

The Perceptions of Technology Utilization in EFL Vocational High School Classroom From In-service and Pre-service Teachers

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ABSTRACT

This study describes and compares in-service and pre-service teachers' perception and utilization of technology in the form of computer-assisted language learning (CALL) and mobile-assisted language learning (MALL) in English as a Foreign Language (EFL) Vocational High School Classroom. This research was conducted at one of the vocational high schools in Surakarta and accommodated a multiple case study. The data of the research was obtained through document analyses, interviews, and observations. This study accommodated interactive model data analysis. From the observations and interviews, this study revealed teachers show positive and negative views on technology usage in the classroom. The positive themes found in the study are familiarity, ease of use, ease of access, interest in use, and provision of various options and qualified sources while the negative themes were mostly technical problems. This study also revealed that both groups of teachers utilized technology for three main themes: (1) presenting, (2) assisting, and (3) assessing. The differences in terms of perception and utilization of technology usage between both groups of teachers were revealed to be small. To conclude, while both groups hold positive views, the actual utilization of technology is still limited so teachers should explore more on technology usage for future implementation since this study only focused on one vocational high school and it did not represent the general schools.

Keywords: CALL; EFL; MALL; Perception; Technology

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INTRODUCTION

Experts highlight the importance of technology integration in the classroom due to the growing significance of digital skills in today's society (Roblyer & Hugh, 2019). The use of digital tools, learning management systems, and online resources offers active learning experiences, enhanced instruction, and students' engagement (Roblyer & Hughes, 2019). The combination between enhanced learning and online resources enables students to participate in group projects, learn at their own speed, and experience personalized support (Tucker et al, 2018). Personalized learning supports students with different abilities, learning styles, and interests (Vrasidas & Zembylas, 2019). Furthermore, the way the new world gives access to various opportunities for teachers to create meaningful and authentic language learning makes the learning context wider and the need for technology usage in language learning is also increased (Kessler, 2018).

The accessibility of educational technology tools broadens teachers' exposure to a variety of hardware, software, and internet resources since it is easier to experiment and integrate technology into their teaching techniques alongside the provision of computers, tablets, interactive whiteboards, and other digital tools (Law & Chow, 2017). Those tools are connected to each other by gathering the equipment or by using a shared network (Klopfer, Squire, and use several teaching techniques, such as

blended learning, to mix the learning activity between direct instruction and online sources so that the learning environment becomes more elaborate (Tucker et al, 2018).

Digital technology is used to meet the needs of teachers and students in certain content areas (Bui, 2022.) For example, the internet offers audio, video, and tutorials that provide different styles of material explanation (Canals & Rawashdeh, 2018). In using audio and video, teachers may use CALL glossing mode which is beneficial for idiom acquisition (Wang et al, 2023). Those offers are able to be found on websites that also provide sample tests for language learners to examine their knowledge (Gao & Shen, 2020). Another usage of technology in language learning is the utilization of translation tools in the learning process (Tsai, 2019). Moreover, the mistakes that appeared in the translation can be analyzed by using automatic writing assistance offered by some websites (Barrot, 2020). An example of mobile activity comes from Xodabande and Hashemi (2023) who utilized electronic textbooks on mobile devices as a media to learn vocabulary. They found that students are able to learn vocabulary by using the electronic textbook on mobile devices since it provides episodic learning affordance, easy access, and enjoyment of learning.

Technology integration in the learning environment is positive when schools are able to provide it (Raygan and Moradkhani, 2020). For example, the usage of multimedia such as text plus audio

and text plus video to present the learning material are useful for language learning that brings positive attitudes and enjoyment during the learning process (Wang et al, 2023). Another positive view also appears in using Twitter as a professional learning network for group projects since the application is a popular social media and it makes the students show their interest in learning (Cowell and Hutchinson, 2018). Other than social media, using web-based learning also brings positive perceptions since it makes the students feel less bored (Teng, 2022). Furthermore, students are perceived positively if the instruction of a task is gamified (Sadhegi et al, 2022).

CALL or computer-assisted language learning is a side of e-learning where computer technology is used in the context of language learning (Yuan, 2007). CALL has three stages that consist of behavioristic stage, communicative stage, and integrative stage (Warschauer, 1996). As the first stage, the behavioral stage focuses on drilling and practicing. The second stage, the communicative stage, focuses on encouraging students' communication and interaction during learning. Lastly, the integrative stage focuses on integrating students with meaningful tasks by using news articles, podcasts, and online resources.

