EXPLORING THE POTENTIALS OF TECHNOLOGY INTEGRATION FOR TEACHING LANGUAGE SKILLS: A LITERATURE REVIEW

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Abstract

The use of technology has become an essential element in teaching and learning process. Usually, each language class uses some type of technology tools that are used to support and enhance language learning. They are tools to help teachers facilitate their students' language learning. This research focuses on the role of technology in learning English as a foreign and second language. It addresses the significance of technology that allows English language learners to develop their learning abilities. In this paper, the researchers describe the term technology integration, of technology, explain the use of technology in the language classroom, discuss the advantages and challenges of technology integration, and provide some suggestions for better use of these technologies to help learners develop their learning abilities.

Keywords: EFL, ESL, Teaching Language Skills, Technology Integration

INTRODUCTION

Technology has grown rapidly in recent years, and its improvement has influenced many areas of human life, including education. In today's times, conventional methods of education have become inadequate, as technology is also rapidly transforming students' views and learning behaviors as digital natives. The rapid growth of technology makes the use of technology important for foreign language teaching and research as well.

Integration of technology is typically defined as purposeful use in language pedagogy of some kind of modern technology. Even though there is often a distinction between technology integration and technology use (Garrett, 2009; Qin & Shuo, 2011; Stockwell & Hubbard, 2013), however the words are used interchangeably.

It is understood that in the development of basic English language skills such as listening, reading, speaking and writing, the introduction of technology into English teaching and learning is of great importance. In terms of frequent use of materials, availability of materials cost of materials, the hardware and software technology resources used in English language teaching and learning can make many contributions to both teachers and students.

Previous research has shown that language curricula, teaching methodology and learning are influenced by technology (Chapelle & Voss, 2016). If properly applied, the practice f technology integration provides the digital natives with lots of benefits: several opportunities for formal and informal language learning, scaffolding, gamification, and so on (Blake, 2016; Ibrahim, 2018; Zappavigna, 2012; Vurdien & Puranen, 2018).

The practice of technology integration has been studied under many termiologies for a long time. Chapelle and Warschauer in the last quarter of the 20th century, introduces the term Computer-Assisted Language Learning (CALL). As the term implies, CALL is fundamentally based on computers (Kern, 2006). CALL incorporates a range of technology tools for example PCs, cell phones, electronic whiteboards, and so on. Later on, other similar concepts were used: Internet-Assisted Language Learning (IALL), Web-enhanced Language Learning (WELL), Technology-Enhanced Language Learning (TELL), and Mobile-Assisted Language Learning (MALL). A number of technology platforms, materials, and methods cover all these terminologies. The timeline of technology integration in ELT is outlined in Figure 1 below:

Figure 1: History of technology integration (source: www.discuss.cle.ust.hk)
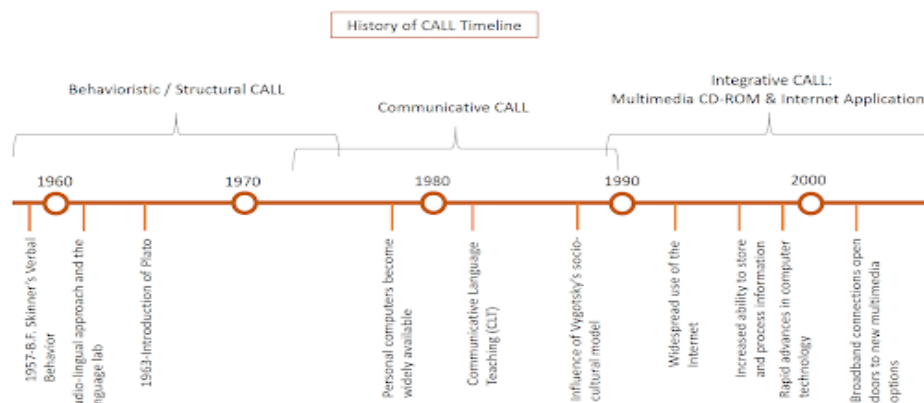
Benefits and Challenges of Technology Integration

The introduction of technology into language teaching has been very popular in many different kinds of institutions over the years due to many benefits. The first beefit is correlated with the excitement of learners. In other words, the use of technology in language learning can improve the learning enthusiasm of students and enhance the learning of students. Research shows that the learning enthusiasm and attitude of learners appear to be better if they have influence over their learning (Bush and Terry, 1997).

The second benefit of technology integration in language learning is learning flexibility (Carr, et al, 2011; Patel, 2014). Technology provides even more flexibility which accmdates students' different learning styles and needs. Technology can be used in isolated ways or alongside textbooks for a far more in-depth learning experience. Students can learn anywhere. Teachers can also track and evaluate the work of students, not just when they are in the classroom, but also outside the classroom.

The third benefit is related to the personalized learning environmennt (Chirimbu and Tafazoli, 2013). By integrating technology into language teaching, students can choose the order in which material is presented to them. The learning material introduced to them can also be tracked by students and the learning speed can also be controlled.

