CHALLENGES OF ENGLISH TEACHERS IN THE DIGITAL ERA

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ABSTRACT

Today's connected knowledge provides teachers and students with fast and easy access to the latest information and communication technology (ICT). The time has come to equip communities around the world with digital literacy skills. English teachers are no exception to the ability to access, analyze, and engage with digital technology and its varieties to support their students in learning. In the digital era where an English teacher is one of the users who also utilize its sophisticated tools, they need not only acquire digitalized pedagogical skills but also the ability to use these skills smartly. One way this can be achieved is by improving teachers' ICT skills as well as their attitude toward the ICT itself. The objective of this paper is to review and elaborate on how English teachers integrate digital technology to create innovative instructional learning models to face the age of digital learning, then how well-prepared they are. In addition, this paper also provides a recommendation to the authorities concerning the facility and digitized school infrastructures to have ICT more integrated into education settings.

INTRODUCTION

In the field of education, there is an important role of information and communication technology in the present and the future. There has been a trend of shifting from conventional face-to-face learning to digital learning due to the development of information and communication technology. Thus, the use of media such as computers and smartphones has triggered rapid accessibility for those users in need without being limited by distance, place, and time.

The global influence of the learning technology network in the field of education has changed the orientation of teachers so fast in terms of utilizing technology-based learning to facilitate their students' learning. Ahmed & Nasser's (2015) study has recommended that teachers should understand the benefits of technology, update technology issues, equip themselves with professional pedagogical ability, and more importantly utilize technology and apply it in learning to improve student achievement in addition to make them ready in facing the expansion of multimedia technology and the era of digital literacy. Therefore, the success

of digital literacy in the classroom setting is often related to the teacher's key role as a facilitator in the teaching-learning process.

Exploring the use of digital technology allows educators to design more engaging learning instruction for the content materials they teach where online learning designs can be combined with face-to-face classroom design or it can be completely online. Teachers must comprehend the characteristics or the potential of digital learning in order to make the best use of it for the benefit of students in learning, given that it is a method or means of communication that can offer significant advantages for the interests of teachers and students.

The term digital learning is defined as a practice of learning effectively using technologies, combining different elements such as blended or virtual learning using e.g., mobile technologies or e-learning. It requires a combination of technology, digital content, and instruction (IGI Global.com). In other words, digital learning is a learning activity or activity using the internet or digital technology in terms of preparation, implementation, and assessment of learning carried out by students, teachers, and parents of students.

To be more specific, digital learning is essentially learning that involves the innovative use of digital tools and technologies during the teaching and learning process and is often also referred to as technology-enhanced learning (TEL) or e-learning. In addition, the definition of digital learning, according to Williams (2012), is a learning that includes hardware aspects (i.e., infrastructure) in the form of a set of computers that are interconnected with each other and have the ability to send data in the form of texts, messages, graphics, videos, and audios. With its capability of data deliverance, according to Kitao (1998), digital learning can be understood as the interconnection of one computer network with other computer networks around the world. However, this notion is only related to the hardware of the device, although there is another type of device that also has an important role in digital learning, namely software. By the software, the data sent and stored during digital learning can be accessed at any time.

Thus, it can be summarized that digital learning is a learning practice that uses technology effectively to strengthen the learner learning experience by emphasizing high-quality instruction and providing access to challenging and interesting learning content. Furthermore, through digital learning, teachers can give feedback through formative assessments, allow learners to learn anytime and anywhere, and deliver individualized instruction to ensure all learners reach their maximum potential. The most important thing offered in digital learning is the diversity of instructional forms delivered by teachers to support learning content so that students have many choices in their learning techniques.

METHODOLOGY

The method used to write this paper is a literature review. As a research method the literature review, according to Snyder (2019, p.334), is a method that provides an overview of a certain issue or research problem. Again, Snyder adds that a literature review can be used, for example, to create research agendas, identify research gaps, or simply discuss a particular matter. As this paper takes, a literature review used is an overview of a certain issue of digital technologies that are utilized by English teachers to create innovative instructional learning models. Therefore, this paper by using that methodology simply discusses three matters: (1)

the variety of digital technologies that can be utilized by language teachers in digital learning; (2) how language teachers integrate digital technology to create innovative instructional learning models; and (3) how today's English teachers' readiness in Indonesia regarding the implementation of technology into their EFL classroom.

FINDING AND DISCUSSION

Findings in this paper are studies and related theories that are selected and regarded to be appropriate for the targeted three matters proposed to be discussed afterward. Those are a variety of digital technologies for learning platforms, English teachers' digital literacy, and today's English teachers' readiness to implement digital technology into their EFL classrooms.