In the other hand, MALL or mobile-assisted language learning is the term used to describe language learning that uses mobile technology (Hoven & Palalas, 2016). The characteristics of MALL are portability,

social interactivity, context sensitivity, connectivity, and individuality (Klopfer, Squire, and Jenkins 2002). Portability means these mobile devices are portable due to their lightweight and tiny size. Social interactivity means mobile devices enable data sharing and cooperation with other students. Context sensitivity means the information on mobile devices may be obtained and specifically reacted to the time and location at hand. Connectivity means by establishing a shared network, mobile devices can be connected to other devices, data-gathering equipment, or a single network. Individuality means the activity platform is personalized for each student.

There are eight guiding principles of MALL (Naismith, et. al 2004). The principles are: 1) The student is mobile, not the technology; 2) Mobile learning has the ability to complement traditional education while also undermining it; 3) Privacy and ownership issues are major ethical considerations with mobile learning; 4) Mobile learning takes advantage of equipment that individuals often carry along; 5) Mobile learning tools are user-friendly and customizable; 6) Mobile learning tools are inexpensive and easy to use; 7) People from different walks of life and in a variety of settings utilize learning devices; 8) Learning might be considered to be movable in terms of time, space, and between different spheres of life.

In the teaching process, technologies are mainly utilized by the teacher to assist their learning by presenting the learning

material (Turgut, 2017; Li et al, 2019). For example, the usage of presentation slides, videos, audio, and tutorials appear in the teaching process (Canals & Rawashdeh, 2018; Ding et al, 2019). Using videos, especially captioned videos allow students to learn vocabulary incidentally (Teng, 2022). From Teng's study, students are able to learn the meaning and the form of words. It is also possible to use the videos for CALL glossing purposes (Wang et al (2023). Furthermore, Wang et al prove that using videos in CALL glossing effectively helps students to learn idioms since it offers interactive learning. However, Li et al (2019) argued that the process of using technology to present the learning material makes the teaching process similar to the conventional teaching process that utilizes chalkboards or textbooks.

Other than presenting material, teachers may use technologies to support students' needs in different content-specific areas (Bui, 2022). For example, internet is viewed as a valuable and useful resource for teaching and learning purposes (Praag & Sanchez, 2015). Teachers also may use Google Translate to help students construct their projects (Tsai, 2019). The study by Tsai explains that by using Google Translate, the students are able to make fewer mistakes in spelling, grammar, and error words so that the writing becomes higher in quality. However, the usage of translation tools is viewed negatively by experienced teachers since it offers shortcuts for the students to get the meaning of certain words or phrases instead of analyzing them (Praag &

Sanchez, 2015). The experienced teachers also suggest using immersion of the target language in the teaching process instead of using translation tools.

In the learning process, teachers are able to utilize websites to teach the spoken form of words (Bashori et al, 2021). Bashori et al explain that the website in the study served learning materials and quizzes. The quizzes create a positive perception from the students that they feel less bored and less frightened since they are able to repeat the questions. Quizzes are able to increase students' motivation to practice vocabulary if they implement gamified instruction (Sadhegi et al, 2022). The main elements in the gamification are points, leaderboards, and achievements or badges (Hamari, 2014). However, some obstacles appear during assessment such as the inability to recognize a task or the inaccurate feedback provision (Bashori et al, 2021). Another obstacle is technical problems since they are the barrier to implement CALL (Hedayati & Marandi, 2014). The last obstacle that appears is that the student teachers or pre-service teachers are facing difficulties in assessing their students using CALL since the school does not require the integration and they avoid "uninteresting" topics like grammar teaching (Schmid & Hegelheimer, 2014).

Many researchers have been focused on finding out the way technology is able to assist students' learning process. Many researchers examine the perception between teachers and students toward it. However, studies that examined the

differences between in-service and pre-service teachers' perceptions of technology usage in the classroom are still limited (Margot & Kettler, 2019). This study focuses on exploring the differences of perceptions and utilization of technology between in-service and pre-service teachers in EFL vocational high school classrooms. From the background of the study, the researchers formulated the following research questions.

1. How do in-service and pre-service teachers perceive the use of technology to enhance students' vocabulary?
2. How do in-service and pre-service teachers utilize technology to enhance students' vocabulary?
3. Is there any differences in terms of the perception of technology utilization in learning vocabulary?

