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ENGLISH AS A FOREIGN LANGUAGE (EFL) STUDENT TEACHERS' READINESS TO DEAL WITH ONLINE LEARNING DURING THE COVID-19 PANDEMIC

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Abstract

The COVID-19 pandemic has forced all teachers to deliver online teaching and learning whether they are ready or not. Some studies have reported that many teachers face many challenges in delivering online classrooms. Hence, it is logical to assume that student teachers are likely to face even a more complex situation dealing with this issue. Unlike in-service teachers, for student teachers, they lack experience in both face-to-face and online learning. Therefore, this study attempts to report the readiness of English as a Foreign Language (EFL) student teachers and the kinds of digital competencies they need to be ready to teach English with digital technology using a quantitative approach. There were 60 respondents who participated using convenience sampling, from an Islamic university in Bogor, Indonesia. Using the TESOL Technology Standards for Teachers and Technology Acceptance Model (TAM) theory, a questionnaire consisting of 50 items was written in 'yes' and 'no' questions. The findings of the study show that most respondents possess adequate basic digital skills to teach digital technology. However, they need to learn various digital technology that more effectively supports language instructions.The respondents also indicate acceptance of the utilization of technology and are willing to integrate it into their future classrooms. This study implies the need to include technology in the curriculum of the English Education Department.

Keywords: EFL student teachers; ICT; TAM; TESOL Technology Standards; TELL

Abstrak

Pandemi COVID-19 telah memaksa semua guru untuk melaksanakan belajar mengajar secara online baik siap atau tidak. Beberapa penelitian telah melaporkan bahwa banyak guru menghadapi banyak tantangan dalam memberikan ruang kelas online. Oleh karena itu, masuk akal untuk mengasumsikan bahwa siswa guru cenderung menghadapi situasi yang lebih kompleks dalam menangani masalah ini. Tidak seperti guru yang sudah mengajar, mahasiswa, kurang pengalaman dalam pembelajaran tatap muka dan online. Oleh karena itu, penelitian ini mencoba melaporkan kesiapan siswa guru Bahasa Inggris sebagai Bahasa Asing (EFL) dan jenis kompetensi digital yang mereka butuhkan untuk siap mengajar Bahasa Inggris dengan teknologi digital menggunakan pendekatan kuantitatif. Ada 60 responden yang berpartisipasi menggunakan convenience sampling, dari sebuah universitas Islam di Bogor, Indonesia. Menggunakan teori TESOL Technology Standards for Teachers and Technology Acceptance Model (TAM), kuesioner yang terdiri dari 50 item ditulis dengan pertanyaan 'ya' dan 'tidak'. Temuan penelitian menunjukkan bahwa sebagian besar responden memiliki keterampilan digital dasar yang memadai untuk mengajarkan teknologi digital. Namun, mereka perlu mempelajari berbagai teknologi digital yang lebih efektif mendukung pengajaran bahasa. Responden juga menunjukkan penerimaan pemanfaatan teknologi dan bersedia mengintegrasikannya ke dalam kelas masa depan mereka. Studi ini menyiratkan perlunya memasukkan teknologi ke dalam kurikulum Departemen Pendidikan Bahasa Inggris.

***Kata kunci**: EFL student teachers; ICT; TAM; TESOL Technology Standards; TELL*

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Introduction

The spread of the COVID-19 virus that become pandemic worldwide has impacted all aspects of human life. It forces most human activities previously done through a physical approach, including education, to migrate into a digital platform (Adedoyin & Soykan, 2020) and push the running of online learning in a sudden and utterly unprepared situation (Atmojo & Nugroho, 2020). The pandemic has caused school suspensions in education, resulting in online learning replacing conventional face-to-face classroom learning (Moorhouse, 2020; Schneider and Council, 2020). As reported by the United Nations Education, Scientific and Cultural Organization or UNESCO (2020), close to 1.5 billion students' learning processes have been affected by the closure of schools and campuses following the COVID-19 pandemic. In Indonesia, the Indonesian Ministry of Education for and Culture (MoEC) has ordered all education units to do their activities from home trying to stop spread of virus that can maintain the health of the students, teachers, and all people involved in educational matters (Mendikbud, 2020a). Furthermore, the Ministry has also instructed the schools in the affected areas to run the online learning started from March 17, 2020, due to the increasing spread of the COVID-19 plague (Mendikbud, 2020b).

Some researchers have acknowledged the advantages of the rapid advancement of digital technology. For instance, Onyema et al., (2020) argue that due to its high capacity to facilitate ubiquitous learning in this pandemic, technology in education is one promising innovation that has become an inseparable component in managing academic hurdles during the COVID-19 outbreak to reduce disease propagation. Before the pandemic, some researchers such as Benali, Kaddouri, and Azzimani, (2018), Sullivan and Bhattacharya (2017) have argued that technology facilitates convenience and practicality for modern people's lifestyles, significantly impacting education. Woodson (2018) suggested that it allows teachers to design and make the lesson plan, provide multimodal instructions deliverance to foster students learning styles, do engaging practices and reviews, and support exciting assessment and instant feedback. Luckin, Holmes, Griffiths, and Forcier (2016) also mentioned that it promotes autonomous learning and activities to suit each students' pace and learning style. To add more, Li, Worch, Zhou, and Aguiton (2015) argue that digital technology could also potentially improve learning outcomes when used effectively. Moreover, integrating technology with its gamification and fun aspects into classroom instruction enhances students' motivation and engagement toward the subject given (Licorish, Owen, Daniel, & George, 2018). Those are proponents of online learning.

In the context of language learning, technology provides rich, authentic, and meaningful language learning resources, efficient and effective instruction delivery, and facilitates language teaching and learning productivity (Ghanizadeh, Razavi, and Jahedizadeh, 2015). Further, it encourages students to have real-world language exposure (Richard, 2015; Li, Snow, & White, 2015) and provides solutions and numerous possibilities to overcome language teachers' obstacles on their instructions (Walker, 2015). A study conducted by Mashhadi and Jamalifarb (2015) found that visual support can facilitate vocabulary mastery because it provides students with attractive visual cues to focus on specific items on the language input supporting the textual lines.

However, in this COVID-19 pandemic situation, when teachers have to carry out all school activities from home, teachers worldwide feel anxious, distressed, reluctant to teach using

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internet and the computer, and are poorly facilitated (Bruun & Zachariassen, 2020). In Indonesia teachers in many areas have reported some challenges in delivering online classes due to some factors such as less exposure to technology, less support from school and government, and low gadget ownership, especially in rural areas (e.g. Alifia et al., 2020; Lie et al., 2020). These existing studies mostly on teachers' readiness to teach have primarily focused on in-service teachers. Hence, little is known whether student teachers are ready to integrate technology into their classrooms while they will be future teachers.

In this context, teaching digital technology literacy and competence at the university level is essential in developing student teachers' attitudes, perspectives, and competence in using digital technology in their instruction, as has been argued by Jeong (2017) before the COVID-19 pandemic began. The question is whether student teachers' preparation programs at the university level play a significant role in providing well-armed graduates to support and introduce their student teachers to the meaningful utilization of technology (Carpenter et al., 2019). Before the COVID-19 pandemic, Teo (2015) has predicted that the teachers' education program was less concerned about preparing the preservice teachers with initial technology integration training. They face some hurdles in managing the preparation program for their teacher candidates to integrate technology and intensively provide them with the related courses that have already included the prerequisites needed (Zipke, 2018). In Indonesia, as the context of the study, although not specifically related to the provision of technology training for student teachers, Kholis & Murwanti (2019) and Kholis (2019) argue that problems with teachers in Indonesia are influenced by pre-service teacher education program and the lack of sustainable teacher professional development.