1. Variety of digital technology for learning platforms

Several forms of implementing digital technology also known as internet-based digital learning can be easily found in schools today. Take for example: learning by online platform through mobile devices, the use of social media to support the delivery of learning content, learning-based digital games, and cloud computing which can be used as a big data storage to evaluate the learning outcomes process and assessment.

A. Mobile learning

Mobile Learning, also so-called *M-learning*, is defined as learning delivered or supported by mobile technology (Traxler 2007). An example of mobile technology that we have often used is smartphone technology. By its sophisticated technology, a smartphone can facilitate mobile learning which can be done anytime and anywhere, as long as users bring their mobile devices. For this reason, McKnight et al. (2003) assert that mobile learning is a learning condition where learners are not in a predetermined place, and the learning model also enables learners to take the chance of learning offered by using mobile technology. Therefore, smart mobile devices are undeniably great to use as digital devices to support learning.

According to El-Hussein and Cronje (2010), technology mobility, learner mobility, and learning mobility are the three essential foundations of M-learning. The rapid development of computer technology, mobile devices, and wireless technology coupled with the increasing demands of learners to learn has led to growth in the use of mobile learning in schools. Traxler (2007), divides at least six categories of mobile learning as detailed in the following.

a) *Technology-driven mobile learning*: a technological innovation that is posited in an academic setting to demonstrate technical feasibility and learning possibilities.
b) *E-learning portable miniature*: technologies such as mobile, wireless, and handheld devices that are used to implement approaches and solutions that have already been used in "conventional" e-learning before.
c) *Connected learning classes*: technologies such as mobile, wireless, and handheld devices that are used to support collaborative learning in classroom settings.
d) *Informal, personalized, conditioned mobile learning*: technologies such as mobile, wireless, and handheld devices with additional functionality, such as video capture which provide other experiences that are considered difficult or impossible to make;

e) *Mobile phone training support*: technologies such as mobile, wireless, and handheld devices that are used to increase work productivity and efficiency by providing information and support to the users;
f) *Remote mobile learning*: technologies such as mobile, wireless, and handheld devices that are used to address environmental and infrastructure challenges to deliver and support education in areas where "conventional" e-learning technology fails to do such things.

Based on the depiction above, it can be clarified that the principles of mobile learning consist of personalized access, metrics, cloud, transparency, game-based concepts, and asynchronous. In addition, mobile learning is based on student self-actualization, prioritizing individual differences, being curative (overcoming), having a blending mode, having always-on characteristics, and being authentic.

B. Social media

Social media is the online media whose users participate and socialize using the internet. Social media users can easily participate, share, and create content such as blogs, social networks, wikis, forums, and virtual worlds which are the most common forms used by people. The term social media is certainly not something unfamiliar to hear, even every day we use social media to interact with friends, relatives, or between students and teachers because of its ease and speed in conveying information. Playing on social media has also become people's daily habit today. Therefore, most social media provider sites, such as *Twitter, Facebook, Instagram, WhatsApp,* and *Skype* offer services for photo sharing, online chatting, video calling, and conferencing. Such kinds of benefits attract users to use social media technology to support their life activities and it is inseparable from the field of education as well.

In learning a foreign language, many things can be utilized through social media, such as sharing lesson materials through photos and text documents (for teaching reading and writing), audio podcasts (for teaching speaking and listening), and instructional videos (for facilitating students to learn all language skills). This is in line with Bower, et al. (2010) that many varieties of social media technologies support school activities such as sharing audio, video, text, images, and other functional capabilities. In addition, social media technology also has other general capabilities such as being able to create a portfolio and school profile and publish it, as well as responding to posts and comments as a form of digital literacy. As a result, it is not surprising that *Facebook, Twitter, Instagram, WhatsApp,* and *YouTube* are examples of social media technologies that have entered schools and higher education over the last ten years.

C. Digital game-based learning

Since digital games have become prevalently global, there is interest in the use of digital games for educational purposes. Games-Based Learning (GBL) focuses on using games not only for entertaining but also for learning purposes. Educational experts have pointed to some features of the game that allow such features to be used as learning tools. GBL has the appeal of being able to motivate students (Prensky 2001); providing real-world experiences (Arena & Schwartz 2013); being able to provide context (Gee 2003); and being able to provide significant feedback on student performance (Shute, 2011). Regarding those functions, this implies that using games in a lesson as part of teaching and learning helps to create positivity around the lesson, motivating students with their participation and creating a positive attitude towards

learning. In addition, games can also create a positive memory and experience of learning for students in the classroom.

