

CHAPTER I

INTRODUCTION

This chapter presents an introduction that includes a general overview of the preparation according to the title. The researcher arranges the chapter from a summary of each content from chapter by chapter which is divided into five chapters, namely background of the study, identification of the problems, limitation of the problems, research questions, research objectives, and significance of the research.

A. Background

Progress in the 21st century is characterized by the rapid development of information technology and the development of automation, where many routine and repetitive jobs are replaced by machines, both production machines and computer machines. Entering the 21st century, these technological advances have entered various aspects of life, including education. Educators and students are required to have teaching and learning skills in the 21st century. A number of challenges and opportunities must be faced by educators and learners in order to survive in the century of knowledge in this information age. technology in the 21st century has changed human life in various sectors of life. According to Adri (2008) who argues, “The development of information and communication technology has also changed the paradigm of society in seeking and obtaining information, which is no longer limited to newspaper, audio-visual and electronic information, but also other sources of information, one of which is through the internet network.”

In 21st-century learning, students' critical thinking skills in Indonesia must be developed because they have an important role in determining the success of learning activities in the 21st century. The presence of media in the learning process is very helpful in improving learning outcomes, fostering student learning motivation, and overcoming through the use of creative learning media learning activities can provide experiences to

students in order to encourage motivation to learn to clarify and simplify complex concepts to be simpler, concrete, and easy to understand. Learning is an activity of students who gain knowledge and skills through the process of student interaction with educators and learning resources in a learning environment. Learning is assistance provided by educators so that the process of acquiring knowledge and knowledge, mastering skills and habits, and forming attitudes and beliefs in students can occur.

TPACK is a framework that integrates three main knowledge: technological knowledge, pedagogical knowledge, and content knowledge. The first component, technological knowledge, requires teachers' knowledge of technology and how to use it such as learning software and presentation tools; the second component requires a general knowledge of pedagogy where teachers understand how students learn, and what teaching approaches and assessment methods should be applied; while the last component recommends teachers to only have knowledge of the subject without much consideration of teaching or assessment methods. All three are important and appropriate to the needs of education today. Therefore, it is important for teachers to be able to apply the TPACK framework in lesson plans. These three components should be interrelated and integrated to create a well-rounded and effective learning experience.

In the context of English learning, TPACK can help teachers design and implement more engaging and relevant materials for students, using technology to facilitate more interactive and contextualized language learning. According to expert Jenkins (2017), English is the international language of the country, and this is a factor of consideration in many ways. Of course, English helps because almost all countries use English to communicate, and the provision of English at the primary school level can give students a higher chance of mastering it. This is because their age level (6-12 years old) is the golden age where their brains can absorb language acquisition quickly. English language learning

often requires the use of various technologies to enhance teaching and learning effectiveness.

TPACK is a framework that combines technology, pedagogy, and content knowledge to create better learning experiences. TPACK-based learning is expected to positively contribute to teaching and learning English. The use of TPACK (Technological Pedagogy Content Knowledge) based learning offers an interactive and engaging approach to presenting learning materials to students. While TPACK-based learning offers great potential to improve the quality of English language learning, there are still some challenges that need to be overcome. One of them is the proper understanding and perception of teachers and students towards the use of TPACK-based learning. Teachers' views on the use of technology in learning can affect the effectiveness of learning implementation in the classroom. In addition, students' perception of learning also has a significant impact on their level of engagement and understanding of learning materials.

One of the latest developments in the learning context is the use of TPACK (Technological Pedagogy Content Knowledge)-based learning. The use of learning offers an interactive and engaging approach to presenting learning materials to students. While TPACK-based learning offers great potential to improve the quality of English language learning, there are still some challenges that need to be overcome. One of them is the proper views of teachers and students towards the use of TPACK-based english learning. Teachers' views on the use of technology in learning can affect the effectiveness of implementing learning in the classroom. In addition, students' views of learning also have a significant impact on their level of engagement and understanding of the learning materials.

TPACK (Technological Pedagogical And Content Knowledge) is a conceptual framework that combines three dimensions of knowledge that are crucial in the context of education. Mishra et al. (2016: 2) TPACK is a framework for understanding and describing

the type of knowledge needed by a teacher to streamline pedagogical practices and concept understanding by integrating technology in the learning environment. Koehler and Mishra have developed a framework to assist with the complex task of evaluating technology integrity known as TPACK. This framework provides a framework to describe and target the use of technology to enhance learning observed by three main components: Technological Knowledge (TK), Pedagogical Knowledge (PK), and Content Knowledge (CK).

The TPACK approach is a mutable form of knowledge that emerges through an integrative process resulting from existing instructional forms into new forms that have the potential to maximize the use of technology in teaching. The TPACK model states that Technological Knowledge (TK), Pedagogical Knowledge (PK), and Content Knowledge (CK) are central to developing practical and creative teaching skills. In addition, the TPACK model is a pedagogical construct that can provide a theoretical basis as well as practical issues for designing learning processes based on teachers' and students' prior experiences, such as perceptions, attitudes, and beliefs in the use of technology. The TPACK framework can also offer some categories for designing a measurement and assessment instrument in implementing an approach to develop a technology incorporation process. The TPACK framework focuses on the integration of information technology into learning situations. However, the successful implementation of TPACK-based learning depends not only on the technology used but also on how students and teachers perceive and respond to this method. Therefore, it is important to understand students' and teachers' views on learning to determine its effectiveness and possible challenges.

