**TEACHER’S PRACTICE IN INTEGRATING DIGITAL TECHNOLOGY INTO TEACHING ACTIVITY**

**Jalu harsabawa, Saefurrohman**

a Universitas Muhammadiyah Purwokerto, JL. KH. Ahmad Dahlan, Dusun III, Dukuhwaluh, Kec. Kembaran, Kabupaten Banyumas, Jawa Tengah 53182

1 harsabawa@gmail.com\*; 2saefur11@gmail.com

|  |  |  |
| --- | --- | --- |
| **Article Info** |  | **ABSTRACT**  |
| ***Article history:***Submitted Jun xx, 201xAccepted Jul xx, 201xPublished Aug xx, 201x |  | With the increased importance of digital technology in the field of education, teachers also need to keep up with technology development. This study tried to find out how teachers practice digital technology in teaching. This study is a descriptive qualitative study that focuses on teachers’ practice in integrating digital technology into teaching activity in the Language Development Centre of Universitas Muhammadiyah Purwokerto. Before observing participants, the researcher surveyed the participants to find out teacher self-acknowledgment which shows that participants have strong knowledge in integrating digital technology into teaching activity. This survey will be used as supporting data for the observation. From the observation, it was found that most participants were using Laptops, Smartphones, and LCD Projectors to help them in teaching. While the application they were using such as Learning Management System namely TAS LDC, Microsoft PowerPoint, Google Jamboard, Lumio, and Blooket |
| ***Keywords:****TPACK**Technology**Digital Technology Integrating**English Language Teaching* |
| *.* |
| ***Corresponding Author:***Jalu Harsabawa,Program Studi Magister Pendidikan Bahasa Inggris,Universitas Muhammadiyah Purwokerto,Jl. KH. Ahmad Dahlan, Po. Box. 202 Purwokerto, Banyumas, Indonesia.E-mail: harsabawa@gmail.com |
| ***How to Cite:***Harsabawa, J., & Saefurrohman. (2023). Teachers’ Practice in Integrating Digital Technology into English Teaching Activity.. Khazanah Pendidikan-Jurnal Ilmiah Kependidikan (JIK), X (X), XX-XX. |

**© 2021 by the authors; licensee FKIP UMP.** This article is an open access article distributed under the terms

and conditions of the Creative Commons Attribution Licen[se (http://creativecommons.org/licenses/by/4.0/](file:///C%3A%5CUsers%5Csd%20bojongsari%201%5CDocuments%5Clayout%20Artikel%20Jurnal%20Dinamika%5Cse%20%28http%3A%5Ccreativecommons.org%5Clicenses%5Cby%5C4.0%5C)).

1. **PENDAHULUAN**

Digital literacy is an important skill to master in this day and age when the majority of information comes from the internet, which can only be accessed via a device such as a personal computer, smartphone, or other type of gadget. Digital literacy entails knowing and being able to use a wide range of technology tools for a variety of purposes (Mantiri, Hibbert, & Jacobs, 2019). "Digital literacy is the ability to use and create technology-based content, including finding and sharing information, answering questions, interacting with others, and computer programming," writes (Widana, 2020). Anyone who regularly uses social media, the internet, or interactive apps should be familiar with digital literacy.