The fourth benefit is related to the autonomy of learning for students (Yang and Chen, 2007).

Integration of technology in the classroom will improve students' learning involvement and learning motivation, strengthen their attitudes towards learning, promote communication, reduce anxiety, promote oral communication, provide opportunities for meaningful interaction, and develop various language skills. Students can also extend their international perspectives, learn different kinds of data, understand and accept different cultures, increase genuine input, learn how to display, manipulate, alter, store and retrieve information.

Finally, integrating technology into language teaching enables students to have authentic language learning experiences (Dale, 2014). Instructions on how to use technology are normally provided in the target language, which aids in the development of vocabulary, comprehension, spelling, and even pronunciation. As a result, it would be a wonderful opportunity for teachers to strategically use them in their language classrooms to develop students' language skills and have more authentic resources.

The application of technology integration, like the two sides of a coin, has its own obstacles. Accessibility, training, and curriculum and technology connections are among the obstacles. The first issue is accessibility. To incorporate technology in the EFL classroom, teachers and students need access to technology as well as strong internet connectivity (Jung, 2005). This is the first challenge for many schools in Indonesia, as most schools lack good internet access and computer facilities.

According to Mali (2015), Redaksi Tempo (2015), and Kaltim Post (2015), accessibility is still a major issue in many Indonesian schools. Of course, providing free high-speed internet Wi-Fi in school areas may be a solution to this problem (Thien, Phan, Loi, Tho, Suhonen, & Sutinen, 2013). Another obstacle to accessibility is the lack of appropriate technology facilities. In other words, if technology resources were available at schools, teachers and students would be empowered to use them more efficiently in their classrooms.

The second obstacle is training (Lai and Kritsonis, 2006). Before using emerging technology in language teaching and learning, it is important that both teachers and students have basic technical skills. If the teachers or students have ideas on how to use the technology tools, they will have a lot of problems during the process.

The correlation between technology and education is the final obstacle (Patel, 2014). Although there are various resources available on the internet, some teachers can find it challenging to incorporate them into the language curriculum. Otherwise, technology integration may be a waste of time if the learning experiences are not based on the language curriculum. Furthermore, in many cases, students were more concerned with the technological tools rather than with the learning materials.

As a consequence, in order to make substantial contributions to the use of technology, it can be said that the process of technology integration needs to be carried out consciously and in a prepared manner. In the other hand, if the technology integration is not implemented properly, technology will have a negative effect on the students' learning process.

Principles of Technology Integration in ELT

Since technology integration has become a trend in language teaching, four guiding principles have been developed for teachers with little technological expertise to teach using technology

by Sharma and Barret (2007). Firstly, it is important to differentiate between the role of educators and the role of technology in the process of teaching and learning.Their roles are not synonymous, but they are instead complementary. Secondly, it is essential to integrate technology by reflecting on the needs of students and ensuring that the teaching is not simply using technology but pedagogically driven. Thirdly, it is important for teachers to align the learning materials with the technology resources they have chosen. Finally, it is important for teachers to reflect how they use the technology tools, rather than the technology tools itself. All the four principles are illustrated in figure 2 below.

Figure 2: Four Principles of Teaching Using Technology (Source: www.semanticscholar.org)
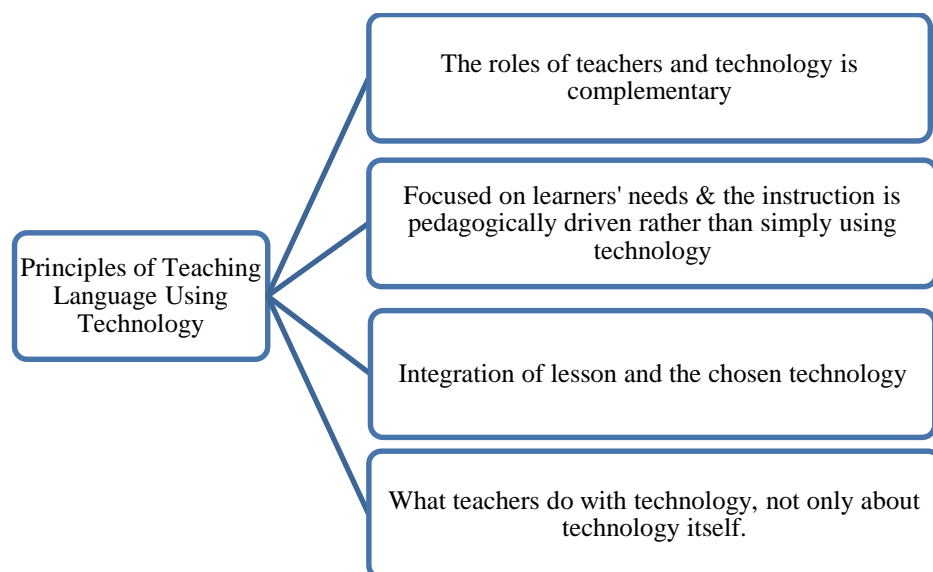
Hockly (2011), in particular, suggests a set of eight questions that English teachers should consider before introducing technology into their EFL classes. The eight questions are clearly visible in Table 1 below.