Furthermore, Maloney (2019) is more specific in asserting that "gamification, game-based learning or play-based learning refers to a type of gameplay with clear and defined learning outcomes. A well-designed digital game stimulates learners' language, critical thinking, and problem-solving abilities". To these characteristics, digital game-based learning can be in the form of word-playing, language play, narrating stories by role-playing, as well as other digital game platforms. In addition to those characteristics, Maloney (2019) emphasizes that gamification is very user-friendly as it covers almost all age levels and language proficiency levels. Gamification can also train learners' listening and speaking skills in addition to being able to evoke learners' critical thinking ranging from problem-solving skills to developing digital literacy skills which are known as one of 21st-century skills.

D. Cloud computing

Cloud computing is a concept that is currently being widely used today, where computing is a model that allows the use of resources such as networks, servers, storage media, applications, and services, together (Mell & Grance, 2011). The presence of cloud computing brings a change in software distribution where in cloud computing the need for word processing applications can be done through browsers.

With the presence of online courses, cloud-based platforms are becoming more important than ever. This digital technology platform is recognized for facilitating distance learning. Today cloud computing is more challenging than a decade before since it bears many benefits for education. Five mostly benefits of cloud computing for education referring to Buchanan Technologies.com, are: (1) long-term cost savings; (2) better collaboration; (3) easy access and resource availability; (4) scalability; and (5) modernizing learning environments. In terms of cost savings, education institutions can reduce the cost of data storage and minimize money spent on maintaining aging IT hardware. In addition, an important aspect of cloud computing for collaboration is to support effective communication among students and to create a digital environment where educators, students, and parents can stay on the same page and platform. With accessibility, cloud computing makes it easier for students to access the same materials and learning resources, regardless of the devices or internet browsers they use. Last but not least, cloud computing technology makes schools more desirable for incoming students and allows teachers and education practitioners to provide a higher standard of learning.

2. English teachers' digital literacy

Young (2008) stated that teachers' dependence on how they utilize technology in the classroom is a success factor in digital learning. Hence, the main obstacle in applying technological devices to the teaching and learning process can be caused by the teacher's lack of competence in mastering digital technology. Thus, the success of digital literacy in classroom settings is often associated with the key role of the teacher as a facilitator in the teaching and learning process. Therefore, digital literacy is a must to be mastered for English teachers today since the capability to practice digital technology, communications tools, and networks to access information become a piece of common knowledge for the school society.

This is in line with Hockly (2012) that digital literacy is defined as skills needed in covering information, media, and technology to face the 21st-century education era. As a consequence, English teachers must have digital literacy in the two following aspects: (1) how to integrate information and communication technology (ICT) into learning circumstances, and (2) how to create innovative digitized instructional learning models.

A. The integration of ICT into learning circumstance

Currently, students and teachers' activities are inseparable from the use of computers and internet technology because, in addition to low-cost access, users also easily use the internet and social media as their daily activities, especially for learning activities. With the easiness of access to the internet, many advantages of using digital technology can be beneficial in English language teaching. Hafifah & Sulistyo (2020) in their research on the perception of teachers in terms of technology integration in English language teaching in Indonesia that most teachers realize the importance of using technology to improve students' English skills. Therefore, the integration of ICT into teaching and learning circumstances is very promising in facilitating students to learn. For this reason, ICT has a significant impact on changes to education systems in many developed countries and has become a global policy of education (Zhao, et al. 2016). ICT is being welcomed by both teachers and students as a new means of promoting contemporary and effective learning activities to improve English proficiency. Hence, ICT competency in Indonesia is one of the main aspects of communication skills and has become the goals and learning outcomes of the Indonesian national curriculum.

B. Innovative digitized instructional learning models

What are types of teachers' skills potentially relevant for the frequency of digital technology use during teaching? To answer this question, Sailer et al., (2021) assert explicitly that teachers must have specific technology-related teaching skills in terms of planning, implementing, and evaluating in order to make interactive learning activities during teaching. To achieve this objective, teachers must be able to construct innovative instructional learning models. Innovative learning models that are considered to have the potential to integrate technology and are flexible to be applied at various age and education levels, and fields of study, according to Pujiriyanto (2019), include discovery learning, project-based learning, problem-based learning, self-directed learning, contextual learning, role-play & simulation, cooperative learning, collaborative learning, and small-group discussions.

