# The Use of Technology in Language Learning: Teachers' Perceptions and Challenges

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Abstract-Technology usage is not something new in our education system and due to the new normal we live in, technology has been used rapidly today compared to back then. Technology has been a new medium in the teaching and learning process rather than the traditional way. It offers a lot of functions in order to make teaching and learning more enjoyable and meaningful.In this context, technology usage is defined as teaching tools, materials or applications used by the teachers in their language learning. It provides a variety of teaching techniques and teaching materials, which act as tools in the teaching and learning process, with the help of technology. However, not all teachers are familiar with the use of technology in their teaching and learning due to some constraints. This study aims to know the teachers' perceptions towards technology as a tool in language learning besides identifying the challenges that occur by using technology in language learning. This research used a mixed method. An online questionnaire was distributed to 30 English teachers in rural areas. The finding of the research showed that most teachers were having positive perceptions towards the use of technology as it is a beneficial factor in language learning despite the challenge they had. Although the result showed positive perceptions towards the use of technology, more research is needed to identify the teachers' competency in using digital tools.

# *Keywords:* perceptions, technology usage, teaching and learning tool, language learning

# I. INTRODUCTION

Consider the students in class A who are only looking at their English textbooks while the teacher stands in front explaining the preposition and they are on guard in case the teacher asks questions and students in class B who are eager to be called forward by the teacher to answer preposition quiz prepared by the teachers using online applications after listening to a video with a song made by the teacher to explain preposition more clearly and attractively. Choose one of those two classes that appeal to you as a teacher.

Parallel to the passage of time, living in a new normal demands changes in every part of life, and education is no exception. Technology has made a big step in education nowadays and it gives a big impact especially on the

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Melor Md Yunos, Universiti Kebangsaan Malaysia, Malaysia (melor@ukm.edu.my) teachers. The changes in teaching styles not only on how the teachers teach but what kind of teaching materials that teachers use in their English lesson. Due to this new normal, we lived in, technology comes as a savior to help English teachers in their teaching. Technology offers the idea of making everything easy to access and to deliver.

Some teachers encountered challenges in delivering their knowledge while integrating ICT as their medium of teaching, the challenges of perception becoming the major challenge instead of the technology themselves (Kurniawan, 2014). Teachers have a lack of understanding and uncertainty towards technology tools and found it hard to integrate them meaningfully in a lesson (Stoetzel & Shedrow, 2021). Despite the fact that traditional methods of teaching appear to be the most convenient and effective because teachers can pay attention to students and interact with them, some teachers find the use of technology to be complicated and unfriendly. This is supported by Dotan et al, 2021 where their finding showed that some teachers are having difficulties using computerized systems in teaching where they have challenges in presenting their notes virtually. However, according to Ghavifekr et al. (2016) ICT in education has the potential to transform teaching.

Students attempting to learn English as a second language require additional language assistance. The students require a variety of tools to help them learn the language easily and effectively in order to master the four major skills in English Language which is listening, reading, speaking, and writing. It is time for teachers to rethink and seize this opportunity to create more engaging, enjoyable, and meaningful teaching materials as their lessons tool through interactive presentation or online applications. According to Nordin et al. (2010), the best way to deliver knowledge is with the integration of technology in teaching and learning not only to teach learners how to master the skills of using the technology tools or applications itself.

In a rural area specifically, the use of technology as teaching and learning tools is totally a great chance to attract the students to enjoy the English language. Schools in rural areas are often associated with the high education gap. If they were to compare with schools in the city, they have challenges in various aspects of basic facilities. The integration of technology in the English language teaching and learning will open a window for these students to enjoy English to the fullest.in schools alters teaching and learning methods in rural education. Andin et al. (2019).

Apart from the fact that some teachers face difficulties and barriers in incorporating technology into their language

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learning, it all depends on the teachers' attitude toward using or not using technology to help them in language learning. Hence, this research is to identify teachers' perception of the use of technology as tools in language learning and the challenge they face in implementing it. Therefore, this research main objectives are as follow:

- 1. To identify teachers' perceptions on the use of technology as teaching and learning tools in language learning.
- 2. To identify challenges faced by the teachers in implementing technology as their teaching and learning tools in language learning.

## II. LITRATURE REVIEW

#### Technology as Teaching and Learning Tools

Digital technologies have become an integral part of everyday life and also of teaching and learning. Various technologies are integrated into education systems such as communication gadgets, the Internet of Things (IoT), multimedia and virtual reality (Kiryakova et al, 2018). ICT enables information gathering, management, manipulation, access and communication in various forms (Yunus et al, 2013).