Table 1: Guiding Questions for Integrating Technology in ELT (Source: Hockly, 2011)

No	Aspects	Explanation
	Technology in Language Teaching: 8 Questions to Ask Yourself	
1	Outcomes	What are students learning? The aim of the lesson should be explicit and clear. What the use of this specific technology add the results of learning and how it improves learning. .
2	Added Values	What does the technology bring to the lesson? Identify how the technology used in the lesson, enhances the activity in some way.
3	Time and Effort	Is it worth the time spent on the technology tool? Will it be for use in the long term or in the short term? Ensure that it will not take more time and energy to use the tool than the language actually being created.
4	Syllabus	Does the technology tool fit the syllabus? If yes, to what points in your syllabus? And what learning outcomes students can achieve.
5	Skills	What technological and digital skills do teachers and students need to have in order to be able to use technology effectively?

6	Location	Where and when will the technology tools be used? Is it inside or outside the classroom?
7	Role	Will students only use the technology tools? Or will students produce something by using the tools?
8	Resources	What educational facilities are available? Teachers must be able to design effective tasks for certain technology tools used in the class.

Table 1 above demonstrates that when teachers want to incorporate technology into their classroom, they must consider certain principles. As a consequence, rather than just using technology, technology integration will concentrate on students' needs and the teaching process will be pedagogically driven.

METHOD

A literature review was used in this research. The aim of the research was to review a few recent articles about technology integration in some educational institutions in order to learn more about its benefits and drawbacks.A written synthesis of journal articles, books, and other documentation that summarizes and critiques the past and current state of knowledge about a subject, organizes the literature into subtopics, and documents the context for a study is known as an analytical review (Creswell, & Clark, 2010). Google Scholar and the Educational Research Information Center (ERIC) were used to identify and pick related journal papers. Finally, the final part of this paper summarizes the main conclusions which can provide readers with a broader and more in-depth understanding of technology integration that can be applied in other educational settings.

RESULTS AND DISCUSSION

Results

In this part, the researchers present guidelines for the effective integration of technology in enhancing learners' language skills based on the literature review method.

1. Teachers should adopt strategies in technology integration to boost student motivation (Pourhossein Gilakjani et al, 2013).
2. Teacher professional development should be specifically considered in order to ensure learning and to change the attitudes of teachers who are unfamiliar with the technology tools (Pourhossein Gilakjani et al, 2013).
3. It is important to coordinate the technology strategy with the curriculum's goals (Ahmadi, 2018).
4. When integrating technology, teachers should consider the most efficient instructional process (Pourhossein Gilakjani et al, 2013).
5. Computer technology is an integral aspect of the learning process for students to learn new skills (Ahmadi, 2018).
6. Language teachers should allow their students to use technology to develop their language skills (Ahmadi, 2018).
7. Universities should consider technology to be an important part of their teaching and learning programs (Ahmadi, 2018).
8. Technology experts should provide extra resources to teachers who use it in their English classes (Ahmadi, 2018).

9. Teachers should be role models for their students when it comes to using computers (Pourhossein Gilakjani et al, 2013).
10. Technology-integrated lesson materials should be created by teachers. These products can be used to concentrate on teaching and learning, not just on technical issues (Ahmadi, 2018).
11. Teachers should find ways to use learner-centered technologies to support them (Ahmadi, 2018).
12. Teachers should set an example for their students when it comes to using technology (Pourhossein Gilakjani et al, 2013).
13. Teachers should be aware of their responsibilities as guides and facilitators of learning for their students (Pourhossein Gilakjani et al, 2013).
14. Adequate tools and technical assistance should be given to teachers to facilitate the implementation of technology (Ahmadi, 2018)..
15. Teachers should heed the guidance of their colleagues in order to improve their teaching through the use of technology (Ahmadi, 2018)..
16. Technology is one of the most critical resources in language learning; it helps students to enhance their language skills (Ahmadi, 2018)..
17. Teachers should encourage their students to use technology to develop their language skills (Pourhossein Gilakjani et al, 2013).

CONCLUSION

According to the literature review, technology integration is crucial, but other factors such as strong internet connectivity should also be considered, as many universities and schools still lack sufficient connections. The second issue is training. To use the program effectively, teachers and students should be qualified enough. When technology is used correctly, it can bring a lot of benefits to teachers and students. The final issue is between the relationship between technology and instruction. Teachers have a difficult time finding the appropriate curriculum-linked technology. To summarize, the findings of this literature review show that technology enables teachers and students to interact communicatively, provides understandable input and output, aids learners in developing thinking skills, makes learning and teaching more student-centered, promotes learners' autonomy and makes them feel more comfortable, and increases learners' willingness to learn a foreign language effectively.

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