Digital technology is tools that are used by people to access, store, and process data in a system. Digital technology refers to tools, systems, and devices that can generate, create, store, or process data. The data processing and logic capabilities of digital technologies are enabled through micro-processes that are programmed to perform various functions. Digital technologies include devices such as personal computers and tablets, tools such as cameras, calculators, and digital toys, systems such as software and apps, augmented and virtual reality, and less tangible forms of technology such as the Internet. (Johnston, K., Kervin, L., & Wyeth, P, 2022). Teachers must know how to effectively engage students in academics with the integration of technology to compete with social media and interactive apps. In response to this condition, some research has been conducted on the investigation of students' and teachers' efforts to integrate technology into literacy teaching (Duriyah & Zuhdi, 2018; Price & Dennis, 2016). Their findings show that students and teachers are becoming more familiar with digital technologies. "Digital literacy entails more than just knowing how to use software or operate a digital device; it entails a wide range of complete cognitive, sociological, and emotional skills that users require to function effectively "in digital environments” (Eshet-Alkalai, 2004). Digital literacy is a social and professional responsibility for teachers and students because 21st-century jobs rely heavily on technology for production and information processing. However, teachers may face barriers that are not limited to language, limited access, different levels of experience, school infrastructure, and keeping up with technological development and change. Ensure that the equipment can operate in advance, create a data management plan, know whom to call for help when there is a technology problem, remind students of copyright laws when producing work, and be prepared to assist students in ensuring students produce high-quality work, are some suggestions made by Hague and Payton (2011) for using digital technology in the classroom to implement digital literacy in teaching and learning activities.

Technology integration in teaching refers to how teachers use and manage technology to conduct more engaging learning activities by using authentic material other than the textbook. In other words, technology integration is to enhance, aid, and complete the teaching and learning process. In the context of English Language Teaching classes, (Ahmadi, 2018) Because of its benefits for teachers and to support students' learning development, technology has become a significant instrument in the English teaching and learning process. This resulted in learners gaining language skills and teachers gaining knowledge along with self-efficacy. He also stated that by incorporating technology into the teaching-learning process, the class will become more active and appealing, and learners will be responsible for their success, resulting in meaningful learning. Integrating technology into English learning will attract students to be more involved in the learning activity since integrating technology in teaching and learning activity might change their view of traditional classroom activity into modern classroom activity. Furthermore, according to another study, learners' participation, IT abilities, and willingness to learn autonomously and cooperatively improved. Teachers appear to have a strong sense of professionalism throughout their careers (Chai, C.S., Koh, J.H.L., & Tsai, C.C. 2013).

In integrating technology into teaching, a framework namely TPACK (Technological Pedagogical Content Knowledge) is needed. In this framework, it is shown that in adapting to the current situation teacher will have to utilize their technological knowledge in line with the pedagogical and content. To get more understanding of how the three knowledge works can be seen in the figure below;



**Fig. 1.** *TPACK Framework (Koehler, M. J., & Mishra, P, 2008)*

Figure 1 is shown some combination between three fields of knowledge namely; Technological knowledge, Pedagogical knowledge, Content knowledge, Technological Pedagogical knowledge, Technological Content Knowledge, Pedagogical Content Knowledge, and Technological Pedagogical Content Knowledge. However, the focus in this research is only focused on Technological knowledge, Technological Pedagogical knowledge, and Technological content knowledge. Because researchers try to find out how teachers practice integrating digital technology into their teaching and learning activities.

Several research finding has conveyed the importance of integrating digital technologies into teaching activities. A previous study proposed by Sari Merta et al (2023) on how the integration of technology in English language teaching stimulates students’ critical thinking, this study unveiled the importance of integrating digital technology into teaching activity it was also found in this study that learning assisted by Youtube video, Toondo, E-book, Mind Mapple, and other website application were able to stimulate students’ critical thinking. However, the study was done through a literature review and needs to be proven in the field.

In another research conducted by Ruggiero & J. Mong (2015), it was found that film and video were the most used digital technology to teach English. The second most used digital technology was Microsoft PowerPoint, while web 2.0 technologies were also used but the number was less compared with the two digital technology mentioned before, the study was conducted toward teachers in middle school and high school groups. research with a similar topic about integrating digital technology was also done by Sherwood, C. (1993) with the result that most participants were using word processing applications such as Microsoft Office in their teaching activity. From those two pieces of research before it is proved that the integration of technology into teaching practice conducted from the lower to a higher class and it already began for a long time. That is why, the study about teacher practice in Integrating digital technology into teaching at the level of the university is needed to find out how teachers at the university level integrate digital technology. In response to the former study, this current research focused to discuss teachers' practice in integrating digital technology into teaching. This study pairs the teacher's practice in integrating digital technology in the classroom and their initial acknowledgment of the Technological Pedagogical Content Knowledge they have. Using the data of teachers' initial acknowledgment and nonparticipant observation results from their classroom, the researcher tried to find out whether their acknowledgment was in line with the practical result and how do teachers using digital technology to conduct the activity in the classroom