METHOD

Following the focus of this study, the researchers applied a multiple case study. This research was conducted for two months at one of high schools in Surakarta. The four participants of this study were selected purposively based on four criteria. (1) The participants of this study should be either in-service teachers or pre-service teachers; (2) The participants either use CALL or MALL; (3) The participants should be male and female representing the gender variations; lastly (4) The participants are willing to participate in this study. Any participants' personal information including both identities as persons and as organizations was kept private.

The researchers utilized method and data triangulation to verify the data. For the method triangulation, the researcher conducted interviews, document analysis, and observations. For the data triangulation, the researcher analyzed participants, documents, and events. The data of the research were collected through document analyses, twenty-two observations, and eight interviews. The researchers collected teachers' lesson plans to observe their content and wrote the data in the lesson plan analysis table. In conducting observations, the researchers examined the teaching processes from the start to the end focusing on technology usage by the teachers. The researchers wrote the data in the observation sheets and recorded the teaching process. In conducting the interview, the researchers applied the semi-structured interviews. The interviews were conducted separately for each participant. Each interview was recorded by using the voice recorder and transcribed in the form of interview transcripts.

To analyze the data, the researchers utilized Miles and Huberman's (2004) interactive model data analysis technique which consists of data collection, data condensation, data display, and conclusion drawing. The data of the research were collected through document analyses, observations, and interviews. In the data condensation, the researcher simplified the data based on the variables of the research. The perception variable consists of understanding and evaluation. For the teacher experiences variable, the coding consists of presenting, assisting, and assessing. Then, the data displayed in the form of data tabulation to help the researchers drawing the conclusion.

RESULTS AND DISCUSSION
CALL and MALL are Perceived Similarly by Both In-service and Pre-service Teachers

This study found that both in-service and pre-service teachers are able to differentiate CALL and MALL based on the device. Furthermore, the usage of both CALL and MALL is perceived positively and negatively by the teachers. The positive themes found in the study are familiarity, ease of use, ease of access, interest in use, and provision of various options and qualified sources while the negative themes were mostly technical problems

Both In-service and Pre-service Teachers are able to Differentiate CALL and MALL Based on the Device.

Table 1. Teachers defining CALL

Types of Teachers	Interview Transcript
Nancy (In-service)	As far as I know, CALL is learning that uses computers; Using blogs, websites, or online videos. (U/C/Nancy/1)
Kayla (In-service)	An old term that probably boomed in the early days when computers were widely used, ...It is when Indonesians teach foreign languages... (U/C/Kayla/1)
Simon (Pre-service)	As far as I know, CALL is a kind of application or device that helps teaching in the form of a computer or laptop. So you have to use a computer or laptop to help or support the lesson. (U/C/Simon/1)
Jared (Pre-service)	As far as I can understand, it seems that CALL is about learning with the help of a computer or perhaps the use of a laptop gadget like that. (U/C/Jared/1)

In this part, the researchers show the way the pre-service and in-service teachers understand CALL. From Table 1, Nancy (an in-service teacher) explained

that CALL is learning that uses computers (U/C/Nancy/1). She explained further that the implementation of computers includes the usage of blogs, websites, and online videos. Similar to Nancy, Kayla gave her opinion on CALL as an old term during the massive usage of computers to teach foreign languages (U/C/Kayla/1). From the pre-service teachers' perspective, Simon defined CALL as any devices or computer applications that help or support the teaching process (U/C/Simon/1). Jared also had the same argument that CALL is a learning process with the help of computers or laptops (U/C/Jared/1).

Those findings are in line with Yuan's (2007) idea of CALL. Yuan defined CALL as a side of e-learning where computer technology is used in the context of language learning. The researchers also found examples of CALL were blogs, websites, and online videos. Those findings are also relevant to the stages of CALL by Warschauer (1996). Based on Warschauer's theory of CALL stages, online videos are included in the communicative stage where the students are encouraged to communicate and interact during learning by using those videos. Then, blogs and websites are included in the integrative stage where the students focus on integrating students to do meaningful tasks by using online resources.

Next, the researchers shows the way the pre-service and in-service teachers

understand MALL. The finding showed that both in-service and pre-service teachers explained similarly about the definition of MALL.

