


ANALYZING THE IMPLEMENTATION OF TECHNOLOGICAL PEDAGOGICAL CONTENT KNOWLEDGE (TPACK) BY EFL TEACHERS IN THE CLASSROOM

Nurhasanah Nurdin¹, Nunung Anugrawati², Andi Bulkis Maghfirah Mannong³

^{1,2,3}Universitas Muhammadiyah Makassar, 90221, Indonesia

Article Info	Abstract
<p>Received: January 24, 2023 Revised: February 19, 2023 Accepted: March 2,, 2023 Published: June 29,2023</p> <p>Keywords: TPACK, Teachers' Perception, EFL Teachers', Teaching English</p>	<p>This research aimed to find out the Implementation of Technological Pedagogical Content Knowledge (TPACK) in EFL classroom at SMPN 4 Sungguminasa and the teachers perception on the implementation of Technological Pedagogical Content Knowledge (TPACK) in EFL classroom. The data was collected in September from two teachers' of seventh and eighth grade of SMPN 4 SUNGGUMINASA. This research used a descriptive qualitative method, and the instruments used observation and interview. The observation was used to observe the implementation of TPACK in EFL classroom and the interview used to get the data related the teachers' perception on the implementation of TPACK in EFL classroom. The result of this research showed that the teachers in SMPN 4 SUNGGUMINASA have a good level of TPACK the teachers can operate technology difference and achieve classes in teaching EFL classroom, namely learning tools and applications such LCD projectors, power point, Laptops, Google Classroom, WhatsApp, mantimeter.com and YouTube. The teachers' have pretty well done in the teaching and learning process. The result of the interview of this research showed that generally the teachers gave positive perception and decided that teachers use Information Communication and Technology (ICT) in EFL classroom, students more motivated to study and easy to understand the material.</p> <p>This is an open access article under the CC BY-SA license.</p>
	
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INTRODUCTION

The teacher is the title of the implementation of education, which is a very influential part in the process of teaching and learning (Subdi, 2011). When learning in the classroom, the teacher must dominate two things, which are strategies complete with material and learning. The teacher as something important in learning to determine the success of the students (Sudjana, 2004). In this 21st century, technology has converted an inseparable part of daily life, where the use of technology in carrying out daily life has become an obligation include in the world of education. As a result, teachers in the twenty-first century must be

knowledgeable and skilled in the use of a wide range of technological devices, both traditional and modern. Murphy et al. (2013).

According to Shulman (1987), every teacher must complete oneself with enough material and pedagogical expertise in order to better promote the teaching and learning processes that occur in class. He goes on to say that teachers should not only be knowledgeable about the subject matter being taught (i.e., content knowledge), but also about classroom strategies, the application of learning theories, differentiation approaches, and grading processes (i.e. the pedagogical knowledge). Mishra and Koehler (2006) augment Shulman's plan by adding technological expertise when it comes to incorporating technology into the classroom, in line with the advancement of technology in the arena of education.

Koehler and Mishra (2006) a framework to assist difficult tasks in evaluating technology integration in Technology Pedagogy and Content Knowledge class. Through three primary modules: Technological Knowledge (TK), Pedagogical Knowledge (PK), and Content Knowledge (CK), it provides a framework for describing and directing the use of technology to improve learning. The TPACK framework goes even further by emphasizing knowledge types that exist at the intersection of those three major points, such as Pedagogical Content Knowledge (PCK), Technological Content Knowledge (TCK), Technological Pedagogical Knowledge (TPK), Technological Pedagogical and Content Knowledge (TPCK), and Technological Pedagogical and Content Knowledge (TPACK). By observing the correlation between those variables components in TPACK, the framework was used to conduct studies to determine how technology is integrated into overall school learning.

LITERATURE REVIEW

Alhababi (2017) investigated the framework of technological, pedagogical, and content knowledge (TPACK) was used to design technology integration activities for teachers' and students' achievement and effectiveness. To collect data for this study, a quantitative and qualitative mixed method was used. The findings indicated that a well-implemented and used TPACK framework is an effective tool for both teachers and students to improve teaching and learning.

Aryanti (2021) investigated the use of teacher pedagogical content knowledge (TPACK) technology in EFL learning in two different school settings during the Covid-19 pandemic (rural and urban). The comparative descriptive method was used in this study. The sample

consisted of two English teachers from each rural and urban school (Middle School 8 Bengkulu Selatan and SMPN 5 Bengkulu city). Observations, interviews, and documentation are methods of data collection. According to the results of this study, an urban teacher has higher TPACK scores than a rural teacher.

Cahyono & Cahyani (2012) investigated Attitudes of Teachers and Technology Use in Indonesian EFL Classrooms According to the findings of the study, information and communication technology has not been developed as a specific function of the classroom, as teachers often use computers and laptops for PowerPoint presentations.