Based on the pre-research observation at SMAN 2 Barru, the researcher found that the problem faced is that teachers' knowledge of the use of technology is still limited. Not only teachers but also students are still confused with the use of technology due to the lack

of equal access to technological devices such as computers, tablets, or the internet. This limitation can hinder the application of technology in learning. For example, in operating some supporting applications in TPACK-based learning. Teachers also still experience obstacles in the process of implementing TPACK-based learning strategies and sometimes find students who do not pay attention well because students feel bored. Students who are not happy and not excited because sometimes the teacher's strategy in teaching is less varied.

In addition, from the interview with one of the XI grade students at SMAN 2 Barru, it is known that the use of TPACK has long been implemented at the school. However, there are only a few TPACK components that have been applied, such as Technology knowledge (TK), where teachers use technology by allowing students to use smartphones and laptops to make presentations, Pedagogical knowledge (PK), where teachers use discussion methods to arouse student interest and participation where occasionally the teacher throws questions to students and forms discussion groups. Content knowledge (CK) is a teacher who is required to provide content or examples of relevant subject matter, however, it is still not maximized in its application. Technological pedagogical knowledge (TPK) and Technological content knowledge (TCK) are not applied in these schools because the teaching and learning process is currently carried out offline and the last is Pedagogical content knowledge (PCK), where teachers usually provide interactive games on the material being studied to increase student interest in learning.

Based on the background of the problem, the researcher gave the research title **"Students' and Teachers' Views on English Learning Based on Technological Pedagogical and Content Knowledge (TPACK) at UPT SMAN 2 BARRU"**.

B. Focus of The Research

Based on the background of the problem above, this research will focus on the views of students and teachers towards Technological Pedagogical and Content Knowledge (TPACK)-based English learning at UPT SMAN 2 BARRU.

C. Problem Statement

Based on the background and research focus that has been stated previously, the problem formulations in this study are:

1. How do students view the use of Technological Pedagogical and Content Knowledge (TPACK)-based English learning at UPT SMAN 2 BARRU?
2. How do teachers view the use of Technological Pedagogical and Content Knowledge (TPACK)-based English learning at UPT SMAN 2 BARRU?

D. Objective of The Research

The objectives of the study are listed below:

1. To know the view of students on Technological Pedagogical and Content Knowledge (TPACK)-based English learning at UPT SMAN 2 BARRU.
2. To know the view of teachers on Technological Pedagogical and Content Knowledge (TPACK)-based English learning at UPT SMAN 2 BARRU.

E. Significance of The Research

The significance of the research is separated into two components of the significance, called theoretical significance and practical significance.

1. Theoretical significance

The results of this study are expected to be a tool to add scientific references and find objects of observation in the field of education that will be used for further research on the influence of the use of TPACK-based English learning.

2. There are four particular significances which are expected by the researcher as follows:

- a. For schools, it is expected to provide benefits for schools that will be used as evaluation material to strive for and increase skills in teaching and the ability of teachers to provide learning media to increase student interest.
- b. For teachers, it is expected to provide new information and innovations to teachers regarding TPACK-based video learning media for students and teachers will understand the phenomena in education systematically, including guidelines that must be applied in education and as an obligation to encourage evaluation for themselves in implementing a good learning process in the classroom.
- c. For students, it can provide benefits in an effort to increase motivation and enthusiasm for learning in order to improve student learning outcomes and help students to be able to learn optimally to achieve proud achievements.
- d. For further researchers, this research can increase the knowledge of further researchers regarding educational research. It is also hoped that researchers' insights into TPACK-based learning will increase and become useful information and sources of information.

CHAPTER II

LITERATURE REVIEW

In this chapter, there were some sections explained. They were previous research findings and some pertinent ideas.

A. Some Related Research Findings

Researchers wrote down some previous related research findings found by several researchers related to this research. Some of the findings are briefly cited below:

1. Several studies are relevant to this research, including Wardani, Suhartono, and Rini (2022) Based on the results of research on the analysis of the application of TPACK in lesson plans, the application of TPACK in lesson plans at SDN 01 Ngadilangkung, Kepanjen District, Malang Regency is in good criteria. The application of TPACK is needed in lesson plans because it will make learning designs that are loaded by the times, namely integrating technology, pedagogy, and content in the process of learning activities. Teachers stated that applying TPACK in lesson plans can make learning in the classroom more focused and effective.
2. Tamba (2021) in his research said that by mastering TPACK, elementary school teachers can present TPACK-based learning, for example, PowerPoint, lectoraspire, short videos, and so on related to the material to be learned and become the best solution when learning is done boldly and in accordance with the industrial revolution 4.0. To make activities increase teachers must have knowledge so that the integration of technology in learning can be done by teachers optimally. The advantage of using TPACK learning is that learning is independent and highly interactive, able to increase memory levels, and provide more learning experiences, with text, audio, video, and animation all used to convey information, and download, students can also email other students, post comments on forums.