1. **METODE**

**2.1. Research Participants and Context of the Study**

The required English course where participants of this research teach target students from non- English study programs. The class was divided based on student ability at the beginning of the year through a pre-test. There are a total of seven levels of class namely; Starter, Elementary, Pre- intermediate, Intermediate, Upper Intermediate, advanced low, advanced mid, and advanced high. However, in this research data was only taken from classes Elementary, Pre-intermediate, and Intermediate due to only teachers from those levels that were available to be observed. The course was conducted by the Language Development Center of Universitas Muhammadiyah Purwokerto (LDC UMP). The purpose of this course was to give students from non-English study programs a chance to develop their English ability at the university level. The research took 13 participants for the survey, and 7 of those participants were observed in the classroom. all of whom were instructors that work for LDC UMP. Before the researcher collects the data. The researcher asks one of the structural members in LDC UMP for permission to distribute the questionnaire and observed their instructors. There was a total number of 21 instructors that work for LDC UMP, however, only 13 of them filled out the distributed questionnaire, and only 7 from the participants that filled out the questionnaire that willing to be observed.

**2.2. Research Design**

This study has been conducted using a Qualitative method. Qualitative research is a method for investigating and comprehending the significance that individuals or groups attach to a social or human situation. Those who engage in this type of inquiry advocate for a research approach that values an inductive manner, an emphasis on individual meaning, and the necessity of expressing a situation's complexity (Creswell, 2007).

The study utilized a qualitative method research design, which involved collecting and analyzing qualitative data. However, the researcher also surveyed to obtain data about teachers' self-acknowledgment of their knowledge about integrating digital technology in their teaching using the TPACK framework as the foundation for creating the questionnaire. The data from the survey was used as supporting data.

**2.3. Data Collection and Analysis**

The researcher conducts 10 observations with 7 instructors. To keep their name anonymous, the researcher changes their identity into teacher one, teacher two, teacher three, teacher four, teacher five, teacher six, and teacher seven. Observation on teacher one was conducted two times, observation on teacher two were conducted two times, and observation on teacher four was also conducted two times. For the rest observation subject namely teacher three, teacher five, teacher six, and teacher seven, the researcher only conducts the observation one time. This action was conducted so the researcher was able to obtain the data needed from each instructor. The observation was conducted from Windows time from 17 May 2023 to 9 June 2023.

The observation guide used three indicators from the TPACK framework, those are; technological knowledge, pedagogical knowledge, and Technological pedagogical knowledge. The three indicators were chosen because the act that represents those indicators was practically observable in the classroom setting. The data obtained were analyzed through thematic data analysis where the researcher looked for patterns in the meaning of the data to find themes. The TPACK theoretical framework also becomes a foundation for the researcher in analyzing the data gained from the observation. The data from observation was used to obtain the data about integrating digital technology into teaching activity from the perspective of the researcher. The questionnaire consisted of 23 statements, each statement categorize into

Technological knowledge, pedagogical, Pedagogical knowledge, Content knowledge, Technological pedagogical knowledge, Technological content knowledge, and Technological pedagogical content knowledge. The questionnaire used in this research was composed of one identical type of item using a five- point interval Likert-type scale. The questionnaire was designed to determine teachers' self- acknowledgment of integrating digital technology into teaching. The design of the questionnaire was adapted from research entitled “Survey of Preservice Teachers' Knowledge of Teaching and Technology” conducted by Schmidt, D. A., Baran, E., Thompson, A. D., Koehler, M. J., Mishra, P., & Shin, T (2009). Although there were some parts from the original questionnaire that did not use in this research, due to not all indicators in the original questionnaire become the focus of this research. The result of the questionnaire was used to gain data related to the integration of digital technology into teaching from the perspective of each participant.