Table 2. Teachers defining MALL

Types of Teachers	Interview Transcript
Nancy (In-service)	MALL is learning with the help of mobile phones. (U/M/Nancy/1)
Kayla (In-service)	MALL is part of, what is it, like a derivative of CALL? ... However, Mobile Assisted Language Learning refers more to small objects that we can carry everywhere, like gadgets. It's easy, like a tablet or mobile phone, or something like that. (U/M/Kayla/1)
Simon (Pre-service)	As far as I know, MALL means learning with the help of a mobile or cellphone. (U/M/Simon/1)
Jared (Pre-service)	Maybe mobile phone-based learning, maybe using phones, and so on like that. (U/M/Jared/1)

As in-service teachers, Nancy and Kayla's answers complete each other's. Nancy defined MALL in a simple way as learning with the help of mobile phones (U/M/Nancy/1). Kayla elaborated more about mobile phones as small objects that people are able to carry everywhere (U/M/Kayla/1). She also mentioned that MALL is a derivative of CALL. Similar to the in-service teachers, Simon's idea of MALL is learning with the help of mobile phones (U/M/Simon/1). Jared also explained that MALL is learning to use phones (U/M/Jared/1). Those findings are relevant to Hoven and Palalas's (2016) view of MALL. They explained that MALL is the term used to describe language learning that uses mobile technology. Furthermore, the research data also found that one of the participants (U/M/Kayla/1) explained the mobile phone as small objects that people

can carry everywhere. Based on Klopfer, et. al (2002), the characteristics of MALL includes portability, social interactivity, context sensitivity, connectivity, and individuality. The finding was relevant in terms of portability. Portability by Klopfer, et. al (2002) means mobile devices are portable due to their lightweight and tiny size.

CALL and MALL is Perceived Positively and Negatively by Both In-service and Pre-service Teachers.

Positive evaluations

The researchers found that based on the participants, positive evaluations of technology usage are familiarity, easy to use, easy to access, interesting to use, option provision, and qualified sources provision.

Table 3. Familiarity with Technology

Types of Teachers	Interview Transcript
Nancy (In-service)	When compared to other applications, YouTube is more familiar (PE/M/Nancy/1)
Jared (pre-service)	Students know that the translation tool must be Google Translate (PE/M/Jared/2)

According to the participants, it appeared that technology is familiar to the students. Nancy (an in-service teacher) argued that compared to other applications, she thought that YouTube (PE/M/Nancy/1) was more familiar to everyone. Jared (a pre-service teacher) also gave his thought that familiarity also appeared in using Google Translate (PE/M/Jared/2). He explained that

students tend to think that translation tools as Google Translate rather than other applications.

Another positive evaluation from both teachers was the ease of use of technology integration.

Table 4. Ease of Use of Technology Integration

Types of Teachers	Interview Transcript
Kayla (In-service)	If I use Microsoft Word, I can prepare it beforehand and I can even save the file and use it again for the next track record (PE/C/Kayla/1) ALL is part of, what is it, like a derivative of CALL? ... However, Mobile Assisted Language Learning refers more to small objects that we can carry everywhere, like gadgets. It's easy, like a tablet or mobile phone, or something like that. (U/M/Kayla/1)
Jared (Pre-service)	The advantage of Google Translate itself is that all the words can be played, and even the sentence form can be read by Google. (PE/M/Simon/2)

Kayla (an in-service teacher) explained that Microsoft Word it is easier to use Microsoft Word since she can prepare everything beforehand and she can save her work as a track record so that it can be used for the next meeting (PE/C/Kayla/1). In terms of Google Translate, Simon (a pre-service teacher) explained that the app is able to play all words and sentences (PE/M/Simon/2). Those findings are relevant to the idea of MALL guideline principles by Naismith, et. al (2004). Naismith, et. al. explained on principle number six that MALL has to be inexpensive and easy to use.

The next positive evaluation was the ease of access. The findings showed that both in-service and pre-service teachers

similarly explained that technology is easy and free to access for teaching purposes.

Table 5. Ease of Access to Integrate Technology

Types of Teachers	Interview Transcript
Kayla (In-service)	Then it (YouTube) can always be connected with us like that, it's really easy for us to connect (PE/M/Kayla/3)
Jared (Pre-service)	We use YouTube because it's free (PE/M/Jared/5)

Kayla (an in-service teacher) explained that YouTube is always connected and it is easy to get connected (PE/M/Kayla/3). Jared (a pre-service teacher) added that YouTube is easy to access because it is free to use (PE/M/Jared/5). Those findings are relevant to the idea of MALL guideline principles by Naismith, et. al (2004). Naismith, et. al. explained on principle number six that MALL has to be inexpensive and easy to use.