Teaching tools make teaching and learning more powerful. It is stated by Gonne (2018) cited by Caroline Victorine Katemba(2020) in her research, teaching tools make teaching and learning more powerful than they would be without it. His study categorizes ICTS as powerful tools in teaching. Granito and Chernobilsky (2012) stated that learners can feel the real life situation when they watch something through digital video rather than the traditional books they have.

# Teachers' Perception on the Use of Technology in Language Learning

There are a few studies done by researchers related to this study. Using technology in language learning can develop creativity and teaching skills among teachers. According to the research done by Asri (2017), she found that technology can improve teachers' creativity and can improve their professional development when preparing materials for students. The implementations of technology are very supportive for the educators in preparing materials and presenting materials as long as administering the result of the assessment (Miftahul et al, 2020). They also wrapped that teachers have changed learning by integrating technology even though it consumes energy, materials and situations in the design of digital-based instructions and in the learning process.

In research conducted by a Faculty Languages and Communication in a University in Malaysia, the majority of their participants supported the use of Facebook as one of the technologies in learning English. They are positive that using this technology helps teachers in improving their teaching skills and make their lessons more interesting so that they can promote a conducive learning environment. More importantly, they can improve their teaching skills by keeping informed with the latest education trends and programs conducted worldwide.

Teachers also believe that technology can help them boost their confidence. Asri 2017, also stated that using media Technologies really helps them to boost their confidence in teaching as they can insert their invoice on the Animation they made. In research conducted by a Faculty Languages and Communication in a University in Malaysia, the majority of their participants supported the use of Facebook as one of the technologies in learning English. They are positive that using this technology helps teachers in improving their teaching skills and make their lessons more interesting so that they can promote a conducive learning environment. More importantly, they can improve their teaching skills by keeping informed with the latest education trends and programs conducted worldwide.

Teacher perceptions of students also need to be taken. Learners' performance will show a positive result with the aid of technology. Alzubi (2019) found that most of the English teachers who participated in her study supported the integration of smartphones (example of technology) in the English learning context as they believe smartphones would boost up learners English learning. Another study proved that technology can increase learners' motivations and engagement in class. Technology such as online book clubs or any small forum discussion helped learners to engage with learners all over the world. These also helped them to be exposed to other cultures around the world. (Coffey, 2012).

Gamification is also one part of technology-based learning tools. A study by Nataliia V. Iaremenko (2017) proved that a gamified learning platform changed students' perspective towards acquiring English language where they become more motivated. The study focuses on Kahoot gamified apps where a total of 120 students from a university in Kyiv was chosen to be the participants in the research. The findings showed positive impacts where the learners felt motivated and happy when the games and quizzes were implemented. 87% of the participants felt positive as their feedback. The teacher should accept that the use of technology in teaching should be present in language learning. These positive points are supported by research from Miftahul et al. (2020) where 80% of teachers believe students can improve their learning processes and outcome through digital technology-based learning. It will affect the students' test score where when they are happy and feeling motivated, they even do tutoring outside school hours using digital-based technology.

In contrast to the above argument, Fatemah and Javad, (2012) discusses that high technology can lead to a better quality of education. The result of the research agreed that the use of technology cannot completely replace teachers' roles in learning and it cannot completely ensure a better quality of education. They believed teachers' technology literacy skills need to move together with the advancement of technology.

# **Challenges Using Technology**

Despite the teachers' positive perceptions in the use of technology as a teaching and learning tool in language learning, there are some challenges that need to be taken into consideration. They have many difficulties that continue to be aroused during the process of using ICT in any lesson even though they have lots of studies that have acknowledged the value of ICT in education (Silviyanti & Yusuf, 2015).

One of the major challenges stated in a research made by Ryn & Sandaran SC, (2020) was the lack of ICT literacy among the teachers and time constraints in their teaching and learning development. They discussed that teachers still need to improve in the use of technology, especially the use of the internet to be able to be more confident in implementing technology in their classroom without hesitation as they still lack in technology literacy. Teacher face difficulties designing exciting material, explaining the materials, assessing and giving feedback as they were lack in training (Tamar Shamil-Inbal & Blau, 2021). The lack of technology literacy can result in teachers always having doubts about implementing technology in the classroom.