1. **HASIL DAN PEMBAHASAN**

Out of all 13 instructors who filled out the questionnaire, it is shown 65,7% of their self- acknowledgment about integrating digital technology into teaching. This number was categorized as “strong” based on the criteria indicator from Sugiono (2008). It means that they have strong knowledge of integrating digital technology into teaching based on their self-acknowledgment. In line with the result of the survey, the result of the observation shows that out of 7 teachers all of

them were integrate digital technology to conduct activities in their teaching and manage the task of their students.

* 1. **Teachers’ self-acknowledgment in integrating digital technology into teaching**

The questionnaire finding as supporting data about teacher self-acknowledgment of integrating digital technology into teaching. Another reason this data is needed is that it gives the researcher starting idea of how participants integrate digital technology into teaching based on their self- acknowledgment.

**Table.1** *Teachers’ self-acknowledgment of integrating digital technology into teaching*

|  |  |  |  |
| --- | --- | --- | --- |
| **Number** | **Indicator** | **Average Percentage** | **Category** |
| **1** | Technological Knowledge | 68.5% | Strong |
| **2** | Pedagogical Knowledge | 64% | Strong |
| **3** | Content Knowledge | 72% | Strong |
| **4** | Technological Pedagogical Knowledge | 62,6% | Strong |
| **5** | Technological Content Knowledge | 66% | Strong |
| **6** | Technological Pedagogical Content Knowledge | 61% | Strong |
| **Percentage of Teacher’s knowledge in integrating digital technology into their teaching** | 65.7% | Strong |

The technological knowledge indicator shows number 68,5 % which falls into the strong category this result shows that based on their self-acknowledgment participants understand how they utilize and keep up with the technology needed for their job. The Pedagogical knowledge indicator shows number 64%, this number categorizes as strong, which represents that participants have a solid knowledge of pedagogical knowledge needed in their job in managing the teaching activity in the classroom. The highest percentage out of six knowledge is content knowledge. This indicator shows 72%, which categorize as strong. This result shows that based on their self- acknowledgment, participants understand the content of the lesson they are teaching to their students. Technological Pedagogical knowledge is a combination between technological knowledge and pedagogical knowledge. This knowledge plays an important role in a situation where a teacher needs to manage the classroom condition using technological tools such as laptops, smartphones, and a learning management system. This particular condition appears when long- distance teaching activities, hybrid classrooms, and activities where students need to use their digital tools are conducted. In this indicator, it shows number 62,6% which categorizes as strong based on the criteria indicator. Technological Content knowledge is a combination between technological knowledge and content knowledge. This knowledge is needed by participants when they have to teach a particular material while using digital technology such as Microsoft PowerPoint, a learning management system, and any other application they decide to use to help them in the process of explanation or conducting activities in teaching. The number shown in this indicator is 66% which categorize as strong based on the criteria indicator. As for the Technological Pedagogical Content knowledge, it shows a number 61% which categorize as strong based on the criteria indicator. This result shows that based on their self-acknowledgment participants understand how to integrate technological, pedagogical, and content knowledge in teaching. From every indicator, the researcher draws an average value to be used as the number of teachers’ self-acknowledgment in integrating digital technology into their teaching, the number shows the mean is 65.7% which categorize as strong based on the criteria indicator. It means that participants believe that they have a solid knowledge of integrating digital technology into their teaching activity.

* 1. **Teachers’ Practice in Integrating Digital Technology into Teaching**

The result of the observation researcher found that each teacher observed has its way of integrating digital technology into teaching. The explanation begins from teacher one to teacher

seven. Each part of the explanation also included the tools and applications they used in their teaching.