According to the participants, technology also presents many options of features and learning materials for the teachers to choose.

Table 6. Options of Features Provision

Types of Teachers	Interview Transcript
Nancy (In-service)	Moreover, for example, if we are looking for learning materials there (YouTube), The material that we look for is available and there are also lots of choices so we can download, choose, and play it over and over again. (PE/M/Nancy/4)
Jared (Pre-service)	So the reason why I chose YouTube is because there are many interesting things that YouTube presents that we as teachers can explore for future student learning. (PE/M/Jared/7)

Nancy as an in-service teacher was able to look for materials on YouTube and the materials were various to choose from (PE/M/Nancy/4). Similar to Nancy, Jared as a pre-service teacher also explained that the reason he chose YouTube is because he was able to find many interesting materials so that he can explore more for future teaching (PE/M/Jared/7). This finding is in line with Canals & Rawashdeh's (2018) study that revealed the available options in the technology are audio, video, tutorials, and any supportive materials to fulfill the students' needs.

According to the participants, technology was interesting and fun to use in the classroom.

Table 7. Interestingness

Types of Teachers	Interview Transcript
Kayla (In-service)	The presence of not only audio but also video displays also makes the students more motivated to focus on learning; Something that makes Quizizz the most fun is that it can be accompanied by a voice, like games like that.... (PE/M/Kayla/5)
Jared (Pre-service)	YouTube is also an application and a social media that is very interesting because it presents audiovisuals (PE/M/Jared/8)

Kayla (an in-service teacher) explained that YouTube provides audio and video displays so that the students are motivated to focus during the learning process (PE/M/Kayla/5). Similar to Kayla, Jared also gave her perception toward YouTube. As a pre-service teacher, he explained that YouTube is an application and also social media that is fun to use because it presents audiovisuals

(PE/M/Jared/8). Lastly, Kayla pointed out that Quizizz is fun to use because it provides voices, games, and question analysis (PE/M/Kayla/5). The finding is in line with Sadeghi, et. al's (2019) study. Their study found that students' motivation was able to increase if the teachers used the gamification instruction.

The last positive evaluation was the provision of qualified sources. There was only one teacher (in-service teacher) who explained that technology provided qualified sources.

Table 8. Provision of the Qualified Sources

Types of Teachers	Interview Transcript
Kayla (In-service)	I prefer to choose the website (Perfect English) ... made by the British themselves, you know, they really are native speakers (PE/M/Kayla/7)

As an in-service teacher, Kayla argued that Perfect English is able to provide qualified sources of learning material since it is made by native speakers, especially by the British.

Negative Evaluations

Most of the negative evaluations of technology utilization by the participants appeared to be technical issues.

Table 9. Negative Perceptions

Types of Teachers	Interview Transcript
Nancy (In-service)	If the video on YouTube is too long, that means it will take up time, and internet quota, so the students who use it have to provide a larger internet quota. Then, if you are at school, for example, you can use wifi at school, but if there are a lot of users, the wifi will automatically be slow. (NE/M/Nancy/1) The translation is a literal translation. So, it means the way it is. (NE/M/Nancy/3)

Kayla (In-service)	Usually when it's not saved, sometimes it's interrupted by adverts. Well, it's the advertisements that really ruin the atmosphere. (NE/M/Kayla/2)
Simon (Pre-service)	Since I don't have YouTube Premium and access it with regular YouTube, there are definitely advertisements that appear at the beginning of the video. That is like a challenge and it delayed to deliver the video to students. (NE/M/Simon/3) But the result of Google Translate sometimes translates things incorrectly, in my opinion. (NE/M/Simon/4)

The provision of internet quota and wifi provision in the school became the obstacles since it could be slowed down if many students using it when Nancy (an in-service teacher) needed to use YouTube during the teaching process (NE/M/Nancy/1). From the pre-service teachers' perspective, the lack of internet quota and bad signal also became obstacles to using any technology that requires internet provision. Simon explained that websites sometimes had errors and the internet signal in each classroom was different (NE/M/Simon/1).