Maghfirah (2019) investigated English as A Foreign Language (EFL) Teachers' Perception on Information and Communication of Technology (ICT). This research used a descriptive qualitative method. The findings of the research showed the results of the teachers' interview showed that mostly the teacher gave positive perception and agreed toward and teachers' used Information and Communication of Technology (ICT) in teaching English.

METHODS

According to (Rakhmat, 2002: 24) the descriptive qualitative method emphasizes observation and a natural setting. Researcher went directly to the field, acting as an observer. Researcher made behavioral categories, observes symptoms, and records them in an observation book (the instrument is an observation guide). Researcher did not try to manipulate the variables. Through qualitative research the research was to describe the implementation of TPACK by EFL teachers in the classroom and their perception on the implementation of TPACK in EFL classroom.

The subject of this research employed two teachers who teach English subject in SMP Negeri 4 Sungguminasa.

Instrument

The researcher used observation and interview for collecting the data. The researcher observed directly the process of implementing TPACK in EFL classroom. The tools of observation that were used including cameras, tape recorders that served to record teaching and learning process that occurs in the classroom, observation checklist regarding implementation TPACK in English classroom. The main feature of the interview is the direct face-to-face contact between the researcher and the interviewer. The interview technique was

conducted by voice recorder and used free-guided interview, that is the questions asked were not limited to the interview guidelines, and could be deepened or developed according to the situation and on site conditions. In this case, the interview was conducted with the English teachers.

Data Analysis

According to Miles, Huberman and Saldana (2014) analysis can be defined as consisting of three steps: data condensation, data display and conclusion drawing verification.

Researchers collected data by observing and surveying teachers about how they teach and learn. Researchers collected and documented all information from the class. The researcher used observations based on facts to inspect implementation of TPACK in EFL classroom using observation checklist and recorded the teachers' process in teaching in class, then the interview was used to get teachers' perception in the implementation of TPACK in terms of ICT in EFL classroom. Researchers used data collected during the survey on TPACK implementation and teachers' perceptions of TPACK implementation in EFL classrooms. As a result, the data are summarized and categorized according to the researcher key points.

After reducing the data, researcher systematically explains and discusses their findings. Therefore, it is easy to analyze. View data that represents data in your organization.

Based on the data display the researcher draw the conclusion in this research on how the teachers TPACK implementation and what the teacher's perception on the implementation of TPACK in EFL classroom.

RESULT AND DISCUSSION

In this section, it is explained the results of research and at the same time is given the comprehensive discussion. Based on the result of observation and interview that a form teachers' Technological Pedagogical Content Knowledge (TPACK) in EFL classroom at SMPN 4 Sungguminasa, especially for the implementation of TPACK in EFL classroom and the teachers' perception on implementation TPACK in EFL classroom.

1. The teachers' Technological Pedagogical Content Knowledge (TPACK) and the implementation in teaching EFL classroom at seventh and eighth grade school of SMPN 4 SUNGGUMINASA.

Mishra and Koehler (2006) identify seven dimensions of teacher TPACK. They derive from three main knowledge components: content, pedagogy, and technology. They are: 1) Technological knowledge (TK). 2) Content knowledge (CK). 3) Pedagogical knowledge (PK), 4) Technological Content Knowledge (TCK). 5) Technological Pedagogical Knowledge (TPK). 6) Pedagogical Content Knowledge (PCK), and (7) Technological Pedagogical Content Knowledge (TPACK)

a. Technological Knowledge (TK)

Based on observation in class the teacher had a low level of TK. Teachers still have a problem with technology when teaching in class, teachers lacked the appropriate critical technical tools required for the course. "I lack knowledge on how to use technology, but usually I use audio visuals such as radio, learning videos that require the internet". He admitted that he has still lacked experience using projectors and computer (laptop) in class because school usually provide computer labs but they are rarely used because its broken, and there was still a lack of tools such as LCDs and projectors in school so teachers usually alternately and some of the teachers used their personal devices.

b. Content Knowledge (CK)

When researcher conducted through observation, the teacher has a good level for CK. The teacher has a good command because the teachers offerings relevant and precise facts about the theme and provide pictures or show YouTube videos about topics currently being taught. Furthermore, the teacher's most recent education comes from an educational background in English, demonstrating proficiency in that subject. To reinforce the lesson, the teacher always asks students about the material from the previous meeting before the lesson begins. "Yes, I always improve my skills and my teaching strategies before and after I teach, like play videos of native speaker's conversation on YouTube, so I can expand y knowledge with authentic materials. I often try various strategies and various methods according to the learning materials".