The researcher observed teacher One, in two meetings. It was conducted two times on 17 May 2023 and 31 May 2023, both classes she was teaching are pre-intermediate level classes. The observation was conducted two times so that the researcher was able to obtain the data needed which related to three indicators namely technological knowledge, pedagogical knowledge, and technological pedagogical knowledge. The three indicators were chosen as observation indicator because the act that represents

indicators were observable in the classroom. In starting booth meetings, teacher one always calls her students' names to check their presence, after calling her students’ names one by one she wrote down the name of the students that attend in the attendant list on her laptop. In both meetings, teacher One always use extended used an extended speaker to play the recorded audio from her laptop. The audio was about the introduction of vocabulary and dialogue about job interviews. After giving the example through recorded voice, teacher one also gave an example of how to pronounce the difficult words from the audio. As for the assignment in both meetings, teacher one asks her students to do the task given in the learning management system. Students in the teacher One class did the assignment on the learning management system through their smartphones. During both meetings, teacher one also let her students use their smartphones to help them in their learning process.

Teacher Two was observed two times on 23 May 2023 at 07.00-08.40 and 08.40-10.20, the first class she was teaching belong to the Intermediate level while the second class belong to the pre- intermediate level. Teacher Two observed two times so that the researcher was able to obtain sufficient data that represent the three indicators from her teaching process. In starting both meetings, teacher two asked her students about the assignment she gave to her students next week before the meeting in the classroom. The first activity she did in both meetings was reviewing the assignment together with her students. The task was screen shared through an LCD projector so all of her students were able to see the task reviewed. In the first meeting, the application she used was Lumio and the learning management system. Lumio was used to help her in explaining the material through slides and mini-games, while the learning management system was used to assign the task to her students. The material discussed in the first class was about how to work on the TOEFL test. During the second class, teacher Two used Lumio, Blooket, and the learning management system. Lumio was used to help the teacher in explaining the material which she screen-shared through an LCD projector. Blooket was used to help Teacher Two conduct interactive activities to explain the material. While the learning management system was used to assign the task to her students related to the material given in the second meeting. In the second meeting, the material she teach was about idioms. In the first and second meeting, the teacher Two students’ was using a smartphone to access the application used in the lesson.

Teacher three was observed one time on 23 May 2023 at 10.20-12.00, the class she was teaching belongs to the elementary level. Teacher three only observed one time because from one meeting researcher was able to obtained sufficient data that represent the three indicators. At the beginning of the meeting, teacher Three asked her students to fill in the attendance list in the learning management system. When it comes to the activity, teacher Three was using Microsoft PowerPoint and the learning management system to help her to explain the learning material which at that time was about describing people and to help her conduct the learning activity. The slide teacher three used consisted of the text about the example on how to describe people, the picture of famous people to be described by her students, and dialogue about describing people from appearance and personality. After showing the example, teacher

three was asking her students to guess people's names based on the description she gave in the PowerPoint slide. At the end of the meeting, teacher three shared the slide with the students through the learning management system.

Teacher four was observed two times on 25 May 2023 at 13.00-14.40 and 15.30-17.00, the first class she was teaching belong to the elementary level and the second class belong to the intermediate level. Teacher four was observed two times so that the researcher was able to obtain sufficient data that represent the three indicators. In observing teacher four, in the first meeting, the researcher found that teacher four was using Microsoft PowerPoint and Google Jamboard to help her in teaching her students and conducting the learning activity. Microsoft PowerPoint was used to share material about describing people. The contents of the slide were an example of text on how to describe people's appearance, pictures of famous people to be described by her students, and a

vocabulary introduction to people's appearance. While Google Jamboard was used to help the teacher to conduct the activity. Teacher four asked her students to draw a picture based on the description she gave. Students draw the picture in Google Jamboard on their smartphones. The Slide used by teacher four was shared through an LCD projector. On the second meeting, teacher four also used Microsoft PowerPoint to help her in showing the material to her students. On the second meeting material teacher four teach was about how to do the TOEFL test. Students saw the material through an LDC projector. In teaching about TOEFL, teacher Four used an extended speaker to help her in playing the recorded voice which contains the example of audio that was played in the TOEFL test.