There are some different views about teachers' roles in the use of technology in teaching and learning. These teachers believe they need to play the dominant roles in class where they need to deliver the content on their own instead of using technology. It assumed that these indicate teachers might not have enough theoretical and practical knowledge about technology well even though they have positive perceptions of the use of technology in English learning (Fatemah and Javad, 2012)

In addition, one of the challenges encountered by teachers or learners is the lack of ICT equipment. According to Asnawi et al. (2018), teachers have a major challenge where they have limited number of ICT facilities and low internet connection at school. It is time-consuming as they need to take turns using the same technology tools in the school. There were also some obstacles to using technology such as the lack of technical skills, infrastructure and facilities and teachers' teaching strategy. (Ramij & Suktana, 2020).

#### III. METHODOLOGY

# **Research Design**

In this study, the mixed method was used to collect and analyse data from a set of questionnaires and an open-ended question. The research questions were developed to ascertain teachers' perceptions of using technology as a teaching and learning tool in their English classrooms, as well as the challenges or barriers they face. The participants were given 25 minutes to respond to the questions. All information provided by participants was guaranteed to be used solely for academic purposes.

#### **Background of Participants**

This study included 30 ESL primary teachers from rural areas in Selangor and Perak. In these two states, purposive sampling is used in the participant selection process to obtain the most appropriate data from the teachers within the researchers' reach. Ilker et al. (2016) stated that the use of purposive sampling techniques or judgment sampling, is the deliberate choice of a participant due to the qualities the participant possesses. This study's participants ranged in age from 25 to 55 years. There were ten teachers between the ages of 25 and 35, ten between the ages of 36 and 45, and ten between the ages of 46 and 55. Participants were assured that the information they provided would be kept strictly confidential and would only be used for research and academic purposes.

#### Instrument

There were four sections (A, B, C and D) in the questionnaire. Section A is about basic information of the participants regarding their age and teaching experience. Section B contains the reasons for teachers using technology, which were created and modified from questionnaires created by Karakaya (2010). Meanwhile, Section C was built and modified from questionnaires used by Zare-ee (2011) to examine English teachers' perceptions of using technology as teaching and learning tools in their English language learning. The Likert-Scale was used to format 7 items in questionnaires for Section Participants would simply select either "Strongly Disagree," "Disagree," "Neutral," "Agree," or "Strongly Agree." Section D includes one open-ended question about the challenges they face when using technology as language learning tools. The researchers also assisted some participants who had difficulty in filling out the questionnaire. In order to increase the reliability of the research, the researchers made observations before doing the research within the teachers near them. Most of the participants were actively asking questions on how to handle digital platforms.

#### Data Collection and Data Analysis

The questionnaire was distributed through Google Forms. The procedure was fully online due to the Covid-19 pandemic. Section A's data was presented in the form of a table based on their age range. The data from Sections B and C were quantitatively analysed in Microsoft Excel to determine the frequency and percentages of each item. The comments for the open-ended question in Section C were extracted using the written space provided to identify challenges faced by the teachers in implementing technology as their teaching and learning tools in language learning. The result was analyzed based on a few themes and frequency.

# IV. FINDINGS

The results of the questionnaire are broken down into four sections. Section A is demographic finding on the sample. Section B focused on the reasons why teachers use technology, followed by Section C regarding the data on teachers' perspectives of the use of technology as teaching and learning tools in language learning and the challenges experience by the teachers when incorporating technology into their language learning were presented in Section D.

### Demographic finding on participants

#### TABLE I: DEMOGRAPHIC FINDING ON PARTICIPANTS

Item	Category	Percentage
Age	25-35	33.3 %
	36-45 46-55	33.3 % 33.3 %
	1.5	26.7.9
Feaching experience	1-5	26.7 %
Feaching experience	6-10	6.7 %
Teaching experience		

Table I shows the demographic finding where the participants are purposive sampling based on their age range, 10 participants for each age category with different years of teaching experience. Based on the years of teaching experience by the participants is 1-5 years frequency is 8 and the percentage is 26.7%, 6-10 years frequency is 2 and it is equal to 6.7%, 11-15 years frequency is 7 and the percentage is 23.3%, meanwhile 16-20 years 10% and its frequency is 3 and lastly, with the 21 and above teaching experience frequency is 10 and the percentages is 33.3%.