As a result, at the beginning of their carrier, many fresh graduated teachers face difficulties integrating technology into their instructions. Some of the reasons include the excessive amount of course content, insufficient time to create and apply the technology-integrated lesson, the unavailability of the necessary software (Brenner & Brill, 2016), and merely being facilitated with the conventional course and workshop (Buss, Foulger, Wetzel, & Lindsey, 2018). Moreover, most technology integration preparation programs focus on the software rather than the methods or models to integrate it into instructions that make preservice and in-service teachers feel unprepared even though they have completed the course (Snow, Dismuke, Wenner, & Hicks, 2019).

In short, we know from previous studies that in-service teachers have to struggle in incorporating technology in their classrooms, while we do not know whether our future teachers are ready to use technology in their online instruction as well. In addition, we also know that before the pandemic, some have criticized teacher education programs for not providing required courses and practice for their student teachers to utilize technology in their future classrooms. Therefore, it is crucial to examine student teachers' readiness to use technology in the classrooms and competencies to deliver the online teaching and learning process. The findings of this study are expected to offer helpful information, especially for student teachers and teacher education programs. Student teachers can reflect their readiness and digital competencies whereas teacher education programs, especially the English Education Department, can look back at their curriculum and decide necessary actions to ensure that their student teachers have the required knowledge and skills in delivering online instruction.

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Some Criteria to Teach with Digital Technology

Digital Competences and Digital Literacy

Maré and Mihai (2018) defined technology in the educational context as using any tools or digital applications to support the instructions inside the classroom. They suggest that technology engages and facilitates students in learning through, from, and with its use, assisting teachers in completing the teaching administration, creating the content to be delivered, and using it on their teaching presentation. Zhou and Wei (2018) also suggest that to be effective teachers in the digital age, they have to possess sufficient knowledge and skills to utilize digital devices and applications inside the class. Therefore, the utilization and the integration of digital technology into the instructions require teachers to have sufficient digital technology competence covering the knowledge, skills, and literacy.

Nami and Vaezi (2018) defined technology knowledge as comprehension of utilizing digital devices (computer, smartphone, etc.), search engines, web browsers, social networking sites, blogs, wikis, Learning Management Systems (LMSs), audio, video, and text sharing software. In the context of language learning, Kabanova and Kogan (2017) refer to Information and Communication Technology (ICT) competence as a combination of four groups of skills, namely cognitive level skills (the ability to learn and to master new technology, understanding its place in the teaching process, and instructional design), technical level skills (the ability to use computer programs, internet resources, LMS, etc. for teaching purposes), motivation level skills (the ability to feel the need in professional development in online teaching, to enjoy using technology, etc.), and experience level skills (sustainability in using technology, ability to use new skills, time management, etc.)

Similarly, Bahcivan et al., (2019) describe ICT competence as the ability to purposefully combine digital technology knowledge and skills and have a positive attitude towards it. Therefore, possessing ICT competence is not merely using the ICT technically and having the knowledge and comprehension on its matters. It also involves the functional aspects, interpersonal attributes, and ethical value of ICT. Educators from different disciplines and countries also note that ICT competence is not merely about technology alone. Teachers are also supposed to understand pedagogical considerations and skills required to support them effectively and efficiently (White, Folley, Williams, & Allen, 2015).

In other words, digital literacy is not merely the ability to use digital tools but also includes the collaboration between the technical, procedural, cognitive, and socio-emotional skills required to live as digital citizens (Cervera & Cantabrana, 2015). In line with this, Gonzalez-Lioret (2014) mentioned that digital literacy covers various skills, from operating the hardware and software and gathering and selecting relevant information and communicating effectively with others through the internet or computer-mediated literacy.

In summary, digital literacy is deemed a compulsory competence to acquire by student teachers to teach effectively in the digital era (Merç, 2015). Therefore, when preparing the student teachers, Dinçer (2018) recommends that teacher education institutions provide them with a technology-rich educational environment and gradually specialize it according to their disciplines to ensure their future integration. The focus on developing the technological literacy

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and skills for language teachers should aim to 1) acquire and maintain foundational knowledge and skills in technology for professional purposes; 2) integrate pedagogical knowledge and skills with technology to enhance language teaching and learning; 3) apply technology in record-keeping, feedback, and assessment; and 4) use technology to improve communication, collaboration, and efficiency. (TESOL, 2008, as cited in Egbert & Borysenko, 2018).

In order to be competent in using technology, it is, of course, important to look at student teachers' familiarity with digital technology, which can be referred to as the level of experience and capacity to utilize digital technology (Byungura, Hansson, Muparasi, & Ruhinda, 2018). In other words, the term 'familiariy' in this paper, also following the concept of Rogers (2002), is used to reveal the respondents' initial exposure towards technology. Nevertheless, these objectives will not be achieved when teachers and student teachers do not accept technology.

Teachers' Technology Acceptance

Technology acceptance refers to users' admission and agreement of the technology utilization in which the actual use of technology can be predicted (Teo, Milutinovic, & Zhou, 2016). Student teachers' intention to use and integrate technology in their future practice can be predicted by examining their technology acceptance level (Scherer, Siddiq, & Tondeur, 2019). Among the other acceptance or adoption models, Technology Acceptance Model (TAM), is acknowledged as the robust model since every variable from the later modified models has already been included in the TAM (Venkatesh, Thong, & Xu, 2016; Marangunić & Granić, 2015). TAM is claimed as the most popular used model to describe one's motivation in using technology. Proposed by Davis in 1985, it is also claimed that on the TAM theory, individual's use of ICT can be predicted based on their beliefs and attitude toward the technology (Anni, Sunawan, & Haryono, 2018; Handayani, Hidayanto, Pinem, Hapsari, Sandhyaduhita, & Budi, 2016). There could be two important reasons to accept and incorporate new technology i.e. the belief of the usefulness of the latest technology in improving productivity (perceived usefulness) and whether the new technology helps accomplish works (perceived ease of use). Numerous studies using the TAM as the conceptual framework has shown that perceived usefulness and ease of use are highly reliable in predicting one's attitude towards technology use and intention to use it (Ducey & Coovert, 2016). Figure 1 describes the TAM framework.