Teacher five was observed one time on 27 May 2023 at 10.20-12.00, the class she was teaching belong to the elementary level. Teacher five was observed one time because the researcher was able to obtain sufficient data that represent the three indicators. In doing the teaching activity, teacher five was using Microsoft PowerPoint and the learning management system. Microsoft PowerPoint was used by teacher five to help her in explaining the material she was teaching at that time. The material was about describing people's appearance. The contents of the slide were an example of how to describe people in the form of text. Pictures of famous people are also included in the slide. Using pictures from the slide, teacher five asked her students to describe the people's appearance in the picture.

Teacher six was observed one time on 5 June 2023 at 13.00-14.40, the class he was teaching belong to the elementary level. Teacher six was observed one time because the researcher was able to obtain sufficient data that represent the three indicators. In doing teaching activities, teacher Five utilized Microsoft PowerPoint and Google. Microsoft PowerPoint was used to help him in showing the slide which contain the set of rules about the activity he was conducting at that time. The activity was about speaking activity where his students were telling a particular movie they likes to the teacher. Teacher Five then asked some questions about the movies. While Google search engine was used by teacher five to check information about the movies before he asks the questions.

Teacher seven was observed one time on 9 June 2023 at 08.40-10.20, the class she was teaching belong to the pre-intermediate level. Teacher seven was observed one time because she did not have any more onsite meetings. However, from the meeting researcher was able to obtain the data needed that represent the three indicators. In doing teaching activities, teacher seven utilized the chat application namely WhatssApp to help her in sharing the material and giving her students tasks. The shared material at that time was about describing people. After students receive the material from the chat application, she conducts the discussion session with her students in the classroom. The learning management system was used to assign tasks about how to describe people to her students

* 1. **Discussion**

In integrating digital technology into teaching practice teachers will need a set of knowledge that can help them design the activity. TPACK framework become one of the solutions for teachers in integrating technology into their teaching activity. Moreover, as time goes by the importance of integrating digital technology into teaching practice is increasing (Ujas Pandy & Paresh Joshi, 2022; Tarik Basar & Leyla Sahin, 2021; Pim, C, 2013). Knowing integrating digital technology in teaching activities will help teachers in adapting to modern classroom conditions. Depending on the condition, the teacher needs to let their students use their smartphones in class to help them with the process of learning. Not only that, using applications whether it is designed purposed application such as Lumio, Booklet, Learning management system, or more general applications such as Microsoft Office PowerPoint also help the teacher in creating more modern teaching activity in the classroom.

The observation results about the technological pedagogical knowledge were showing that most teachers actively use digital technology such as Microsoft PowerPoint to assist their teaching activity. Although not only a teacher but Microsoft PowerPoint also bring benefit to students. Aside from Web 2.0, several traditional ICT applications continue to exist. Many stand-alone applications, such as word processing and presentation software (for example, Microsoft Powerpoint), can be used effectively by students to 'improve their language skills through research and by sharing their findings in oral presentations,' as well as 'provide real-world contexts and technological skills and enable students to develop confidence in their language abilities' (Jewel, 2006 as cited in Stanley, 2013). While a small number of them were fully immersed in the activity through some applications. The way teachers integrate technologies were depend on their teaching style.

The result of an observation about technological pedagogical knowledge is in line with the indicator in the questionnaire filled by them which shows a “Strong” criteria indicator that represents teachers' knowledge on how they integrate technological pedagogical knowledge. It is in line because, from the process of observation, the researcher found that teachers were able to keep each portion of the aspect properly and keep the teaching from disruption. Based on this result it is shown that with the proper knowledge owned by a teacher, they can carry out the teaching on the right track without facing meaningful obstacles as concluded by Ayten (2021).