3. Dewi & Widyasari (2022) in their research concluded that the use of videos as learning media is able to increase students' attention and help them understand the material clearly. Learning videos are also able to foster student interest when contributing to the learning process, thus video-based learning materials can be used as alternative learning materials.
4. Afsari, Rebica, et al (2021) In their research entitled Development of Tpack-Based Learning Videos in Fraction Materials for IV Sd Class Students, it can be concluded based on the results of data analysis with an average student score of 85% that the use of TPACK-based learning videos on fraction materials for grade IV elementary school students including valid and practical learning videos has the potential to affect student learning outcomes.
5. Aprilutfi, Delita nur (2021) stated in his research entitled TPACK-based flipbook learning media makes them actively express their opinions about what is their difficulty, and they also become closer to friends to share new knowledge. Using TPACK-based flipbook learning media during learning makes the learning process more efficient and effective”.
6. Aisy (2022) in his research shows that TPACK-based learning can have an influence on children's expressive language skills, therefore the hypothesis that has been proposed can be accepted. influences the expressive language skills of children aged 5-6 years. This is shown when children can express ideas, feelings, opinions, or questions when asked to observe the material, answer more complex questions from the teacher during question-and-answer activities, and retell stories that have been listened to.
7. Andriani (2022) stated that the Application of Technological Pedagogical and Content Knowledge (TPACK) Based Scientific Learning Model in Geography

Subjects Significantly Affects the Improvement of Student Learning Outcomes. The data shows that there is a significant difference in student learning outcomes between the experimental class and the control class with a significance value (2-tailed) = $0.000 < \text{than } 0.05$. Therefore, it can be concluded that H_0 is rejected and H_a is accepted.

8. M. Anggrayni, Susilawati, and Tamala (2023) stated that in this study which used learning media in the form of TPACK-based animated videos in IPAS subjects in class IV SDN 01 Sitiung, using animated videos as learning media is a unique way that can be done to attract students so that they become more motivated and more focused on learning so that they can improve the learning outcomes of students at SDN 01 Sitiung. So, learning media using animated videos can be said to be very practical, valid, and effective.
9. Widaningsih, Margo Irianto, et al (2023) concluded, “After the author conducted a literature study related to the application of TPACK-based learning, there are findings include:
 - 1) The implementation of TPACK-based learning at school is carried out by combining the knowledge (content) that knowledge (content) owned by the teacher and integrating it with technology.
 - 2) There is an increase in the ability of numeracy competence of learners through the application of TPACK-based learning.
 - 3) There is an increase in learner outcomes through TPACK-based learning”.
10. Moris Virgiawan, (2022) concluded that “TPACK framework-based learning tools integrated with Virtual Reality media are effective enough to improve students' writing skills at SMA Batik 2 Surakarta. This is evidenced by the results of the calculation of the N-gain score; the N-gain score for the experimental class is

57.21%, which is included in the moderately effective category. While the average N-Gain score for the control class of 23.31% is included in the ineffective category. So it can be concluded that the TPACK framework-based learning tools integrated with Virtual Reality media are effective enough to improve students' writing skills at SMA Batik 2 Surakarta”.

From some of the findings of the researchers above, the researcher used TPACK-based English learning. The research shows that the use of interesting and interactive learning can increase students' learning motivation. The learning is made with the TPACK model which includes technology, pedagogy, and content. The use of TPACK-based learning can improve students' skills in using technology and improve their learning quality. Therefore, the use of TPACK-based learning can be one of the effective strategies for improving students' learning quality.

In looking at students' and teachers' views on Technological Pedagogical And Content Knowledge (TPACK)-based English learning, an inclusive and diverse approach is needed.

B. Some Partinent Ideas

1. Concept of Views

According to Tony dan Barry Buzan (2021) his research, vision is the process of how a person selects, organizes, and interprets input information to create a meaningful picture of the whole. Vision depends not only on physical stimuli but also on stimuli related to the surrounding environment and individual conditions. While the research I. Khoirunnisa (2023) says that view also known as perception is an important part of human psychology in responding to the presence of various aspects around them. Perception is the experience of an object, event, or relationship obtained by gathering information and also interpreting messages.

Meanwhile, according to a psychological perspective, perception is defined as a type of information management that connects a person with their environment. Individual social perception is the process of achieving knowledge, the process of thinking about other people, for example, based on physical characteristics, qualities, and even their personality.

In the statement above, researchers can conclude that views and perceptions are interrelated. Perception is a basic cognitive process involving the organization and interpretation of sensory information, while view is a broader judgment or opinion formed based on perception, experience, knowledge, and personal values. In the context of TPACK-based learning, understanding the relationship between perceptions and views is critical to evaluating how students and teachers receive and value the integration of technology in English language teaching. Perceptions focus more on how they receive and interpret the technological elements of learning, while views include their broader judgments and attitudes toward this learning approach. Combining the analysis of perceptions and views will provide a more comprehensive picture of the effectiveness and acceptance of TPACK-based English learning.