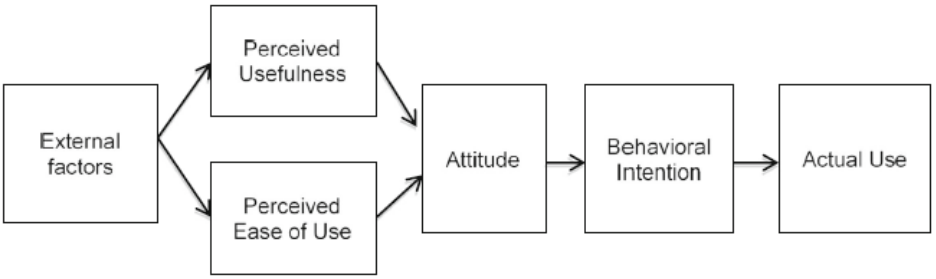

Figure 1. The TAM framework

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Teachers' Technology Integration

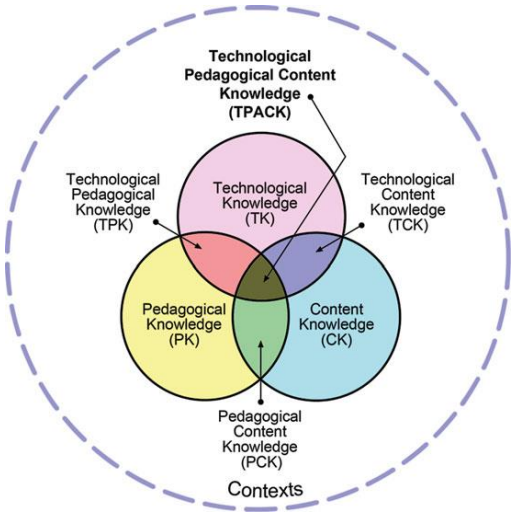

Figure 2. Technological pedagogical content knowledge framework (Mishra and Koehler 2006)

Besides having adequate digital competence, both preservice and in-service teachers should also know how to integrate this knowledge in their classrooms to deliver effective teaching (Gellerstedt, Babaheidari, & Svensson, 2018; Boholano, 2017). This technology integration can be defined as how teachers utilize technology for instructional deliverance to provide and reshape the teaching and learning activities more effectively (Gilakjani, 2017). In other words, it is a way of doing particular assignments by practically incorporating technical processes, methods, and knowledge that includes the hardware and the relation between the users, the tools, and the environment (Ahmadi & Reza, 2018).

The framework of combining content, pedagogical knowledge and the use of technology in delivering instruction has been proposed by Mishra and Koehler (2006), called Technological Pedagogical and Content Knowledge (TPACK). It is one of technology integration approaches, requiring teachers to integrate technological and pedagogical knowledge in their teaching (Teo, Sang, Mei & Hoi, 2019). In other words, TPACK is the interdependent situated knowledge needed to integrate digital tools and resources effectively in curriculum-based teaching (Harris, Phillips, Koehler, & Rosenberg, 2017). It suggests that teachers understand how knowledge of technology, pedagogy, and content interact in their instruction (Rosenberg & Koehler, 2015). In 2006, Mishra and Koehler developed TPACK in response to the absence of theory guiding technology integration into education. Based on the TPACK framework, technology integration should occur in all school subjects, which means that English teachers also need to acquire the knowledge and competence to enhance their instruction to meet the requirement of being professional EFL teachers (Wang & Dostál, 2018).

In the context of preservice teachers, only limited studies focus on EFL student teachers' readiness for technology integration into language learning. Some previous studies focus more on the lack of infrastructure and the causes of in-service teachers' incompetence in incorporating digital technology into their classrooms. For instance, Vatanartiran and Karadeniz (2015) carried out a large-scale study on the challenges and needs of K-12 in-service teachers in Turkey, which findings revealed three crucial issues they face in integrating technology into their instruction, namely 1) executive issue which relates to managerial and financial matter; 2) infrastructural issue

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which deals with the limitation of technological facility and maintenance, and 3) instructional issue which includes instructional material, students' readiness, and teachers' competencies. Furthermore, Adegbenro, Gumbo, and Olakanmi, (2017) investigated the attitude of 21 in-service teachers in Gauteng Province, South Africa, and their needs in integrating technology to support their instruction in a secondary school context. The result revealed that most teachers have a positive attitude toward incorporating technology into their classrooms and are willing to integrate it into their teaching and learning sessions. However, they still have to struggle with the insufficient ICT facilities, lack of ICT training, and teachers' professional development programs. Another example comes from Kabanova and Kogan (2017), which identified university language teachers' personal needs concerning their professional ICT competence to design a specially tailored in-service training course and test its efficiency. The findings revealed that most participants are reasonably confident in using ICT for their basic needs and have enough technical skills to prepare their content for the teaching. However, most of them consider themselves to have low professional ICT competence. A course syllabus was then designed to develop technical skills, instructional technology, and practices based on the findings, which certainly is a good follow-up action.

Referring to the studies mentioned above, not much is known concerning student teachers' readiness to integrate technology in the classrooms. Due to the urgency of digital literacy and competence during the covid-19 outbreak, it is crucial to verify student teachers' readiness to use digital technology in future classrooms. In this case, readiness refers to the fulfillment of the requirements to teach using technology, including student teachers' familiarity with some digital technology, their basic digital skills, and their acceptance of integrating technology in their future classrooms. To be more specific, this study addresses the following questions: 1) how familiar EFL student teachers are with digital technology?; 2) how is EFL student teachers' ICT basic skills; and 3) how is EFL student teachers' level of acceptance of digital technology? The findings of this study are expected to give important information on the lacks, wants, and needs of EFL student teachers concerning their basic digital skills and literacy.

Method

This study employed a quantitative approach in which a survey design was employed to reveal student teachers' readiness to teach with digital platforms. Using a convenience sampling, the present study involved 60 EFL student teachers from an Islamic university in Bogor. They participated as they have taken ICT, Computer Assisted Language Learning (CALL), or Mobile Assisted Language Learning (MALL) courses and have accomplished the teaching practicum program that offers them experience the real struggles many teachers face in incorporating technology into their instructions. Therefore, they were expected to give more apparent descriptions of the readiness and whether their existing basic digital skills and literacy have met the required competencies based on the TESOL's Technology standard for EFL teachers.

Due to the outbreak of the Covid-19 Pandemic, the present study collected the data by delivering a questionnaire written inv*'yes' and 'no'* questions through a google form platform. There were 50 items representing EFL student teachers' familiarity with digital technology (11 items), their basic digital skills to figure out the respondents' eligibility in teaching with

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technology referring to TESOL Technology Standard for Language Teachers (29 items), and their technology acceptance level based on TAM theory (10 items).

Content validity analysis was employed by inviting two experts as validators, while Cronbach's Alpha was used to examine the instrument's reliability. The reliability coefficient for each construct varies from .76 to .94, indicating that the instrument is reliable. The data were analyzed using descriptive statistics in which both frequency and percentage were calculated.

Results and Discussion

EFL Student Teachers' Familiarity with Digital Technology

This section addresses the study's first question, which concerns EFL student teachers' familiarity with digital platforms focussing on language skills enhancement, as shown in Table 1.