The above various learning models provide opportunities for integrating technology in the process. To facilitate and provide an overview of how to integrate technology, a framework for integrating technology in learning has been developed based on what Koh, et.al (2013) named TPACK (technological, pedagogical, and content knowledge). In its implementation, learning instruction which is integrated by TPACK, according to Shulman (1986), emphasizes the interplay between three types of knowledge: content knowledge, pedagogical knowledge, and technological knowledge. The concept of TPACK involves seven knowledge domains as shown in figure 1 below.

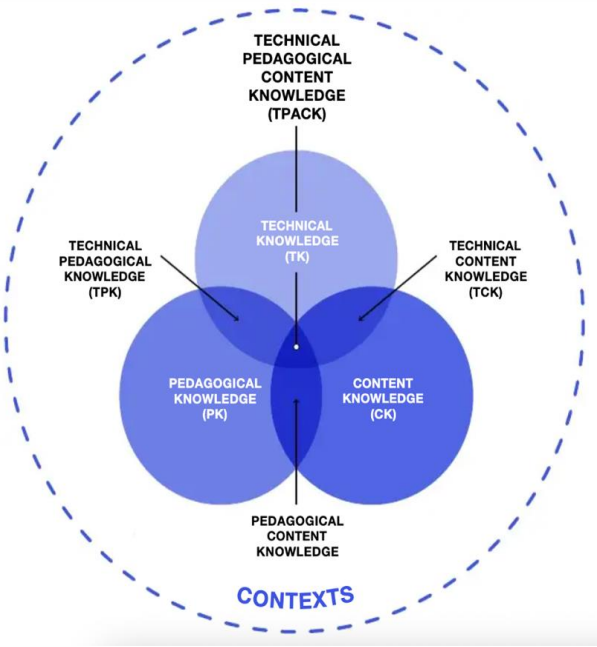

Figure 1. The integration of TPACK in learning contexts based on Koh, et.al (2013)

Figure 1 above provides a description related to integrating technology in learning where teachers must involve seven domains of knowledge in implementing the learning context, namely: content knowledge, pedagogical knowledge, technological knowledge, pedagogical content knowledge, technological content knowledge, technological pedagogical knowledge, and technological pedagogical content knowledge. Hence, by integrating TPACK into the learning context teachers might teach certain materials using learning technology to facilitate the learning process of students.

3. English teachers' readiness today

How is today's English teachers' readiness in Indonesia regarding the implementation of technology in their classroom? Several studies on teachers' perspectives on integrating technology into the teaching of English as a foreign language, the majority of English teachers in Indonesia believe that technology is important and useful for teaching all skills of English, but that it conflicts with their in-class teaching methods. Although they have a favorable attitude toward the advancement of technology or the use of ICT for language learning, it shows that the majority of teachers lack the ICT pedagogy that they can implement in their classrooms (Febriani & Hafifah, 2019; Fauzi et al., 2022).

A more recent study was investigated by Hafifah & Sulistyo (2020) which found that the implementation of technology into English language classrooms in Indonesia met two major problems. First, the primary issue with teachers integrating ICT is the ICT facility, which includes internet access and the availability of technological tools. Teachers do not have enough facilities and infrastructure that support them in applying ICT in English language teaching. In addition, there are various qualities to the internet connection in many different parts of Indonesia. As a result, most teachers have limited access to the Internet, particularly in Indonesia's rural areas. The teachers' ICT proficiency is the second issue; while the majority of

them are ICT literate, very few of them participated in training and updated their skills. By this condition, the teachers feel a lack of ICT skills although they are quite ICT literate. This is to confirm a study from Zhao et al. (2016) that training experience influences teachers' ICT skills as well as their attitude toward ICT. For this reason, the concern for us in the near future is that most teachers need regular training in integrating ICT into language instruction. The more knowledge and experience applying ICT teachers have, the more improving their competence in ICT literacy.

CONCLUSION

Being literate in the digital age means being able to use information and communication technologies to find, evaluate, create, and communicate information. When it comes to language learning, the awareness and the attitude to use digital-based learning techniques can play a major role in enhancing the qualitative aspect of English language teaching. However, not all English teachers are ready to use technology tools since they have insufficient digital literacy. English teachers also have an inadequate digital environment, such as not updating existing digital devices and the lack of training experience in ICT it affects the improvement of their digital competence and their digital literacy level as well. This is indeed a challenge for English teachers. In anticipation of this challenge, it is recommended that the authority increase the facility and digitized school infrastructures to have ICT more integrated into education settings. More organized and more frequent training in ICT applications is badly needed in this context to improve English teachers' ICT skills.

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