2. The Concept of TPACK

a. Definition of TPACK

According to Rahmawati and Khoirurrosyid (2022) research that “the TPACK approach is an approach developed from the Pedagogy Content Knowledge (PCK) approach first introduced by Shulman in 1986. As the name implies, TPACK is a learning approach that integrates technological and pedagogical developments to develop content in the world of education. This is done with the hope of being able to provide fresh air as well as new directions to educators regarding the use of technology to support the

learning process. Of course, the use of technology is expected to make learning run more effectively and efficiently”.

Meanwhile, according to Azhar and Muchtar (2022) TPACK, it can be defined as the interaction and connection between technological knowledge (digital video, internet, and so on), pedagogical knowledge (regarding practices, processes, models, strategies, and other methods), and knowledge about the content (the materials taught) which aims to help improve student learning. TPACK is very complex knowledge for teachers. Technological Pedagogical Content Knowledge (TPACK) is one thing that teachers need so that teachers can use whatever technology is appropriate to apply in learning based on pedagogical aspects and material characteristics.

TPACK is important for knowledge in developing teachers' skills on how to facilitate student learning of specific content through technological and pedagogical approaches. Ulya, Lubis, and Sukiman (2023) suggested that TPACK is a framework for teachers to develop learning designs, according to the findings. This TPACK design combines three key elements: technology, pedagogy, and content. knowledge. One of the readiness of the world of education in facing the challenges of world development is to skillfully use technology as a medium and learning resource.

b. TPACK Indicator

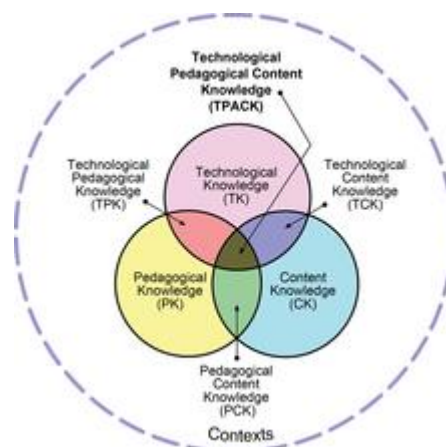


Figure 2.1 Component TPACK (Koehler & Mishrra, 2006)

The stages in measuring TPACK are as follows:

- 1) CK (Content Knowledge) is the educator's insight into the teaching materials and materials that will be explained to students. Knowledge of the subject matter to be studied and taught. According to Shulman et al in Sutrisno (2012) concluded that the subject matter consists of knowledge (frameworks, theories, ideas, concepts, methods and is equipped with scientific methods and their implementation in everyday life), so that students can focus on the subject matter.

Content knowledge refers to the understanding of subject matter content in a particular academic discipline or domain. This includes knowledge of key concepts, principles, theories, facts and skills relevant to each subject area. Teachers with CK have expertise in their respective subject areas and understand the structure, organization, and importance of content knowledge. CK involves knowing what to teach, how to teach it, and how to assess students' understanding and mastery of the content.

- 2) PK (Pedagogical Knowledge) is the knowledge of educators related to the practical process and methods of teaching and learning. It is the knowledge between the theory and practice of teaching and learning that encompasses goals, processes, methods, evaluation/assessment, and strategies. In general, pedagogy consists of learning, classroom organization, and student assessment. (Prasetya, Putra, and Budasi 2019) Pedagogical knowledge requires teachers to assess and understand affective, cognitive, and social aspects as well as the development of learning theories that can be applied in the learning process. Thus, teachers should have a good understanding and focus on the required knowledge of how students can understand and comprehend knowledge, attitudes, and skills.

- 3) PCK (Pedagogical Content Knowledge) is an effective teaching process that can be applied to teaching material pedagogy. According to Koehler in Sutrisno (2012), "PCK is the idea of material transformation in the learning process including a combination of pedagogy and subject matter. PCK contains general knowledge, subject curriculum, learning strategies, and knowledge transformation; in the context of education, it includes the learning process related to the subject matter. Based on this, when teachers teach subject matter, they find many ways to represent it and adapt instructional materials to alternative conceptions and students' prior knowledge. What is expected is effective learning". This involves understanding students' prior knowledge and misconceptions, as well as knowing how to scaffold learning experiences, provide relevant examples, and create opportunities for active engagement and reflection within the content area.
- 4) TK (Technological Knowledge) is the educator's insight into the field of technology that supports learning activities. technological knowledge that can be used to support the learning process. For example, the use of software, animation applications, the internet, and others. The ability possessed by teachers is related to mastery in processing information by utilizing technology in learning. The definition of TK used in TPACK is close to information technology skills such as information technology literacy. Knowing how to use educational technology tools such as interactive whiteboards, learning management systems, or educational apps to enhance instruction. This may include skills like creating multimedia presentations, using educational software for simulations or virtual labs, or utilizing online collaboration tools for group projects. Mishra et al. Sutrisno (2012) emphasized the main knowledge, technology, and skill in using it to support the understanding of the subject matter studied. This means that the ability to use information technology can be

applied productively in the workplace and in daily life, to determine the achievement of goals in learning and can adapt to changes in information technology.