Table 1. Student Teachers Familiarity with Digital Applications and Websites to Enhance Language Learning

1.	Reading Skills		**WebQuest**	**Bilingualkidspot.com**	**Independent. co.uk**	**AR textbooks**
			4 (6,67%)	4 (6,67%)	2 (3,33%)	6 (10%)
2.	**Listening Skills**	Lyricstraining.com	talkingbook	Ello	Esl-lab.com	audacity	vocaroo
		5 (8,33%)	4 (6,67%)	24 (40%)	1 (1,67%)	8 (13,33%)	3 (5%)
3.	**Speaking Skills**			Talktyper	Or	Google assistant	google translate
				1 (1,67%)	3 (5%)	38 (63,33%)	59 (98,33%)
4.	**Writing Skills**			Essaybot	Killbot	Blog	Writing exercises. co.UK
				2 (3,33%)	8 (13,33%)	19 (31,67%)	1 (1,67%)
5.	**Vocabulary**	visual dictionaries (http://visual.merriam-webster.com/)		thesauruses (www.visualthesaurus.com)		visual imagery http://thevisualdictionary.net/	
		11 (18,33%)		8 (13,33%)		4 (6,67%)	
6.	**Grammar**			Duolingo	Grammarly	Class dojo	Grammar Ninja
				46 (76,67%)	52 (86,67%)	4 (6,67%)	1 (1,67%)

The findings show that most respondents are not exposed to various digital media for language learning enhancement, such as reading, listening, writing, and vocabulary enrichment. For instance, on reading skills, nearly all participants do not know the four mentioned platforms or websites that can enhance students' reading comprehension since only 10% or less are familiar with the platforms mentioned in the instrument. For listening, the figure is better since 40% of them have known Ello although, for other media, the statistics vary from 1.67% up to 13.33%.

Many more respondents know digital platforms for speaking than writing regarding productive skills. 63.33% and 98.33% know google assistant and Google Translate, respectively, while for writing, standing as the highest, 31.67% know blog as a medium for teaching writing. Finally, concerning the familiarity with digital platforms on language components, more student teachers are familiar with digital platforms associated with grammar than vocabulary. 76% and 86% are aware of Duolingo and Grammarly, respectively, compared to only 13.33% and 18.33% who know thesaurus and visual dictionaries.

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Furthermore, concerning the utilization of supporting digital platforms for their future teaching, Table 2 shows that the student teachers have been familiar with the use of most popular digital tools such as WhatsApp, zoom, google meet and google classroom, and Instagram to initiate social networking and teaching and learning interaction though conference meeting. To provide media for their teaching and learning, Ms Powerpoint is the most famous while Prezi and Sway are the two least familiar platforms. It is also clear that more than 50% of the participants are familiar with applications to create video content, in which the highest portion (78%) know Kinemaster.

Table 2. EFL Student Teachers' Use of Digital Technology in Supporting Their Future Teaching

1.	**Social networking platforms**	**Whatsapp**	**Twitter**	**Blog**	**Telegram**	**Facebook**	**Instagram**
		59 (96,67%)	36 (60%)	20 (33,33%)	45 (75%)	40 (66,67%)	52, (86,67%)
2	Conference and meeting tools and digital learning platforms	Skype	zoom	Edmodo	Google meet	Google Classroom	Moodle
		12 (20%)	59 (98,3%)	9 (15%)	52 (86,6%)	57 (95%)	1 (1,6%)
3.	Applications to create engaging presentations		Ms. Powerpoint	Canva	Sway	Powtoon	Prezi
			58 (96,67%)	51 (85%)	3 (5%)	10 (16,67%)	6 (10%)
5.	Applications to create interactive quizzes or activities		Google form	Ms. Form	Live worksheet	Kahoot	Quizzes
			57 (95%)	19 (31,7%)	2 (3,33%)	42 (70%)	30 (50%)
6.	Applications to create annotated, engaging video content			Kinemaster	Video	InShot	Viva Video
				47 (78,33%)	8 (13,33%)	38 (63,33%)	38 (63,33%)
7.	Applications to provide interactive and collaborative learning	WIKI	mentimeter	Survey Monkey	Google drive	Padlet	Blogger
		19 (31,67%)	5 (8,33%)	1 (1, 67%)	57 (95%)	29 (48,33%)	19 (31,67%)
8.	Create Visually engaging content			Corel draw	Canva	Photoshop	Google draw
				18 (30%)	51 (85%)	36 (60%)	8 (13,33%)
9.	Create digital portfolios			Weebly 2 (3,33%)		Google sites 11 (18,33%)	
10.	Preparing learning material and activities				lessonwriter.com	Google sites	WebQuest
					2 (3,33%)	15 (25%)	1 (1,67%)
11.	Manipulating or changing link of websites into QR code or memorable websites address			QR Code Generator	QR Code Reader	Bitly.com	gg.gg
				19 (31,67%)	20 (33,33%)	16 (26,67%)	4 (6,67%)

Regarding the provision of interactive and collaborative learning, google drive is the most familiar, while Survey Monkey (1,67%) and Mentimeter (8,33%) are the two least likely to be used by the EFL student teachers in this study. Apparently, padlet is quite well known as 48,33% of respondents plan to use it in their future teaching and learning activities. Many plan to use canva and photoshop to create visually engaging content, at 85% and 60% respectively.

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Unexpectedly, for preparing learning materials and activities, only a few of them are familiar with the three offered options, i.e. lesson writer (3,33%), google sites (25%), and Webquest (1,67%).

EFL Student Teachers' ICT Skills

To address the second research question, this section explains EFL student teachers' ICT skills and whether they have met the digital technology standards to prepare them to teach with digital technology using the TESOL Technology Standards for Teachers. There are five aspects measured to investigate EFL student teachers' ICT skills, namely EFL student teachers' ICT basic skills and EFL Student Teachers' Technological Standard Point 1 – 4.

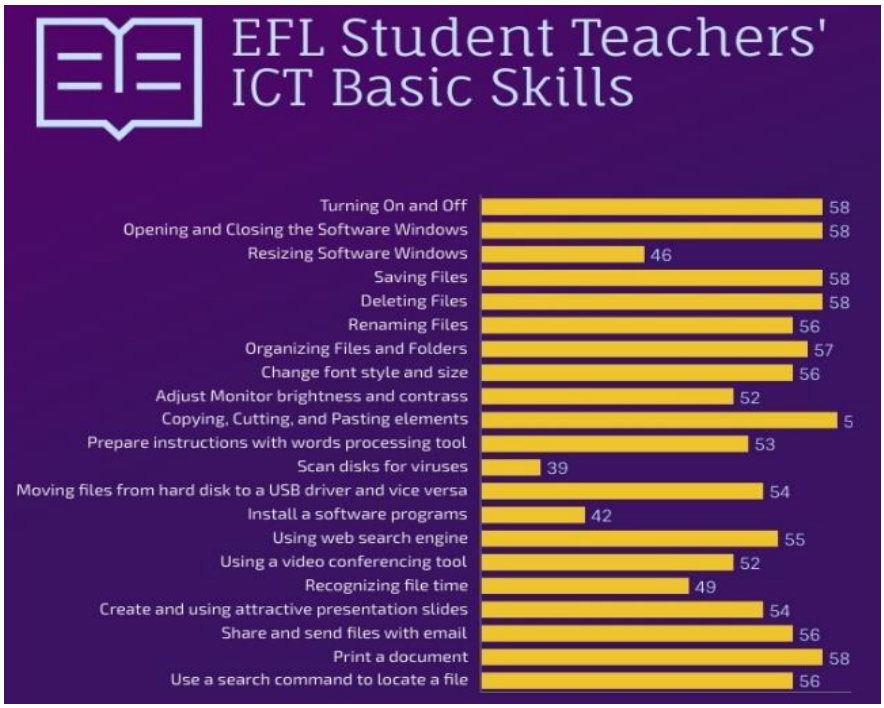

Figure 1. EFL Student Teachers ICT Basic Skills.