### Reason for using technology

Participants were asked to select one or more reasons why they use technology from a list provided; the results are shown in Table 1. The frequency is proportional to the number of teachers who selected the items.

#### TABLE II: REASONS FOR TEACHERS TO USE TECHNOLOGY

No	Reasons	Frequency	Percentage
1	Online dictionaries	9	30 %
2	Build own online task (Quizizz / Word Wall)	16	53.3 %
3	Check and mark students' work online	12	40 %
4	Have online classes via Google Meet or Zoom applications	15	50 %
5	Produce own digital video	5	16.7 %
6	Assigning homework via Whatsapp/ Google Classroom	27	90 %
7	Email	13	43.3 %

Table 2 showed that the most frequent reason for teachers to use technology is for assigning homework via applications which are Whatsapp and Google Classroom (90%), followed by building own online task by using online programmes such as Quizziz and Word Wall (53.3%), having online classes via Google Meet or Zoom applications (50%), using for email purpose (43.3%). In between the results, the table indicates that teachers are using technology for checking and marking students' work online (40%) and also use online dictionaries (30%) and the least reason is producing their own digital video (16.7%). The highest percentage of technology tools used is the most simple and easy to operate, which contradicts the lowest percentage 16.7% which is to produce their own video. Producing own video needs high technology competency skills as it contains different transition and graphic elements.

# The teachers' perceptions towards the use of technology as teaching and learning tools in language learning

This section describes the 30 English teachers' perceptions based on 7 items in the questionnaire. Table 2 shows the results.

TABLE 2: TEACHERS' PERCEPTIONS ON THE USE OF TECHNOLOGY AS TEACHING AND LEARNING TOOLS IN LANGUAGE LEARNING.

No.	Items	S.D	D	NS	Α	S.A
1	In my view, the use of technology as teaching tools makes teaching and learning more powerful and meaningful than it would be without it.	0%	0 %	0 %	20 (66.7%)	10 (33.3%)
2	I am able to produce my own teaching materials by using technology.	0 %	8 (26.7%)	5 (16.7%)	13 (43.3%)	4 (13.3%)
3	I believe that using technology is more effective than using books or printed materials.	0%	7 (23.3%)	6 (20%)	17 (56.7%)	0%
4	The use of technology makes knowledge and information spread fast.	0%	0%	0%	20 (66.7 %)	10 (33.3%)
5	I think using technology makes my English language learning more effective.	0%	0%	0%	20 (66.7%)	10 (33.3%)
6	My students enjoy their English learning with the help of technology.	0%	0%	0%	18 (60%)	12 (40%)

7	I believe that	0%	0%	0%	20	10
	using				(66.7%)	(33.3%)
	technology					
	as a teaching					
	and learning					
	tool in my					
	English					
	language	guage				
	class					
	benefits					
	both myself					
	and my					
	students.					

Table II indicates, for the first item, 100% of the participants agree that the use of technology as teaching tools make teaching and learning more powerful than it would be without it as stated in Gonne (2018) in his study where ICTS are powerful tools in teaching. It shows that the English teachers have positive perceptions that technology has a good impact in their teaching. The next item shows that almost 56.6% equals 17 participants able to produce their own teaching materials by using technology. Almost 56.7% of participants agree that using technology is more effective than using books or printed materials. Granito and Chernobilsky (2012) stated that learners can feel the real life situation when they watch something through digital video rather than the traditional books they have.

Again, 100% of participants agree that the use of technology makes knowledge and information spread fast which allows teachers to stay current on current news, technology, and materials that can be used for English language learning. ICT enables teachers and learners to gather data, administration, manipulation, access and communication in multiple forms (Yunus et al. 2013). All the participants also agreed (100%) that technology makes their English language learning more effective. Teachers who use technology to teach language have a positive view toward student motivation and make learning engaging, exciting, and efficient (Tengku, M., S. & Yusuf, Y., Q. 2015). Besides that, 100% participants agreed that their students enjoy their English learning with the help of technology as stated in Arifah (2014) in her study stating that the use of the Internet increases learners' motivation.

### English Teachers' Challenges in Using Technology as Teaching and Learning Tools in Language Learning.

There are challenges or challenges exposed by the teachers regarding the use of technology for their language learning during home based learning due to COVID19 pandemic. The data gained were divided into two tables according to the chosen setting, Perak and Selangor. The data were presented in Table III and Table IV.