Another obstacle that both teachers encountered was advertisement issues. Kayla (an in-service teacher) found that advertisements on YouTube videos appeared when it is not saved interrupting her teaching process and it ruined the atmosphere of the classroom (NE/M/Kayla/2). Simon, as a pre-service teacher, also encountered advertisement problems while using YouTube in his teaching. He explained that he did not use YouTube Premium so the advertisement appeared at the beginning of the video and it delayed to deliver the learning material to the students (NE/M/Simon/3).

The last obstacle that appeared was the unreliable to assist the students. Nancy, as an in-service teacher explained that Google Translate tends to translate the literal meaning rather than the native speaker version of a translation (NE/M/Nancy/3). The pre-service teacher also encountered grammatical issues in using Google Translate. Simon pointed out that Google Translate sometimes translates words incorrectly (NE/M/Simon/4). The inaccuracies were also found in a study by Bashori et. al (2021) study. One of their participants pointed out that the technology failed to recognize the task or it gave the wrong feedback even though the input to a certain task was correct.

The Utilization of Technology during the Teaching Process

This study revealed that teachers utilized technology in the teaching process to present the instructional material, assist students' project construction, and assess students' understanding

Presenting the Instructional Material

The researchers found that both in-service and pre-service teachers use technology to present the instructional material. This is in line with Ding, et al. (2019) study that the participants used videos and presentation slides to present the learning material. In presenting material, teachers often use YouTube, Microsoft Word, and Canva. For example, Nancy (in-service teacher) picked audio and video talking about narrative text. In the classroom, Nancy played audio

listening about Ndaung Snake story and she asked students to look for the vocabulary or phrases they could get. Aside from using YouTube, Nancy also used Microsoft Word to present the instructional learning material. Nancy presented four images of the Crying Stone story to be analyzed by the students. They were asked to analyze the pictures by looking at any vocabulary they could find.

Similar to Nancy, Kayla also presented instructional material by using YouTube and Microsoft Word. In using YouTube Kayla presented a video of a fable to her students. The video had subtitles from start to end that could be seen by the students. This is similar to Teng (2022) who used captioned video as an incidental learning of vocabulary. Teng explained that the participants improved their knowledge of word form and meaning by watching captioned audiovisual input. While presenting the material, Kayla broke down the text by playing back the video slowly and pausing each part of the text. Students were asked to guess the structure of the text orally and voluntarily. In using Microsoft Word, Kayla presented a list of words that are contained in the narrative video. The list of words was in English and the students were asked to orally translate the words into Bahasa Indonesia.

Different from the in-service teachers who used the saved YouTube videos and Microsoft Word, Simon (a pre-service teacher) used online YouTube videos and Canva during the teaching process. Simon let their students access the learning

material by themselves on their mobile phones. The learning material was talking about proverbs and captions. The video explains how to use proverbs correctly. The written material was also available in the video. In using Canva, Simon presented learning material about proverbs. The material was displayed in English. During the presentation, Simon did not always read the content of the material. At some point, he appointed students to read aloud the learning material. The students were appointed randomly by him. After that, Simon would explain again about the material that the students had read.

Different from the other teachers, Jared focused more on giving students assignments rather than explaining learning materials. He asked the students to analyze an assignment and then they could learn from the result of the analysis. Based on Li, et. al (2019), there were no differences between conventional teaching that used chalkboards or textbooks and current teaching since the technologies were mainly used to present the learning material.

Assisting Students' Project Construction

The research found that both in-service and pre-service teachers use technology to assist students in project construction. It appeared that three teachers used Google Translate and one teacher used ChatGPT. For example, Kayla asked her students to translate a list of words that were contained in a narrative text. Kayla presented the list of words by

using Microsoft Word. She asked her students to translate the words from English to Bahasa Indonesia. She allowed them to use Google Translate to find the translation of every word they did not understand. After the instruction was done, the students started to answer the translation of each word orally and voluntarily. Similar to Kayla, Nancy also pointed out that any word that the user puts in Google Translate will automatically produce its sound. To activate it, the user needs to press the microphone symbol. Other than checking the way a word is pronounced, users of Google Translate are also able to check the spelling of a word. Even though a user writes a word falsely, the suggestion of the right word will appear.