Figure 1 reveals that more than 90% of the participants can operate ICT basic skills starting from turning on and off, opening and closing Windows software, saving, deleting, renaming, and organizing files and folders. Nearly all of them are also skillful in creating PowerPoint presentation files, sharing files through emails or moving them from their device to USB driver or vice versa, and using a search command to locate a file. However, few of them need more training on ensuring safety from viruses, installing software programs, and resizing windows.

Furthermore, as displayed in Table 3, the next aspect measured is EFL Student Teachers' Technological Standard Point 1, which deal with whether they have acquired and maintained foundational knowledge and skills in technology for professional purposes. The findings show that all requirements in this respect have been fulfilled except involvement in online communities. More than 90% of the respondents do not get involved in virtual villages. This can be related to the fact that nearly 20% of them do not exchange information on available technology to enhance teaching with their mates, likely due to a lack of involvement in online communities. The good thing is that 100% perceive that they can use online technology to deliver instructional roles in their online teaching.

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Table 3. EFL Student Teachers' Technological Standard Point 1

No.	*EFL student teachers acquire and maintain foundational knowledge and skills in technology for professional purposes.*	Yes	No	Interpretation
1.	I belong to online communities (e.g., mailing lists, blogs, wikis, podcasts) Mention the name of your community…….	5 (8,3%)	55 (91,7%)	No
2.	I share information about available technology to enhance teachings with my classmates	49 (81,7%)	11 (18,3%)	Yes
3.	I can take advantage of professional development related to technology integration (e.g., conferences, journals, mailing lists, communities of practice).	54 (90%)	6 (10%)	Yes
4.	I keep up with information through a variety of sources that inform technology use. (e.g., books, journals, mailing lists, conventions).	51 (85%)	9 (15%)	Yes
5.	I can use online technology as available to deliver instructional or support material.	60 (100%)	0	Yes
6.	I can adapt a variety of digital resources.	55 (91,7%)	5 (8,3%)	Yes
7.	I conform to local legal requirements regarding accessibility and copyright	59 (98,3%)	1 (1,7%)	Yes

The following criteria deal with whether the EFL student teachers can integrate pedagogical knowledge and skills with technology to enhance language teaching and learning, which results are described in Table 4. As expected, it can be clearly seen that more than 90% of respondents in this study can integrate their pedagogical skills with technology to deliver their future instruction.

Table 4. EFL Student Teachers' Technological Standard Point 2

No.	*EFL student teachers can integrate pedagogical knowledge and skills with technology to enhance language teaching and learning.*	Yes	No	Interpretation
1.	I can identify appropriate technology environments (e.g., lab, one computer class, online, independent use) to meet specific learning/teaching goals.	58 (96,67%)	2 (3,33%)	Yes
2.	I choose technology that is aligned with needs and abilities of the students (e.g., language learning–focused software, productivity tools, content tools)	56 (93,33%)	4 (6,67%)	Yes
3.	I ensure that students understand how to use the technology to meet instructional goals before I teach	58 (96,67%)	2 (3,33%)	Yes
4.	I can make several backup plans for when the technology is not working	55 (91,67%)	5 (8,33%)	Yes

Regarding identifying appropriate technology environments to meet specific learning goals, more than 95% of the EFL student teachers in this study believe they can do so. The same percentage also consider themselves to be able to choose platforms and tools appropriate to students' needs and abilities. What should be noted in this point is that nearly 10% of the respondents cannot make several backup plans when the devices do not work.

Next, it is also important to look at the participants' ability to apply technology in record keeping, assessing, and providing feedback to students, which are presented in Table 5. Unlike the previous point, the EFL student teachers' answers vary, showing considerable differences in general.

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Table 5. EFL Student Teachers' Technological Standard Point 3

No.	*EFL student teachers' ability to apply technology in record-keeping, assessing and providing feedback*	Yes	No	Interpretation
1.	I am familiar with few record-keeping tools and techniques (e.g., software-based classroom management tools, electronic grade books, reports to stakeholders)	35 (58,33%)	25 (41,67%)	Yes
2.	I can use technology to illustrate learner progress (e.g., graphic representations of scores over time, revision history).	39 (65%)	21 (35%)	Yes
3.	I understand various methods of providing electronic feedback on student work (e.g., email, insert comments).	54 (90%)	6 (10%)	Yes
4.	I can give feedback through digital file exchange (e.g., review tools in writing; annotated comments in speaking).	54 (90%)	6 (10%)	Yes

It can be generally said that most of the respondents can apply their technological competence and knowledge in record-keeping, giving some feedback, and assessing using digital tools. Nevertheless, it is crucial to note that 41.67% are not familiar with some available platforms to manage classrooms and report the results to relevant stakeholders. Similarly, more or less one-third (35%) cannot use technology to illustrate students' progress using graphic representation or revision history. The interesting point is that 90% of them can understand how to provide feedback to students via email or insert comments next to students' work.

Finally, the last point investigated in this section is whether the EFL student teachers use technology to improve communication, collaboration, and efficiency. Table 6 explains the findings, which reveal that most of them have used digital technology to maintain and enhance communication, collaboration, and efficiency. This is because at least 90% of the participants answered "yes" to five out of eight questions posed in this aspect, while at least 85% of them answered "yes" to the three remaining questions.

Table 6. EFL Student Teachers' Technological Standard Point 4

No.	*EFL student teachers' use of technology to improve communication, collaboration, and efficiency*	Yes	No	Interpretation
1.	I share my email address with students and peers.	51 (85%)	9 (15%)	Yes
2.	I can maintain an electronic forum (e.g., webpage, blog, WAG) to post information for students about the class.	54 (90%)	6 (10%)	Yes
3.	I can view and give comment on students' electronic work (e.g., electronic portfolios, project work, websites).	53 (88,33%)	7 (11,67%)	Yes
4.	I can share instructional material digitally.	57 (95%)	3 (5%)	Yes
5.	I can implement lesson plans obtained from the internet.	58 (96,67%)	2 (3,33%)	Yes
6.	I can draw on resources (lesson plans and teaching ideas) that are posted online.	56 (93,33%)	4 (6,67%)	Yes
7.	I can use electronic resources to find additional materials for lesson planning and classroom use.	56 (93,33%)	4 (6,67%)	Yes
8.	I can arrange a system to collect, organize, and retrieve materials and students' data.	51 (85%)	9 (15%)	Yes

Student Teachers' Technology Acceptance

As previously argued, this study proposes student teachers' technology acceptance as an indicator to examine the EFL student teachers' readiness in teaching using digital technology. TAM theory is used which offers four aspects to show factors that affect one's technological

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acceptance level, namely, Perceived Ease of Use (PEU), Perceived Usefulness (PU), Attitude toward the Use of digital technology (ATU), and Behavioral Intention to Use (BIU), as in presented in Table 7.