1. **SIMPULAN**

Based on the results of the questionnaire and what was observed, it is clear that having solid knowledge of integrating digital technology will assist teachers in using it in actual teaching situations. According to the results of the questionnaire used to gather data for the first research question, every sign that demonstrates participant understanding of incorporating digital technology into the educational process falls within the category of "Strong" criteria indicators. The results of the observation, which included three of the six indicators in the questionnaire, demonstrate that the observed teachers had no trouble utilizing technology. Based on the circumstances at the time, each of the seven teachers who were observed used technology differently. Knowing how to use digital technology in teaching activities can help teachers choose what kind of technology to employ based on the needs of their students and the circumstances in the classroom.

1. **DAFTAR PUSTAKA**

Al-Habsi, T., Al-Busaidi, S., & Al-Issa, A. (2021). Integrating technology in English language teaching through a community of practice in the Sultanate of Oman: implications for policy implementation. Educational Research for Policy and Practice, 1-26.

Ahmadi, D. M. R. (2018). The use of technology in English language learning: A literature review.

International journal of research in English education, 3(2), 115-125.

AYTEN, B. K. (2021). Analysis of classroom teachers' knowledge of the technological pedagogical field. International Technology and Education Journal, 5(1), 61-82

Başar, T., & Şahin, L. (2021). Technology integration in teaching English as a foreign language: A content analysis study. Journal of Educational Technology and Online Learning, 5(1), 204-222.

Creswell, John W. (2014). Research design: qualitative, quantitative, and mixed methods approaches. United States of America, SAGE Publications, Inc.

Chai, C. S., Koh, J. H. L., & Tsai, C. C. (2013). A review of technological pedagogical content knowledge. Journal of Educational Technology & Society, 16(2), 31-51.

Duriyah, L.T., & Zuhdi, M. (2018). Digital Literacy With EFL Student Teachers: Exploring Indonesian Student Teachers’ Initial Perception About Integrating Digital Technologies Into a Teaching Unit. International Journal of Education & Literacy Studies, 6(3), 53-60. Australia, Australian International Academic Centre. Retrieved from <http://www.journals.aiac.org.au/index.php/IJELS/article/view/4611>

DOI: <https://doi.org/10.7575/aiac.ijels.v.6n.3p.53>

Ertmer, P. A. (2005). Teacher pedagogical beliefs: The final frontier in our quest for technology integration. Educational Technology, Research, and Development, 53(4), 25-39.

Godwin-Jones, R. (2016). Looking back and ahead: 20 years of technologies for language learning. Language Learning & Technology, 20(2), 5–12. Retrieved from <http://llt.msu.edu/issues/june2016/emerging.pdf>

Eshet, Y. (2004). Digital literacy: A conceptual framework for survival skills in the digital era. Journal of Educational Multimedia and Hypermedia, 13(1), 93-106. Norfolk, VA: Association for the Advancement of Computing in Education (AACE). Retrieved from [https://www.learntechlib.org/primary/p/4793/.](https://www.learntechlib.org/primary/p/4793/)

Hockly, N. (2013, 29 April). Digital literacies: What are they and why should we care? Retrieved from https://[www.teachingenglish.org.uk/article/digital-literacies-what](http://www.teachingenglish.org.uk/article/digital-literacies-what)

are-they-why-should-we-care

International Literacy Association (2018). What's Hot in Literacy 2018 Report. Retrieved from https://[www.literacyworldwide.org/get-resources/whats-hot-report](http://www.literacyworldwide.org/get-resources/whats-hot-report)

Koehler, M.J., & Mishra, P. (2008). Introducing TPCK. AACTE Committee on Innovation and Technology (Ed.), The handbook of technological pedagogical content knowledge (TPCK) for teachers

Koehler, M. J., & Mishra, P. (2009). What is technological pedagogical content knowledge?

Contemporary Issues in Technology and Teacher Education, 9(1), 60-70.

Johnston, K., Kervin, L., & Wyeth, P. (2022). Defining Digital Technology. Centre of Excellence for the Digital Child Blog. Available online: https://[www.](http://www/) digital child. org. au/blog/defining- digital-technology/(accessed on 7 July 2022).