- 5) TCK (Technological Content Knowledge) is an insight by providing new methods and styles in the delivery of specific teaching materials. Understanding of the ways in which technology and content influence and constrain each other. Mishra & Koehler (2006) describe technological knowledge as the ability:
 - a) To use technology as a reflection of information
 - b) To use technology to create teaching materials
 - c) To assist students in utilizing technology by teachers
- 6) TPK (Technological Pedagogical Knowledge) is the knowledge that uses technology that has various variations in teaching. A series of activities about understanding the changes that occur in the learning process by utilizing technology to support the understanding of concepts/materials. According to Mishra & Koehler (2006), TPK includes a boldness in using technology to facilitate learning experiences, enhance students' individuality and collaboration, and improve students' cognitive abilities.
- 7) TPACK (Technological Pedagogical and Content Knowledge) is an educator's insight by being able to integrate technology for the pedagogical process in any context. The knowledge that teachers can rely on in developing abilities and skills. According to Chai et. al (2011), TPACK in other words, is the potential of using pedagogy and technologies to assist students in studying related information. TPACK is the basis for effective teaching with the help of technology. So it can be said that TPACK is an understanding of how technology can be used skillfully to meet pedagogical needs in delivering certain materials. It effectively integrates technology, pedagogy, and content knowledge to design and implement innovative learning experiences.

8) Contextual Knowledge

Contextual knowledge helps one to understand not only what to do or understand, but also why it is important and how it relates to the situation or conditions at hand. This enables individuals to make better decisions, manage risks, and adapt their actions according to changing conditions. understand the broader context in which teaching and learning take place, including factors such as school culture, student demographics, available resources, and educational policies.

According to Wahyuni (2013), contextual knowledge informs decision-making and adaptation of teaching practices to meet the diverse needs of students and address specific challenges or opportunities in the educational environment.

c. The advantages and disadvantages of TPACK

1. The advantages of TPACK in learning are as follows

According to (Stoilescu, 2015) the use of Technological Pedagogical Content Knowledge (TPACK) in learning practice and research has several important advantages, including:

- 1) Technological Pedagogical Content Knowledge (TPACK) shows consistency in integrating the use of technology into different contexts.
- 2) Integrating ICT in the classroom by emphasizing the interrelationship between technology, pedagogy, and content, this framework has a well-established theoretical foundation.
- 3) The three main aspects (technology, content, pedagogical) of classroom activities can be tracked and analyzed.

2. The disadvantages of TPACK are as follows

According to (Koehler, 2011) although it has several advantages, TPACK also has two disadvantages, including:

- 1) New technologies often create new opportunities that can represent content and pedagogy that did not exist before.
- 2) Most technologies used by teachers are usually not designed for educational purposes, for example, they are used for offices, businesses, and others.

3. Concept of English Learning

a. Definition of English learning

Learning is the process by which individuals acquire knowledge, skills, attitudes, or values through interaction with the environment or through direct experience. It can happen in a variety of contexts, including at school, at work, at home, or in social settings. Learning is not only limited to the absorption of information but also involves understanding, applying, and evaluating that information. It is an ongoing process throughout life and can occur consciously or unconsciously. While (Yamin, 2017) concludes that “Learning is a system that aims to assist the learning process of students, which contains a series of events that are designed and arranged in such a way as to influence and support the internal student learning process”.

This is in line with the opinion of (Wijaya, 2015), who said that “English language learning is to develop the ability to speak English contextually and acceptably in accordance with the context and conditions and situations of students' daily lives. This is to produce a form of English learning that is more in touch with the language needs of learners. These findings need to be integrated in such a way as to produce learning activities that emphasize aspects of how English is used as a means of communication in accordance with the needs of students “.

The explanation above can be concluded that English language learning is a process of activities that present information with means that help students improve their ability to learn a foreign language or second language.

b. The Purpose of English Learning

The purpose of learning becomes a basic reference in learning activities. Likewise, with learning objectives in English, teachers provide learning with the hope that students can achieve English learning objectives. The conclusion of the study is that the purpose of learning English is “so that students can communicate in English orally and in writing fluently and in accordance with the social context” (Yamin, 2017).

c. English Learning Competency

According to Widyasari (2016), “Students' English language competencies include the skills of listening, reading, speaking and writing namely:

- 1) Listening means understanding the multiple meanings (interpersonal, opinion, textbook) of various spoken texts that have specific communicative purposes, text structures, and linguistics.
- 2) Speaking means expressing various meanings (interpersonal, opinions, textbooks) through various spoken texts that have specific communicative purposes, text structures, and linguistics.
- 3) Reading means understanding various meanings (interpersonal, opinions, textbooks) in various written texts that have specific communicative purposes, text structures, and linguistics.
- 4) Writing means to express a wide range of meanings (interpersonal, opinion, textbook) in a variety of written texts that have a specific communicative purpose, text structure and linguistics.

d. The Role of English Learning

According to Wijaya (2015) strongly supports that learning and mastering English is a necessity. For Indonesia, learning English is still something that is very difficult for most people, and sometimes even scary for some. However, English is a big business, and the ability to speak English is important for one's competitiveness. With good English skills, competitiveness is good, which is useful for our country too. However, that doesn't mean we should forget Indonesian, which is already our national language.