Table 7. Student Teachers Technological Acceptance (TAM)

No.	Student Teachers Technological Acceptance (TAM)	Yes	No	Interpretation
	Perceived Ease of Use (PEU)			
1.	I would find ICT based learning to be flexible to interact with	55 (91,67%)	5 (8,33%)	Yes
2.	Learning to operate ICT based learning would be easy for me	54 (90%)	6 (10%)	Yes
3.	It would be easy for me to get ICT based learning to do what I want to do	55 (91,67%)	5 (8,33%)	Yes
4.	I feel that my ability to determine ICT based learning ease of use is limited by my lack of experience	57 (95%)	3 (5%)	Yes
	Perceived Usefulness (PU)			
5.	Using ICT based learning in my English Language Teaching course would enable me to accomplish tasks more quickly	58 (96,67%)	2 (3,33%)	Yes
6.	Using ICT based learning would improve my English Language Teaching course performance	58 (96,67%)	2 (3,33%)	Yes
7.	Using ICT based learning would enhance my effectiveness on the English Language Teaching course	57 (95%)	3 (5%)	Yes
8.	Using ICT based learning would make it easier to do my English Language Teaching course	58 (96,67%)	2 (3,33%)	Yes
	Attitude towards the use of Digital Technology (ATU)			
9.	I believe it is a good idea to use an ICT based learning on English Language Teaching course	58 (96,67%)	2 (3,33%)	Yes
	Behavioral Intention to Use (BIU)			
10.	I plan to use an ICT based learning in the future	59 (98,3%)	1 (1,7%)	Yes

The data displayed in Table 7 indicate that most of the participants have fulfilled the criteria, meaning that they accept the positive use of technology in the teaching and learning process. They consider that ICT-based learning is flexible and are confident in operating relevant devices. They also believe that ICT-based education will help them finish their tasks faster and enhance their teaching performance. Hence, they conclude that using ICT-based learning to teach English is a good idea and confirm that they will use it in their future teaching activities. However, they also note that lack of experience can limit their decision in using ICT-based learning. Overall, it can be concluded that most of the participants accept the utilization of digital technology in language instructions.

Discussions

The findings indicate that the participants of the present study mostly have adequate basic digital skills. As Littlejohn and Hood (2017) suggested, basic digital literacy is needed for student teachers to feel more convincing in utilizing the tools and maximizing the use of open educational resources (OER) to support the instructions. Jeong (2017) also suggested that educational and pedagogical goals should be considered along with the utilization of the new technology to make student teachers aware in choosing the suitable kinds of tools to be used and how to operate them on their language learning and future career as teachers.

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In revealing the respondents' basic digital technology competencies, the term "familiarity" is aligned with the first stage of technology adoption hierarchical model posed by Rieber and Welliver (1989) then refined by Hooper and Rieber (1995). It is used to define the participants' initial exposure towards technology, while the "have used it" statement is used to rephrase the term "utilization" of the new digital technology that the respondents try to incorporate for instructional purposes (Rogers, 2002). The present study's findings suggest that, in general, most of the respondents are relatively familiar with the digital platforms to teach. However, few alternative digital applications, platforms, and websites are still unfamiliar and less explored.

To ensure that student teachers possess the required competencies, it is essential to provide them with some specific courses such as ICT, CALL, MALL or Instructional media, and also to verify that they have met the standardized criteria approved among educators in a broader scope. This step is also crucial for conducting the needs analysis to investigate the gap between the student teachers' present situation and the expected competence required by the standardized criteria (target situation). Therefore, in order to verify whether the student teachers have met the expected criteria, the present study adapted the points proposed from TESOL Teachers' Technological Standard by selecting some subpoints to fit the goals in investigating the EFL student teachers' eligibility in teaching using technology. Based on the adapted criteria, it was revealed that most of the student teachers have shown positive responses that they have met most of the TESOL Technological Standard requirements. However, most of them admitted that they do not belong to any kind of community or group concerned about the utilization of technology for educational purposes. Referring to the regulation of the Ministry of Education and Culture (MoEC) no. 45/2015, it was also revealed that the findings of the student teachers' basic digital skills and TESOL Technological Standard are consistent with most of the criteria to be eligible to teach with technology.

The level of student teachers' acceptance of technology can be considered the critical factor affecting student teachers' decisions in incorporating digital technology into their future careers. The result of the present study revealed that the respondents' openness to embracing new digital technology is the result of their positive responses towards the practicality and usefulness of the digital technology and their positive perception and willingness to use it in their future careers.

Overall, the findings provide information that to be eligible to teach English with technology, the student teachers are expected to possess several digital competencies criteria. The idea of the present study is in line with Starkey's (2019) division of 4 main types of competencies: generic digital competence, digital teaching competence, professional digital competence, and personal characteristics. The initial refers to technological knowledge as part of the TPACK component that includes general task such as skills in operating standard functions of digital devices. Secondly, digital teaching competence refers to incorporating digital technology into instructional practice. Third, professional digital competence that covers technological proficiency, pedagogical compatibility, and social awareness requires student teachers' sensitivity as problem solvers to incorporate digital technology into their instruction successfully. And lastly, the personal characteristics of the student teachers' personal characteristics include their belief, confidence, and self-efficacy in incorporating the digital tools, that aligned with the state of digital nativity, experiences, and motivation in utilizing the digital tools. These findings have

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essential implications on the need to include technology in the curriculum of the English Education Department.

Conclusions

The present study investigated EFL student teachers' readiness to use technology by analyzing their familiarity with digital technologies, basic ICT skills, and acceptance level of technology use for their future teaching. The findings show that most respondents are familiar with digital technology and possess adequate basic digital competencies in operating digital tools. However, regarding the utilization of the applications, platforms, or websites that focus on language learning enhancement, most of them still need to be introduced and modeled on how to use it effectively due to their unfamiliarity with those kinds of language learning digital tools.

The TESOL Technological Standard for EFL Teachers revealed that most of the student teachers testified that their profiles have met the criteria to be ready to teach with digital technology. Nevertheless, the student teachers should have broadened their network by joining some community or group that focuses on sharing the information about the utilization of technology in language learning to keep up with the latest information.

Finally, Student teachers' acceptance of technology is also considered the crucial point that will determine their decisions on using digital technology in their future teaching. Their technological acceptance findings suggested that integrating digital technology into their future teaching can be more practical and ease them in teaching English. Therefore they are willing to integrate it on their later instructions.

Referring to the above findings, student teachers' educators need to keep up with the innovation of technology to enhance language learning while student teachers themselves need to be proactive and initiative in improving their digital competence and literacy by joining communities that focus on exploring and sharing the latest information about the use and integration of digital technology into education, particularly on enhancing language learning. Furthermore, teacher education programs should facilitate the development of proper digital knowledge and skills to be ready to prepare their student teachers with adequate digital competence since most of their lack of preparation is caused by the inadequacy of professional development program they get, particularly on the enhancement of their digital literacy and competence.

References

Adedoyin, O. B., & Soykan, E. (2020). Covid-19 pandemic and online learning: the challenges and opportunities. *Interactive Learning Environments*, 1-13.

Adegbenro, J. B., Gumbo, M. T., & Olakanmi, E. E. (2017). In-service secondary school teachers' technology integration needs in an ICT-enhanced classroom. *Turkish Online Journal of Educational Technology-TOJET, 16*(3), 79-87.

Ahmadi, D., & Reza, M. (2018). The use of technology in English language learning: A literature review. *International Journal of Research in English Education*, *3*(2), 115-125.