c. Pedagogical Knowledge (PK)

The third aspect is Pedagogical Knowledge (PK). Based on observation researcher found the teachers' levels of PK was very high. First, teachers understand the essential pedagogical approach to preparing and delivering lessons. Second, teachers conducted face-to-face learning in the classroom. Learning is student-centered and there is no time limit for implementing learning. For example, during the teaching and learning process, a teacher can use her LCD projector to share videos and slide presentations with the class. Second, the teachers prove a comprehension of various student learning panaches by using YouTube videos to increase students' comprehension and checking students' understanding by asking directly and randomly. Furthermore, the teachers structure the experience to encourage student learning. "Yes, at the beginning in class I always start with pray and reading the Al-Qur'an, than I check the students attendance who come and not. Before we continue into the topic I ask questions about learning in previous meeting to students. In the teaching and learning process I try to teach all students to play an active role in class, such as asking "what do you think about?" or "give me examples about this/that" at the end of class I give them games in learning that can increase more responses from them" She admitted that she had knowledge if the classroom controlling. The teacher can lead the discussion interactively.

d. Technological Content Knowledge (TCK)

Based on observation the majority of teachers have a good level of TCK. Teachers use technology to demonstrate complex ideas that are otherwise difficult to comprehend. They were shown to be able to use technology to select appropriate primary competency materials for learning English in the classroom. Appropriate technologies can also be used in multimedia resources to drive learning processes such as: LCD and laptop computers. "Sure, I usually use some application like mantimeter.com in class when the internet stable, I also use LCD and play examples of material/topic in class via YouTube or videos that I make" She confessed that she created a WhatsApp group class to share the material or a YouTube link to the material, and instructed the students to watch videos to enhance their in-depth knowledge of the material.

e. Technological Pedagogical Knowledge (TPK)

Observation based results in classroom indicated that the subject's TPK levels were well enough. Teachers have used technology to present materials to students in class in interesting

ways, allowing students to take an active role in the classroom. It turns out that they had their own information technology learning media in place before the learning process began. They used WhatsApp as a medium to share more information in class, YouTube link video or Power point presentation that has been previously studied in class and used Google Forms for daily testing of absent students. "I sometimes adjust the use of technology according to the topic of material in class, such as when I teach asking and giving opinions, sometimes students do not understand if they are not given a clear picture. That's why I can prepare tools such as LCDs and projectors as much as possible in class to show students the material and examples of material that students do not understand".

f. Pedagogical Content Knowledge (PCK)

The sixth domain is pedagogical content knowledge (PCK). Based on researcher conducted through observation indicated that PCK level of the teacher was good. It is because teachers' choose operative teaching strategies that director students' thinking and learning. They were able to grasp different sub-concepts of material and apply them in different ways. The application of English development they used in teaching materials has made them creative and innovative when learning in the classroom. As a result, they seemed to have a deep understanding of the content and teaching methods, and English teachers seemed to be able to hone their professional skills. "When there are students who do not understand the material, I usually show different examples of the same material with examples that are easy to understand for students, such as we learn asking and giving appreciation, I show examples in a slide show if students did not understand I also show a video in the form of an animation that easy for students to understand".

g. Technological Pedagogical Content Knowledge (TPACK)

The seventh area of knowledge is Technical Education and Content Knowledge (TPACK) observation through in class showed that the majority of teachers had TPACK level is satisfactory. It demonstrated that English teachers could incorporate seven aspects of TPACK, namely Technological Knowledge, Pedagogical Knowledge, Content Knowledge, Pedagogical Content Knowledge, Technological Content Knowledge, Technological Pedagogical Knowledge, and Technological Pedagogical And Content Knowledge.

First, it demonstrated that English teachers can deliver classes that effectively combine subject matter, technology, and teaching-learning approaches. Others have acknowledged

teaching materials with proper teaching methods using assistive technology based on TPACK framework, such as LCD projectors and power point, whereas some people use technology to teach materials to make the content more appealing to students, and teachers also used Google Classroom for sheering material.

Second, teachers used technology in their lessons to support student learning approaches. Teachers often shared her YouTube link video to her WhatsApp group class as a reference for students so that they could understand the material better when they saw the examples. Finally, teachers were able to create well-prepared lesson plans and use technology to present relevant lesson content. Teachers can conduct lessons using self-created lesson plans and used popular technology learning tools such as WhatsApp, Google Forms, Google Classroom and Mantimeter.

Although the study above is similar to the researcher study and is also about teacher TPACK in EFL classes, the results different from this study where teacher TPACK was discussed in a comparative study and the researcher study dealt with implementation of TPACK. It was also discovered by researcher at SMPN 4 Sungguminasa.