In using Google Translate, the pre-service teachers also had their experiences in the classroom. For example, Simon used Google Translate to help the students pronounce a whole sentence. Simon asked the students to learn the intonation and pronunciation of dialogue using Google Translate on mobile phones. They were able to press the sound button to activate examples of existing vocabulary pronunciations. Different to Simon, Jared used Google Translate to help students to translate an assignment. In the session, Jared asked the students to translate the sentences in the file that had been given in the form of Google Docs. After that, students are asked to identify the similarities and differences in the existing sentence structures. The usage of Google

Translate also can be found in a study by Tsai (2019). Tsai utilized Google Translate to finish a project. The students were asked to translate a Chinese text using Google Translate and the results of the translation were compared to the self-writing text. It was found that the result of Google Translate translation indicated higher writing quality such as a higher number of words, fewer grammatical errors, and fewer spelling errors.

Other than Google Translate, a pre-service teacher also utilized ChatGPT to assist students' project construction. Jared asked the students to create a report text about the capital of a country using ChatGPT. The commands sent via ChatGPT must be in English. After the text has been constructed, the students are asked to transfer the text to their book. Then the students analyzed the text regarding the accuracy of the writing. The results of their analysis are written in their notebooks.

Assessing Students' Understanding

The findings showed that the tools used to assess students' understanding were Perfect English and Quizizz. For example, Kayla as an in-service teacher used Quizizz to assess students' understanding. During the quiz, she displayed the students' rankings through the projector. The students were able to do the quiz from their mobile phones. In using Quizizz, there was no feedback from the system regarding student answers. The points and leaderboard make Quizizz one of the gamification learning tools (Hamari

et al, 2014). The usage of Quizizz is also similar to a study by Bashori et al (2021). Bashori et. al also utilized web-based assessment in the research that served learning materials and quizzes to enhance students' vocabulary. Bashori et al found that a participant viewed the ASR made learning English less boring and less frightful since the questions of the assignment were able to be repeated. Another assessment tools that appeared during the research was Perfect English. Perfect English is a website that provides learning materials, especially grammar-related material, exercises, and direct feedback for its users. First, the students had to answer the questions inside a box provided by the website. Then, the answers written in can be immediately seen as wrong or right by clicking the check box. Feedback from the system could also be seen by students directly.

The Comparison of Perception and Utilization of Technology between Teachers

This study revealed that between in-service and pre-service teachers, the differences in terms of their perception of technology usage in the teaching process are small.

The Comparison in terms of Perception of Technology Utilization

In terms of perception, the researchers divided it into understanding and evaluation. In the understanding context, both in-service and pre-service teachers

have the same view toward CALL and MALL. In the understanding of CALL, all of the teachers have the same view that CALL is a learning process that utilizes computers. In the understanding of MALL, both in-service and pre-service teachers had also the same view that MALL is a learning environment that utilizes mobile phones. An in-service teacher gave further explanation toward MALL in terms of the portability of the device that complemented the other in-service teacher's definition of MALL while the pre-service teachers only explained MALL as learning with the help of mobile phones. The in-service teacher's views were in line with Chen & Tsai's (2021) findings that were analyzed using Tsai's (2004) 5-T framework to illustrate computers or internet role in education (Technology, Tool, Toy, Tour/Travel). Chen and Tsai found that in-service teachers considered MALL as a tool that helps teachers to teach (Tool) and it helps students to learn anywhere and anytime (Travel).

In the evaluation of CALL and MALL, both in-service and pre-service teachers had the same view that using certain technologies can increase students' vocabulary for several reasons. The positive evaluations are familiarity, ease of use, ease of access, option provision, and interestingness. However, only one Kayla (an in-service teacher) argued that technology provides qualified instructional material. According to Praag & Sanchez (2015), the offering of qualified sources is useful for teaching purposes. Aside from

positive evaluation, negative evaluation also appeared from both the teachers. From teachers' evaluation, the main obstacle to technology usage is technical problems and it was similar for both teachers. For example, Nancy and Simon explained that internet quota and signal provision became an obstacle if they used online videos. The advertisements also became obstacles for both teachers. For example, Kayla and Simon explained that advertisements interrupted their teaching process. This finding is in line with Hedayati & Marandi's (2014) that one of the barriers in the implementation of CALL is the technical problem.

However, Jared did not see internet quota and advertisements as challenges, not like the other teachers. The reason for his statement was that he was always able to download the video before presenting it to the students so that the challenges were manageable.