DOI: 10.15408/ tjems.v8i2.23324

Alifia, U., Barasa, A. R., Bima, L., Pramana, R. P., Revina, S., & Tresnatri, F. A. (2020). Learning from Home: Portrait of Teaching and Learning Inequalities in Times of The Covid-19 Pandemic. *Smeru Research Institute*, *1*(1), 1–8. https://smeru.or.id/sites/default/files/publication/cp01_covidpjj_eng.pdf.

Altschuld, J. W., & Watkins, R. (2014). A primer on needs assessment: More than 40 years of research and practice. In J. W. Altschuld & R. Watkins (Eds.), Needs assessment: Trends and a view toward the future (pp. 5-18), *New Directions for Youth Development, 2014*(144). Hoboken, NJ: Wiley Periodicals. DOI: 10.1002/ev.20099.

Anni, C. T., Sunawan, & Haryono. (2018). School counselors' intention to use technology: The technology acceptance model. *Turkish Online Journal of Educational Technology-TOJET, 17*(2), 120-124.

Atmojo, A. E. P., & Nugroho, A. (2020). EFL classes must go online! Teaching activities and challenges during covid-19 pandemic in Indonesia. *Register Journal, 13*(1), 49-76.

Bahcivan, E., Gurer, M. D., Yavuzalp, N., & Akayoglu, S. (2019). Investigating the relations among preservice teachers' teaching/learning beliefs and educational technology integration competencies: A structural equation modeling study. *Journal of Science Education and Technology, 28*(5), 579-588.

Bal, A. S., Grewal, D., Mills, A., & Ottley, G. (2015). Engaging students with social media. *Journal of Marketing Education*, 37(3), 190-203.

Benali, M., Kaddouri, M., & Azzimani, T. (2018). Digital competence of Moroccan teachers of English. *International Journal of Education and Development using ICT*, 14(2).

Boholano, H. B. (2017). Smart social networking: 21st century teaching and learning skills. *Research in Pedagogy, 7* (1), 21–29.

Bruun, A., & Zachariassen, D. (2020). *Zoom-fatigue: hvad ved vi fra samtaleanalysen? [Zoom-fatigue: what do we know from conversation analysis?*] Aarhus University, Denmark. Retrieved September 26, 2020. http://www.lingoblog.dk/zoom-fatigue-hvad-ved-vi-fra-samtaleanalysen/.

Buss, R. R., Foulger, T. S., Wetzel, K., & Lindsey, L. (2018). Preparing teachers to integrate technology into K–12 instruction II: Examining the effects of technology-infused methods courses and student teaching. *Journal of Digital Learning in Teacher Education*, *34*(3), 134-150.

Carpenter, J., Rosenberg, J., Dousay, T., Romero-Hall, E., Kessler, A., Phillips, M., Morrison, S., Fischer, C., & Krutka, D. (2019, March). What do Teacher Educators think of Teacher Education Technology Competencies? In *Society for Information Technology & Teacher Education International Conference* (pp. 796-801). Association for the Advancement of Computing in Education (AACE).

Cervera, M., & Cantabrana, J. (2015). Professional development in teacher digital competence and improving school quality from the teachers' perspective: A case study. *Journal of New Approaches in Educational Research*, *4*(2), 115-122.

Depdiknas. (2008). *Pengembangan bahan ajar*. Jakarta: Direktorat Jenderal Managemen Pendidikan Dasar dan Menengah, Direktorat Pendidikan Sekolah Menengah Atas.

DOI: 10.15408/ tjems.v8i2.23324

Dinçer, S. (2018). Are preservice teachers really literate enough to integrate technology in their classroom practice? Determining the technology literacy level of preservice teachers. *Education and Information Technologies*, *23*(6), 2699-2718.

Ducey, A.J., & Coovert, M.D. (2016). Predicting tablet computer use: An extended technology acceptance model for physicians. *Health Policy and Technology*. DOI: 10.1016/j.hlpt.2016.03.010.

Egbert, J., & Borysenko, N. (2018). Teacher preparation for using technology. *The TESOL Encyclopedia of English Language Teaching*, 1–7. doi:10.1002/9781118784235.eelt0432

Gellerstedt, M., Babaheidari, S. M., & Svensson, L. (2018). A first step towards a model for teachers' adoption of ICT pedagogy in schools. *Heliyon, 4*(9), e00786. DOI: 10.1016/j.heliyon.2018.e00786.

Ghanizadeh, A., Razavi, A., & Jahedizadeh, S. (2015). Technology-enhanced language learning (TELL): A review of resources and upshots. *International Letters of Chemistry, Physics and Astronomy*, 54, 73.

Gilakjani, A. P. (2017). A review of the literature on the integration of technology into the learning and teaching of English language skills. International Journal of English Linguistics, 7(5), 95-106. DOI: https://doi.org/10.5539/ijel.v7n5p95.

Gonzalez-Lloret, M. (2014). The need for needs analysis in technology-mediated TBLT. In M. Gonzalez-Lloret & L. Ortega (Eds.) *technology and tasks: Exploring technology-mediated TBLT*. Amsterdam/Philadelphia: John Benjamins. (pp. 23-50).

Handayani, P.W., Hidayanto, A.N., Pinem, A.A., Hapsari, I.C., Sandhyaduhita, P.I., & Budi, I. (2016). Acceptance model of a hospital information system. *International Journal of Medical Informatics*. DOI: 10.1016/j.ijmedinf.2016.12.004.

Harris, J., Phillips, M., Koehler, M., & Rosenberg, J. (2017). TPCK/TPACK research and development: Past, present, and future directions. *Australasian Journal of Educational Technology, 33*(3), i-viii. https://doi.org/10.14742/ajet.3907

Jeong, K. O. (2017). Preparing EFL student teachers with new technologies in the Korean context. *Computer Assisted Language Learning, 30*(6), 488-509.

Kabanova, N., & Kogan, M. (2017). Needs analysis as a cornerstone information of ICT competence in language teachers through specially tailored in-service training course. In Zaphiris, P., and Ioannou, A. (Eds.). *International Conference on Learning and Collaboration Technologies*. (pp. 110-123). Springer, Cham.

Kholis, N., & Murwanti, M. (2019). Teacher Professionalism in Indonesia, Malaysia, and New Zealand. *TARBIYA: Journal of Education in Muslim Society*, *6*(2), 179–196. https://doi.org/10.15408/tjems.v6i2.11487.

Li, J., Snow, C., & White, C. (2015). Urban adolescent students and technology: Access, use and interest in learning language and literacy. *Innovation in Language learning and teaching*, 9(2), 143-162.

Li, L., Worch, E., Zhou, Y., & Aguiton, R. (2015). How and why digital generation teachers use technology in the classroom: An explanatory sequential mixed-methods study.

DOI: 10.15408/ tjems.v8i2.23324

International Journal for the Scholarship of Teaching and Learning, Vol. 9. No. 2, article 9.

Licorish, S. A., Owen, H. E., Daniel, B., & George, J. L. (2018). Students' perception of Kahoot! 's influence on teaching and learning. *Research and Practice in Technology Enhanced Learning*, *13*(1), 9.