Mantiri,O., Hibbert, G. K., & Jacobs, J. (2019). Digital literacy in ESL classroom. Universal Journal of Education Research 7(5), 1301-1305. Retrieved from [http://www.hrpub.org](http://www.hrpub.org/) DOI: 10.13189/ujer.2019.070515

Merta, L. W. S., Ratminingsih, N. M., & Budasi, I. G. (2023). The Integration of Technology in English Language Teaching to Stimulate Students’ Critical Thinking. Language Circle: Journal of Language and Literature, 17(2), 333-341.

Mishra, P., & Koehler, M.J. (2006). Technological pedagogical content knowledge: A framework for integrating technology into teacher knowledge. Teachers College Record, 108(6),

Mishra, P., & Koehler, M. (2007). Technological pedagogical content knowledge (TPCK): Confronting the wicked problems of teaching with technology. In C. Crawford et al. (Eds.), Proceedings of Society for Information Technology and Teacher Education International Conference 2007

Mantiri,O., Hibbert, G. K., & Jacobs, J. (2019). Digital literacy in ESL classroom. Universal Journal of Education Research 7(5), 1301-1305. Retrieved from [http://www.hrpub.org](http://www.hrpub.org/) DOI: 10.13189/ujer.2019.070515

Pandya, U., & Joshi, P. (2022, August). Integration of Technology in English Language Teaching. In International Seminar Commemorating the 100th Anniversary of Tamansiswa (Vol. 1, No. 1, pp. 56-60)

Pim, C. (2013). Emerging technologies, emerging minds: digital innovations within the primary sector. Innovations in learning technologies for English language teaching, 17-42.

Ribeiro, S. (2015). Digital Storytelling: an integrated approach to language learning for the 21st- century students. Teaching English with Technology 15(2), 39-53. Retrieved from https://[www.ceeol.com/search/article-detail?id=408511](http://www.ceeol.com/search/article-detail?id=408511)

Ruggiero, D., & Mong, C. J. (2015). The teacher technology integration experience: Practice and reflection in the classroom. Journal of Information Technology Education, 14.

Schmidt, D. A., Baran, E., Thompson, A. D., Koehler, M. J., Mishra, P., & Shin, T. (2009). Survey of preservice teachers' knowledge of teaching and technology. Récupéré le, 2.

Sherwood, C. (1993). Australian experiences with the effective classroom integration of information technology: Implications for teacher education. Journal of Information Technology for Teacher Education, 2(2), 167-179.

Shulman, L. (1986). Those who understand: Knowledge growth in teaching. Educational Researcher, 15(2)

Shulman, L. S. (1987). Knowledge and teaching: Foundations of the new reform. Harvard Educational Review, 57(1)

Spires, H. A., & Bartlett, M.E. (2012) Digital Literacies and Learning: Designing a Path Forward. The William & Ida Friday Institute, North Carolina State University.

Sugiyono. (2008.). Metode penelitian pendidikan : (pendekatan kuantitatif, kualitatif dan R & D) / Sugiyono. Bandung :: Alfabeta,.

Stanley, G. (2013). Integrating technology into secondary English language teaching. Innovations in learning technologies for English language teaching, 43-66

UNICEF. (2020). Strengthening Digital Learning across Indonesia: A Study Brief. Unicef, 1–14. https://[www.unicef.org/indonesia/media/10531/file/Strengthening](http://www.unicef.org/indonesia/media/10531/file/Strengthening) Digital Learning across Indonesia: A Study Brief.pdf

Vagias, W. M. (2006). Likert-type scale response anchors. Clemson International Institute for Tourism & Research Development, Department of Parks, Recreation and Tourism Management. Clemson University.

Widana, I. (2020). The effect of digital literacy on the ability of teachers to develop HOTS-based assessment. Journal of Physics: Conference Series. 1503. 012045. 10.1088/1742- 6596/1503/1/012045.