The important role of English in the learning and teaching process requires an appropriate method to improve student's English language skills with fun learning activities and can encourage students' willingness to learn to play an important role in the teaching and learning process.

CHAPTER III

RESEARCH DESIGN

In this chapter, the researcher describes the research design; It consists of a method of research, the research instrument, the data sources, the technique of data collection, and the technique of data analysis. Each of these sections is explained as follows:

A. Research Design

In this research, the researcher used descriptive qualitative research that focuses on finding out how teachers and students view on the use of TPACK-based English learning. The qualitative approach was chosen because it allows researchers to understand the context and complexity of the phenomenon under study through in-depth interviews as the main data collection tool. This research used a participatory observation technique.

According to Risky (2019) stated that the data collection techniques used in the study were the observation of statements regarding the implementation of the learning process, Likert scale numbers regarding statements of video media used in the learning process, and interviews regarding perceptions of the usefulness and functionality of video media in learning.

Therefore, this study focuses on the views of teachers and students on whether there are obstacles experienced during the learning process using TPACK-based learning video media at UPT SMAN 2 BARRU.

B. Research Site

The research location was carried out or centred on a secondary school located at SMAN 2 BARRU, Mangkoso, Kecamatan Soppeng Riaja, Kabupaten Barru.

C. Research Participant

Participants in the research were seven students and two English teachers at UPT SMAN 2 Barru. The sampling method used in this study was random sampling. According

to L. R. Gay (2017: 150), Simple random sampling is the process of selecting a sample in such a way that all individuals in the defined population have an equal and independent chance of selection for the sample. The selection of the sample is completely out of the researcher's control; instead, a random, or chance, procedure selects the sample. In other words, every individual has the same probability of being selected, and the selection of one individual in no way affects the selection of another individual.

D. Procedure of Collecting Data

In this qualitative study, the researcher used three steps of data collection, which are as follows.

a. Observation.

The researcher conducted observation by taking a random sampling of students and English teachers at UPT SMAN 2 Barru. The researcher conducted pre-observation to ensure the implementation of TPACK-based English learning in the school. The researcher observed some students who had received TPACK-based English learning. The aspects that were observed in this stage are how technology is used in the English class, the teaching methods and strategies used by the teacher in the classroom, and the mastery of the material taught by the teacher. The results of these observations were to determine which students and teachers have implemented TPACK-based English learning.

b. Interview.

In research, an interview or a question-and-answer session is one of the best ways to find out students' and teachers' views on TPACK-based English learning as a teaching method. The researcher interviewed the respondents by means of face-to-face interviews with English students and teachers. With this technique, the necessary data can be obtained or needed by asking some questions directly regarding the experience in

integrating technology, challenges experienced, student involvement, methods and strategies used by teachers as well as ways of classroom management. According to L. R. Gay (2017: 405), An interview is a purposeful interaction in which one person obtains information from another. Interviews can provide information that is not accessible through observation-observation cannot provide information about past events, or circumstances that used to occur.

In review it allows researchers to obtain important pieces of data that they could not have obtained from observation alone, although observation and interviews in pairs provide valuable ways of gathering information that complement each other. Next, the researcher used English-Indonesian to make it easier for students and teachers to get more information from the respondents during the interview.

c. Documentation.

The process of this research can help the researcher in collecting the documentation data needed to analyze the students' and teachers' views on TPACK-based learning. By combining data from various sources, the researcher can gain a more comprehensive understanding of the implementation and impact of using such learning in the context of English language learning.

E. Technique of Data Analysis

In this study, the authors used qualitative data analysis techniques. Data analysis in qualitative research involves summarizing data in a reliable and accurate way. It is the presentation of research findings in a way that has undeniable nuances. "Qualitative data analysis is the process of breaking down data into smaller units, determining import, and bringing related units together in a more general and analytical form" (L. R. Gay, 2017: 487).

Sirajuddin (2010: 283) says that the qualitative data analysis framework includes several stages, namely; coding, data reduction, data display, and making a conclusion or interpretation. The method can gain more views of students' and teachers' views on TPACK-based English learning. For more details as follows:

1. Data reduction

This stage simplifies the data by summarizing relevant or appropriate information from interviews, observations, and documents. The data reduction process can involve grouping data into categories and identifying initial patterns that continue to emerge throughout the qualitative-oriented project. Thus the reduced data provide a clearer view, and make it easier for researcher to conduct further data collection, and search for it when needed. At this stage, researchers obtained data from interviews with students and teachers, who implemented the use of TPACK-based English learning. In this step, only the necessary data is used.