Jared: "If I get around it, I download the video first and then present it via a projector. So, we can watch it together. ... Regarding the quota issue, it is not a challenge for me because I know that not many students have enough quota or adequate quota when I ask them to watch YouTube videos."

The Comparison in terms of Technology Utilization

In presenting material, the in-service teachers used YouTube and Microsoft Word. Both Nancy and Kayla used YouTube to present narrative videos and Microsoft Word to present simple material.

They downloaded the video first so that there were no advertisements appeared during the playback. While the in-service teachers presented their learning material by downloading the video and serving it to the students, Simon (a pre-service teacher) asked the students to directly watch the video from their mobile phones. He also used Canva to present more complex instructional material. These findings are in line with Turgut's (2017) study that revealed the usage of Powerpoint slides with pictures is often used by the teachers to assist their job instead of converting the teaching practice. However, Li, et. al (2019) explained that there were no differences between conventional teaching that used chalkboards or textbooks and current teaching since the technologies were mainly used to present the learning material. Different from Simon, Jared did not use YouTube to present the learning material. He focused on using analysis of certain tasks so that the students would understand the objectives of the lesson.

In assisting students' project construction, both in-service and pre-service teachers used Google Translate in the teaching process. Both in-service teachers used Google Translate purely for translation purposes. Different from them, Simon (a pre-service teacher) used it to check the pronunciation and the intonation of a dialogue. Jared also had different methods of using Google Translate. In the other hand, Jared asked his students to use Google Translate to translate some sentences from an assignment. Later, the

result of the translation would be analyzed by the students for other learning objectives. Those findings are contrary to Praag and Sanchez's study (2015). They explained that experienced teachers suggested immersing the target language rather than using translation tools since it only offers shortcuts for the learners (Praag & Sanchez, 2015).

In assessing students' understanding, the researchers found that only an in-service teacher utilized the technology. Kayla utilized Perfect English website and Quizizz to assess students' understanding. Different from Kayla, the other teachers made a project to assess students' understanding. A study by Schmid and Hegelheimer (2014) showed that the student teachers or pre-service teachers were prone to focus on general topics rather than "uninteresting" topics like grammar teaching since they were not required by the school to design integrated lessons. As a result, the student teachers had difficulties to make assessments by integrating CALL.

CONCLUSION

This study reveals that both in-service and pre-service teachers are able to differentiate CALL and MALL based on the device that is used during the teaching process. In using technologies (both CALL and MALL), there are positive and negative evaluations from both teachers. The positive evaluations of technology consist of familiarity, ease of use, ease of access, option provision, interestingness, and the

provision of qualified instructional material. There are also negative evaluations that come from both teachers in the form of technical problems such as network provision challenges, advertisement interferences, and unreliable task assistance. Aside from teachers' perceptions, this study also reveals the utilization of technology in the teaching process by both in-service and pre-service teachers such as presenting instructional learning material, assisting students' project construction, and assessing students' understanding. This study also reveals that there are small differences in terms of perception and technology utilization between in-service and pre-service teachers.

The research findings implicitly show that most of the evaluations of technology usage are positive. In that case, both in-service and pre-service teachers are highly recommended to use technology in the teaching process. In the teaching process, both in-service and pre-service teachers can explore more about many types of applications to be implemented in the classroom by observing other lectures from other schools and examining research papers that show the variation of teaching from many countries, considering the students' needs. In terms of the small negative perceptions, both teachers can try to find learning websites that are free from advertisements. Both teachers can also try to subscribe to one learning website that offers learning materials and tasks for the continuity of teaching. Lastly, regarding the

internet connection, teachers can discuss the problem with the school about the provision of adequate internet providers.

This research is limited to two aspects. First, the number of participants from both in-service and pre-service teachers does not represent the condition of the teaching process in other schools. Second, this study does not focus on one specific technology so the study only examines the surface of each technology that appears during the research. From the limitations of this study, it is suggested that future researchers examine the perception of both in-service and pre-service teachers with one specific technology usage in the teaching process. It is also recommended to use statistics to enrich the results of the study.

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AUTHORS CONTRIBUTION STATEMENT

Each author made a substantial contribution to this study. MAW was in charge of the entire project, including conceptualization, data collection, analysis, and manuscript writing. ES was in charge

of reviewing the overall content of this research. TS was in charge of reviewing some of the content and the manuscript writing of this research.

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