Lie, A., Tamah, S. M., Gozali, I., Triwidayati, K. R., Utami, T. S. D., & Jemadi, F. (2020). Secondary School Language Teachers' Online Learning Engagement During the Covid-19 Pandemic in Indonesia. *Journal of Information Technology Education: Research*, *19*, 803–832. https://doi.org/10.28945/4626.

Littlejohn, A., & Hood, N. (2017). How educators build knowledge and expand their practice: The case of open education resources. *British Journal of Educational Technology*, 48, 2, 499–510. DOI: https://doi.org/10.1111/bjet.12438.

Lubis, A. H. (2018). ICT integration in 21st-century Indonesian English language teaching: Myths and realities. *Cakrawala Pendidikan*, (1).

Luckin, R., Holmes, W., Griffiths, M., Forcier, L. (2016). *Intelligence Unleashed: An argument for AI in education*. London: Pearson Education.

Marangunić, N., & Granić, A. (2015). Technology acceptance model: A literature review from 1986 to 2013. *Universal Access in the Information Society*, *14*(1), 81–95.

Maré, M. G. J., & Mihai, M. A. (2018): Factors contributing to the level of acceptance of technology in affluent private schools. *Journal of Research on Technology in Education*. DOI: 10.1080/15391523.2018.1508389.

Mashhadi, F., & Jamalifar, G. (2015). Second language vocabulary learning through visual and textual representation. On the 2nd Global Conference on Linguistics and Foreign Language Teaching, LINELT-2014, Dubai – United Arab Emirates. *Procedia - Social and Behavioral Sciences* 192, Pp. 298 – 307 DOI: 10.1016/j.sbspro.2015.06.043.

Mendikbud. (2020a). *Surat edaran Mendikbud: Pelaksanaan kebijakan pendidikan dalam masa darurat penyebaran Corona Virus Disease (Covid-19)*. Retrieved from http://kemdikbud.go.id/main/files/download/51e9b72ef92c6d8.

Mendikbud. (2020b). *Surat edaran mendikbud: pembelajaran secara daring dan bekerja dari rumah dalam rangka pencegahan penyebaran Corona Virus Disease (Covid-19)*. Retrieved from http://kemdikbud.go.id/main/files/download/c5d9f0ec9ff40c6.

Merç, A. (2015). Using technology in the classroom: A study with Turkish preservice EFL teachers. *Turkish Online Journal of Educational Technology-TOJET, 14*(2), 229-240.

Moorhouse, B. L. (2020). Adaptations to a face-to-face initial teacher education course 'forced' online due to the COVID-19 pandemic. *Journal of Education for Teaching*. https://doi.org/10.1080/02607476.2020.1755205.

Nami, F., & Vaezi, S. (2018). How ready are our students for technology-enhanced learning? Students at a university of technology respond. *Journal of Computing in Higher Education*, *30*(3), 510-529.

DOI: 10.15408/ tjems.v8i2.23324

Onyema, E. M., Eucheria, N. C., Obafemi, F. A., Sen, S., Atonye, F. G., Sharma, A., & Alsayed, A. O. (2020). Impact of Coronavirus pandemic on education. *Journal of Education and Practice*, *11*(13), 108-121.

Oxford, R. L. (2016). *Teaching and researching language learning strategies: Self-regulation in context (2nd Edition)*. New York: Routledge.

Richards, J. C. (2015). The changing face of language learning: Learning beyond the classroom. *RELC Journal*, *46*(1), 5-22.

Rogers, P. L. (2002). Teacher-designers: How teachers use instructional design in real classrooms. In *Designing instruction for technology-enhanced learning* (pp. 1-17). IGI Global.

Rosenberg, J. M., & Koehler, M. J. (2015). Context and technological pedagogical content knowledge (TPACK): A systematic review. *Journal of Research on Technology in Education, 47*(3), 186-210.

Scherer, R., Siddiq, F., & Tondeur, J. (2019). The technology acceptance model (TAM): A meta-analytic structural equation modeling approach to explaining teachers' adoption of digital technology in education. *Computers in Education*, *128*, 13–35.

Schneider, S. L., & Council, M. L. (2020). Distance learning in the era of COVID-19. *Archives of Dermatological Research, April*. https://doi.org/10.1007/s00403-020-02088-9.

Snow, J.L., Dismuke, S.,Wenner, J., Hicks, S. (2019). Facing practice as teacher educators: A self-study of program graduates. *In Preparing the Next Generation of Teacher Educators*. Advances in Teacher Education Book Series.

Sullivan, N., & Bhattacharya, K. (2017). Twenty years of technology integration and foreign language teaching: A phenomenological reflective interview study. *The Qualitative Report*. 22. 756.

Teo, T. (2015). Comparing preservice and in-service teachers' acceptance of technology: Assessment of measurement invariance and latent mean differences. Computers & Education, 83, 22-31.

Teo, T., Milutinovic, V., & Zhou, M. (2016). Modeling Serbian preservice teachers' attitudes towards computer use: A SEM and MIMIC approach. *Computers & Education*, 94, 77–88.

Teo, T., Sang, G., Mei, B., & Hoi, C. K. W. (2019). Investigating preservice teachers' acceptance of Web 2.0 technologies in their future teaching: a Chinese perspective. *Interactive Learning Environments*, *27*(4), 530-546.

UNESCO. (2020). 1.3 Billion Learners Are Still Affected by School or University Closures, As Educational Institutions Start Reopening Around the World, Says UNESCO. https://en.unesco.org/news/13-billion-learners-are-still-affected-school-university-closures-educational-institutions.

Vatanartiran, S., & Karadeniz, S. (2015). A needs analysis for technology integration plan: Challenges and needs of teachers. *Contemporary Educational Technology, 6*(3), 206-220.

DOI: 10.15408/ tjems.v8i2.23324

Venkatesh, V., Thong, J. Y. L., & Xu, X. (2016). Unified theory of acceptance and use of technology: A synthesis and the road ahead. *Journal of the Association for Information Systems, 17*(5), 328–376. https://aisel.aisnet.org/jais/vol17/iss5/1.

Walker, A. (2015). *Technology-enhanced language learning.* English Language Teaching Global Blog by Oxford University Press. Retrieved on January 12th, 2020 from https://oupeltglobalblog.com/2015/02/18/technology-enhanced-language-learning/.

Wang, X., & Dostál, J. (2018, August). Study of future EFL teachers' ICT competence and its development under the TPCK framework. In *International Symposium on Emerging Technologies for Education* (pp. 156-165). Springer, Cham.

White, S., Folley, S., Williams, S., Allen, J. (2015). Preparing higher education tutors for delivering online courses. In: White, S., Marquand, M. (eds.) *The Seventh International Conference on Mobile, Hybrid, and Online Learning* (eLmL 2015), Lisbon, Portugal, pp. 20–26. IARIA.

Woodson, K. (2018). *How to use technology effectively to transform your ESL classroom.* (Weblog post). Retrieved from https://www.fluentu.com/blog/educator-english/esl-technology-2/.

Zhou, Y., & Wei, M. (2018). Strategies in technology-enhanced language learning. *Studies in Second Language Learning and Teaching, 8(2),* 471-495.

Zipke, M. (2018). Preparing teachers to teach with technology: Examining the effectiveness of a course in educational technology. *The New Educator, 14*(4), 342-362.

DOI: 10.15408/ tjems.v8i2.23324