2. Data Display

The data found after data reduction then be presented. This aims to make it easier for researchers to analyze the data. In this study, researchers presented data using essays. According to Abdussamad, Z. (2022: 167), Data analysis after data collection, at this stage the researcher is heavily involved in the presentation or appearance of data that has been collected and analyzed by previous researchers Qualitative often organizes narrative text. Display is a format for systematically presenting information to readers. Qualitative research focuses on the words, and actions of people that occur in a certain context, where the context can be seen as an aspect that is immediately relevant to the situation concerned.

3. Conclusions and verification

In the final stage, the researcher interprets the data and draws conclusions based on the findings that emerged from the data analysis. In addition, researchers will also verify conclusions by referring back to the initial data. This verification aims to ensure that the conclusions drawn are still following the research objectives. Researchers will assess and study all the data and then make connections between stories so that researchers will get the results and conclusions of the research.

F. Research Validity

Validity and reliability in this research, researchers can ensure that research findings are reliable and meaningful and help strengthen the validity and reliability of research results. The validity and reliability of data analysis was tested using triangulation. According to Abdussamad, Z. (2022:103), data collection in qualitative research generally includes observation, interviews, and document analysis. These different data sources are then compared using other techniques in a process called triangulation. The purpose of triangulation is not to find the truth about a phenomenon but to increase the researcher's understanding of what has been discovered, of what has been discovered. The value of the data collection technique using triangulation is to find out that the data obtained is convergent (widespread). Therefore, by using triangulation techniques in data collection, the data obtained will be more consistent (Abdussamad, 2022: 156). This technique will compare data from several sources, methods, or research to ensure the consistency and validity of research results. Researchers will use observation, interview, and document study techniques to collect data. For the final step, the researcher will conduct research not only at certain times but will conduct research at different times when the researcher wants to collect data.

CHAPTER IV

FINDINGS AND DISCUSSION

This chapter presents the findings and discussion of these findings which are organized in line with the problem formulation outlined in the introduction. The discussion section provides further arguments and interpretations of the findings.

A. Findings

This chapter is divided into two parts, the first is about students' views on Technological Pedagogical And Content Knowledge (TPACK)-based English learning, and the second is about teachers' views on Technological Pedagogical And Content Knowledge (TPACK)-based English learning at UPT SMAN 2 Barru. In collecting data, researchers took the following steps such as observation, interview, and documentation.

To find out the data before conducting the research, the researcher conducted a direct interview observation with one of the students to ensure that SMAN 2 Barru implemented TPACK-based English learning. The result showed that they did implement TPACK-based English learning which has been started since 2023. In the process of TPACK-based English learning, they sometimes use laptops for the technology component used in teaching and learning methods.

1. Students' Views on TPACK-Based English Learning

In this finding, data were collected using interviews with seven students from different classes and at different times based on their curiosity and availability. In this section, the researcher used direct interviews with students at school. The interviews discussed the ease of access to information, independence in accessing materials, use of technology, and the use of applications in the learning process. This can be seen as follows:

- a. Ease of learning technology between students and teachers

The results of direct interviews with students at school show that the use of technology during TPACK-based English learning facilitates the learning process.

...dapat banyak mengetahui banyak materi dalam pembawaan dari guru tersebut yang menggunakan teknologi handphone...

“can know a lot of material in the presentation of the teacher who uses mobile phone technology”.(R1, June 2024)

...cukup bagus karena dapat memudahkan kita dalam pembelajaran itu.....

“quite good because it can facilitate us in learning that”.(R2, June 2024)

...bisa dibilang cukup baik dikarenakan pembelajaran bahasa inggris di sekolah atau di kelas penggunaan teknologi sangat dibutuhkan karena dapat membantu...

“is quite good because learning English at school or in the classroom the use of technology is needed because it can help”.(R3, June 2024)

...dapat memudahkan pembelajaran dan melakukan presentasi..

“can facilitate learning and presenting”.(R4, June, 2024)

...bagus karena mudah digunakan karena dapat akses ke internet jadi mudah digunakan..

“good because it is easy to use because it can access the internet so it is easy to use”.(R5, June 2024)

...sangat baik dikarenakan dalam melakukan pembelajaran bahasa Inggris menggunakan teknologi..

“very good because in doing English learning using technology”.(R6, June 2024)

Students who said that the use of technology in TPACK-based English language learning is unsupported when used as follows:

...biasa saja karena proses pembelajaran yang mungkin cukup monoton karena metode yang digunakan kayak begitu-begitu saja...