Challenges faced	Frequency
Time constraint	7 (46.7%)
Internet connection	3 (20.0%)
Lack of technology skills	2 (13.3%)
No accessibility to gadget	3 (20.0%)

Table III shows most of the participants, 46.7% in Perak stated that due to time constraint, they have challenges in creating materials and setting up the apparatus needed which related to the use of technology in their lessons. Some responses were extracted from the open-ended questions showed below:

It may requires a lot of teacher's effort and time to produce T&L materials using technology (T12)

Technology is okay but there are time constraints to do teaching material. (T24)

*I consumed a lot of time producing my own materials. It demotivated me sometimes.* (*T29*)

Some of the participants agreed with the use of technology however, insufficient time in preparing materials, learning new applications, make them demotivated.

The challenge with internet connection and no accessibility to gadgets were faced by 20% participants respectively. Meanwhile, the least challenge faced by the participants which equal to 13.3% was lack of technology skills. Below are some responses extracted from the open-ended questionnaire.

It is hard to integrate technology in teaching English especially during PDPR due to poor internet connection. (T2)

Lack of equipment to use and I only have my mobile phone. (T11)

I think I've attended a few courses on ICT/ producing my own digital materials but still couldn't catch up with the technology skills like the other teacher. (T16)

# TABLE IV: CHALLENGES FACED BY THE TEACHERS IN USING TECHNOLOGY IN SELANGOR

Challenges faced	Frequency		
Time constraint	3 (20.0%)		
Internet connection	6 (40.0%)		
Lack of technology skills	4 (26.7%)		
No accessibility to gadget	2 (13.3%)		

Table IV shows the challenges faced by the teachers in using technology in Selangor. The result shows that the most challenging problem faced by 40.0% of participants was the internet connection. As stated by Asnawi Muslem, Yunisrina Qismullah Yusuf and Rena Juliana (2018), teachers have a major challenge where they have limited ICT tools and low internet connection at school. About 26.7% participants were facing a challenge with lack of technology skills and 20.0% stated that time constraint is their challenge and the least challenge faced by 13.3% participants is no accessibility to the gadget. Below are some responses extracted based on challenges faced by the English teachers.

#### Internet connection

It is hard to integrate technology in teaching English especially PDPR due to poor internet connection. (T3)

No challenges with technology, but I live in rural area, connection is not so good (T30)

#### Lack of technology skills

It is hard for me to produce my own digital materials due to lack of skills in technology (T4)

I am too slow to learn (T22)

#### Time constraint

Time constraints in creating materials. (T10)

It takes time for me to learn new skill especially in technology (T8)

#### No accessibility to gadgets.

I don't have any other gadgets and depend on mobile phones. (T14)

*I share my gadget with my children. (T21)* 

These are challenges faced by the English teachers affecting them in using technology as teaching and learning

tools in the language learning. Although, the usage of technology is highly recommended especially in this new normal of language learning, Nikian, Nor, Aziz, (2013) stated that teachers who were motivated to participate in technology training may face a lack of equipment such as computers, time, and technical support. Some of the participants agreed with the use of technology however, insufficient time in preparing materials, learning new applications, make them demotivated. Some participants stated that even though they are using technology as a teaching tool in language learning, the students might not be able to access it. According to Shanmugam and Balakrishnan (2019) the lack of the use of ICT in rural schools results in rural students being unable to keep abreast of these subjects more efficiently and prevents them from performing well in the subjects. Lack of technology skills is also one of the challenges mentioned by the participants. Through the study done by Liu, Lin, Zhang, Zheng (2017), in enhancing teachers' perception of the usefulness of technology, they need better facilities besides the access to technical support and also variance of resources as well as technologically related to pedagogical training. Some teachers have challenges in keeping them up with the current technology and some teachers are considered weak in catching up with the use of technology. Therefore, the researchers hope that the education administration would like to play roles and take actions towards these challenges. As if the challenges faced by the teacher can be solved and overcome, it is able to increase the quality of education during COVID19 pandemic.

### V. CONCLUSION

Based on the findings of this study, it is possible to conclude that teachers have a positive attitude toward using technology as a tool in their English lessons. They were able to make their teaching and learning more powerful and meaningful by utilising technology. Despite their disparities in age and years of teaching experience, they all use technology in their classrooms. On the other hand, teachers themselves are still struggling to overcome challenges and challenges when it comes to using technology. Future research should focus on determining teachers' competency in using digital tools other than laptops and smartphones.

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