2. The teachers' perception on the implementation of Technological Pedagogical Content Knowledge (TPACK) in terms of the used of Information and Communication Technology (ICT) in EFL classroom.

Based on interviews about teachers' perceptions of introducing information and communication technology (ICT) into their English classrooms, researchers found that teachers had different views on the introduction of ICT in the classroom. To collect the data, researchers interviewed two English teachers.

a. ICT Improves student's interest

Teachers' already have a basic understanding of ICT and have used it in the classroom to increase student learning and students' enthusiasm for learning. The teachers' already well understood the used of ICT in classroom. This is supported by the result of interview where the teacher said that:

T1: "That's right, using TPACK is very useful for the teachers improve student interest in learning so the teachers can be easy to teach the students, the teachers can be easy to transfer the knowledge to the students by using TPACK in learning process"

ICT is a technology that includes a wide variety of information tools and apps that teachers can use to improve student engagement and the quality of student knowledge in the classroom.

b. The students are more motivated to learn with ICT

Teachers said that ICT is not only a true tool in the learning process, teachers can also use it to interest students during learning and to make learning materials interesting. Students are less likely to get bored while learning, as well as using the LCD. Furthermore, the result of interview where the teacher said that:

T2: “Yes, they are very happy when learning using media such as LCD and showing some learning videos.”

He admitted that students are more motivated and happier with the use of ICT as a learning tool, especially by expanding material through media such as YouTube and playing more videos.

c. ICT help the teachers to teach English

The teachers supposed that the profits of using ICT make it easier for teachers to give material in the good way such as used power point presentation in LCD projectors and or give any examples to students when students don't understand the material. Currently, ICT for learning has become a rarity as regular teachers and students are already ICT enabled. This is supported by the result of interview where the teacher said that:

T1: “Yes Of course, used of ICT learning in class very helpful for the teacher, it can be see that if there are students that don't understand the material, the teacher can give some example that can students more understand”

She informed that in the class usually used projector and LCD so if students need more examples it was be easier to show the different examples on YouTube or Internet.

d. ICT make it the students happy to study English

The teacher said that with ICT, students are satisfied with learning. With ICT, the students learning can be growths, the teacher can play an authentic examples video from many resources such as internet Google or YouTube. Further, based on the interview the teacher said that:

T1: “Yes of course, it is a very useful and very good when we use ICT in English in English learning I mean, because when we teach and we use TPACK automatically the

students are attractive the students more active in learning process and it is a fact I see the reality of my students they are happy and they are enthusiastic to teach English if we using ICT”

The teacher said that when we use ICT in class the students happier than we are not, the students more interesting and motivated when we use ICT in learning process.

e. ICT makes the students easier to understand the material

Teachers have found that with ICT, students develop more comprehensible material and are more motivated when the material they are given is created in the most engaging way possible. By doing these, students can quickly summarize and understand what they have learned from their teacher. Based on the interview the teacher said that:

T1: “Yes it does, I think I using TPACK is a very good it is can help the teachers to teach English because we can easy to find out some information by using TPACK like video from YouTube and some application in the world so the students can more attractive the student can emphasastic if we apply TPACK in the classroom”

The students understand the lessons more quickly if they were delivered in the form of slide presentation (PPT) and provide authentic examples from several sources through ICT.

Based on the analysis of teachers' perceptions of the use of ICT in the classroom, it is clear that all teachers have solid beliefs in the use of ICT in the classroom. This is supported by the outcomes of interviews with researcher who agree that ICT is essential for English language teaching. All students can find a wealth of material and examples through ICT media platforms such as the internet and educational videos on YouTube. Students can also use mobile phone tools and apps to increase their understanding. This is similar to Abdul's (2019) study, in which teachers indicated that they had a positive perception of their teachers and said they approved of their use of information and communication technology (ICT) in teaching English.

CONCLUSION

Based on the observation and interview that the researcher conducted that the implementation of TPACK for teachers in the teaching and learning process of EFL classroom has been very successful, teachers face some challenges. There are two types of fences to implementing her TPACK in the EFL classroom. First, some teachers still struggle with technology. For example, a teacher had a problem with an LCD projector used in class.

Second, internet connection or Wi-Fi at school only covers in around the teacher's office so teachers who teach in classes far behind will be constrained in Wi-Fi connection, so the teachers use their own Wi-Fi.

Teachers' perception on the implementation of TPACK in terms of the use of Information Communication and Technology, all of teachers give positive perception towards used of ICT by implementing ICT in EFL classroom, it can help the students to improve their interested and motivation in learning English. Besides, it can help the teachers to teach and make the students easier to comprehend the material. Nowadays, students are very good at using technology. Teachers also feel that ICT is proper for students at all heights, from the simplest to the most experienced.

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