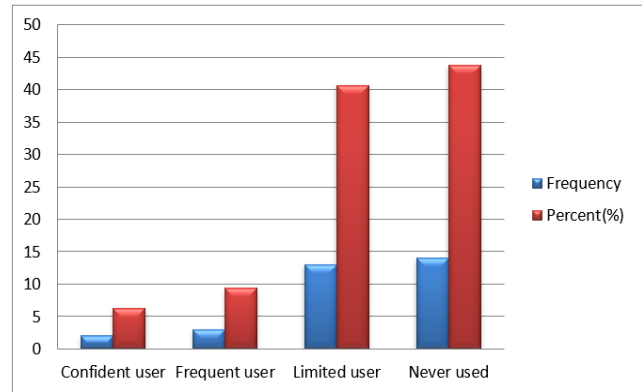
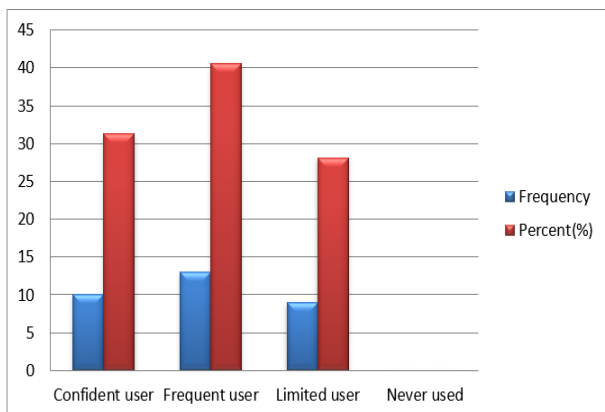


Figure 1. Teachers' familiarity with ICT



B. Obstacles that prevent teachers from using ICT

In this section, the researcher aimed to describe the perception of the teachers concerning the eight elements that hinder them to use ICT in classes. In table 2, the results that are obtained are shown. Table 3 and Figure 2 indicate the most remarkable barriers according to the mean scores. It is obvious that merely three items got scores equal or exceeding 3.80, showing that teachers' attitudes concerning these three items are the main barriers preventing them from integrating ICT into their lesson plans.

Table 2. Obstacles prevent teachers from using ICT

| | Disagree and strongly disagree | | Undecided | | Agree and Strongly agree | |
|--|--------------------------------|---------|-----------|---------|--------------------------|---------|
| | Frequency | Percent | Frequency | Percent | Frequency | Percent |
| Shortage of class time hinders me to use ICT. | 10 | 31.3 | 3 | 9.4 | 19 | 59.4 |
| Little access to ICT prevents me to use ICT. | 3 | 9.4 | 4 | 12.5 | 25 | 78.2 |
| Few ICT technical supports at schools discourage me to use ICT in the classroom. | 2 | 6.3 | 3 | 9.4 | 27 | 84.4 |
| Society's views about ICT hinder me to use ICT. | 13 | 40.6 | 3 | 9.4 | 16 | 50 |
| Colleagues' negative views about ICT hinders me to use ICT in the class. | 24 | 75 | 2 | 6.3 | 6 | 18.7 |
| School views about ICT discourage me to use ICT. | 6 | 18.8 | 3 | 9.4 | 23 | 71.9 |
| The time needed to learn using ICT prevents me to use ICT. | 16 | 50 | 3 | 9.4 | 13 | 40.7 |
| Requirements of qualifications discourage me to use ICT. | 16 | 50 | 1 | 3.1 | 15 | 46.9 |

| Statements | Mean |
|--|--------|
| Few ICT technical supports at schools discourage me to use ICT in the classroom. | 4.1250 |
| Little access to ICT prevents me to use ICT. | 4.0000 |
| School views about ICT discourage me to use ICT. | 3.8438 |
| The shortage of class time hinders me to use ICT. | 3.3750 |
| Society's views about ICT hinder me to use ICT. | 3.0938 |
| Requirements of qualifications discourage me to use ICT. | 2.9688 |
| The time needed to learn using ICT prevents me to use ICT. | 2.8438 |
| Colleagues' negative views about ICT hinder me to use ICT in class. | 2.1875 |

Teachers believe that inadequate technical support at school and restricted access to ICT are the fundamental elements that hinder them to use ICT in the classroom. School views about ICT were considered another crucial barrier for teachers that disable them from integrating ICT into their curriculum, which was surprising for the teacher. Further, The item "Shortage of class time hinders me to use ICT" received more than 55% of the agreements of the teachers.

However, forty percent of the participants believed that Society's views about ICT don't hinder them from following the new trends of teaching by using ICT in their classroom. Three quarters of respondents (75%) believed that their colleagues' negative views of ICT don't affect their attitudes toward using ICT in the classroom. Half of the surveyed teachers (50 %) also claimed that the Time needed to learn ICT and the requirements of qualifications do not impact they're to use of ICT in their classroom. Generally, their colleagues' negative perceptions regarding using ICT in their classroom don't influence them.

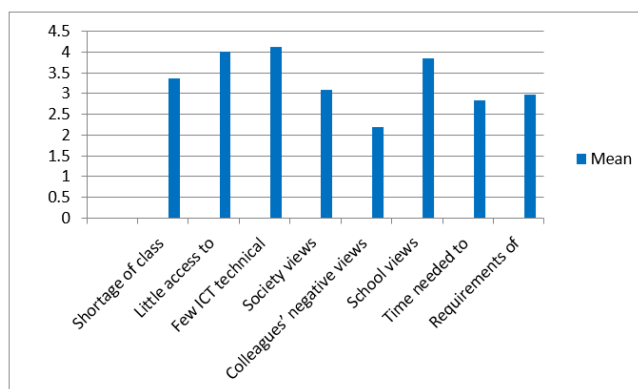


Figure 2. Barriers preventing teachers of using ICT according to the mean scores

4. Conclusion

The literature sheds light on the integration of technology in language teaching, and it is considered an important medium that has a great influence on students learning because it gives them motivation and desire and effectively supports their learning. However, using ICT as a teaching aid is more complex because it demands more particular skills from teachers to implement it. Besides, teachers are faced with many deficits and obstacles that hinder them from implementing ICT in their classrooms or growing supporting materials by using it.

The outcome of this study shows that the high school teachers are knowledgeable about ICT and how to use it; this does not necessarily mean that they imply it to the curriculum. Moreover, inadequate technical support at school and little access to ICT hinder teachers to employ ICT in their classrooms. Schools' views on ICT and insufficient class time was regarded as two other crucial barriers for teachers in implementing ICT in their curriculum. To enable teachers to integrate ICT into their curriculum, on one hand, educational sectors should provide teachers with adequate and appropriate support. On the other hand, what is happening in the classroom and changes that are occurring should be known by the teacher. As a result, effective ICT application in teaching and learning can be applied, leading to the enhancement of educational programs.

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