“ordinary because the learning process may be quite monotonous because the methods used are like that”.(R7, June 2024)

From the results of the interview above, the researcher can conclude that the TPACK components, namely technological knowledge and technological content knowledge, have been applied in this learning method. Where the use of technology has positive and negative sides. In this case, the positive side is that they are very enthusiastic to come forward and contribute directly to the material, the use of technology will make it easier for students to access learning materials and facilitate the presentation of English learning materials, while the negative side is that English learning can make students quickly feel bored with continuous discussion learning methods. Thus, teachers have an important role in this TPACK-based English learning method and strategy to continue to improve their technological knowledge. For more complete data can be seen on the attachment page.

b. Easy access to materials

In addition to the ease of learning technology, there is also convenience in getting English materials during the implementation of TPACK-based English learning. There is a student statement that:

...saya merasa lumayan meningkat karena dari dulu itu em...tidak mengerti membaca bahasa Inggris karena di bahasa Inggris itu beda tulisan beda kata jadi sekarang saya sudah bisa lumayan membaca...

“I feel that I've improved because I used to...not understand reading English because in English it's different writing different words so now I can read quite well” (R1, June 2024)

...menurut saya... kemampuan bahasa Inggris saya cukup meningkat dikarenakan penggunaan teknologi dalam pembelajaran bahasa Inggris dibutuhkan dikarenakan ada hal-hal yang tidak terdapat di buku bisa kita cari tau di internet...

“In my opinion... my English language skills have improved because the use of technology in English language learning is needed because there are things that are not found in the book that we can find out on the internet”(R3, June 2024)

...ya...cukup meningkat semenjak teknologi tersebut dapat digunakan dalam pembelajaran tersebut...

“Yes...quite an improvement since the technology can be used in learning” (R4, June 2024)

...saya rasa bisa meningkat sedikit demi sedikit ketika saya belajar...

“I think I can improve little by little as I learn”(R5, June 2024)

...ya... lumayan meningkat karena memudahkan. Mudah juga dikerjakan tugas menggunakan teknologi...

“Yes... quite an increase because it makes it easier. It is also easy to work on tasks using technology”(R6, June 2024)

...cukup meningkat dikarenakan adanya teknologi...

“Quite an increase due to technology”(R7, June 2024)

Furthermore, the views of some students who showed a counter attitude to the information they obtained:

...tidak...terlalu karena proses pembelajarannya yang monoton jadi tidak ada yang buat menarik. Itu-itu terus juga...

“No...too because the learning process is monotonous so there is nothing to make it interesting. It's the same thing over and over again”.(R2, June 2024)

From the results of interviews with students in this section, the researcher can conclude that the application of TPACK-based English language learning reaps pros and cons as well as responses. The components of TPACK in the form of content knowledge and pedagogical technology knowledge have a positive side, namely, TPACK-based learning can make it easier for them to get more complete material so that it can improve their English language skills. He stated that he had an increased understanding of English as well as a breadth and depth of the teaching material. He could decide whether the subject would be easy to understand, as well as the level of anticipation. It also revealed that they were able to achieve the content in the learning objectives. On the negative side, the use of TPACK-based learning makes some students less focused on understanding the material provided because sometimes the explanation of the material is only based on the material.

c. Students experience challenges in learning

The interview results further showed that with TPACK-based English learning, some students' views on the problems arose. The data is as follows:

*...tantangannya itu kak...kalau menggunakan laptop itu saya belum terlalu paham tapi jika menggunakan handphone saya sudah ada mengerti ya...
tantangannya itu biasa tidak ada kuota...*

“The challenge is that kak... if using a laptop I don't really understand but if using a cellphone I already have an understanding... the challenge is usually not having a quota”(R1, June 2024)

...mungkin cuman dalam mauki artikan sebuah kalimat ke dalam bahasa Indonesia...

“maybe just in trying to translate a sentence into Indonesian”.(R2, June 2024)

...tantangan yang sering saya hadapi yaitu...tentang akses jaringan kurangnya akses jaringan ketika tidak ada kuota misalnya emm.... membuat kita susah belajar menggunakan teknologi.....

“the challenges I often face are...about network access lack of network access when there is no quota for example emm.... Makes it difficult for us to learn to use technology”.(R3, June 2024)

...ya...karena kurangnya pemahaman saya dengan menggunakan laptop....

“yes... due to my lack of understanding with using a laptop”.(R4, June 2024)

...tidak terlalu paham cara menggunakan teknologi...

“don't really understand how to use technology”.(R5, June 2024)

...kalau mau membuat ppt di komputer karena tidak memiliki komputer...

“if I want to make ppt on the computer because I don't have a computer”.(R6, June 2024)

...emmm kurangnya akses internet...

“em lack of internet access”.(R7, June 2024)

The researcher can see the results of interviews given by some students above. This explains that the use of TPACK-based English learning at UPT SMAN 2 Barru has not been used optimally in learning because students are still not proficient and accustomed to the use of technology due to the different levels of student abilities. Students may find it difficult to understand how technology can support the learning of specific content. They use technology but do not understand how it can deepen their understanding of the learning material. Thus, students are more tempted to access social media or online games. Another challenge in TPACK-based learning is that there are still many students who do not have adequate access to technological devices such as computers, but almost all students have cell phones. Thus, this can hinder their participation in the TPACK-based learning process.

d. Student engagement in learning

In addition, the researcher also asked the final question on how students' engagement in TPACK-based English learning was used at UPT SMAN 2 Barru. The researcher displayed the interview results in text form. The data shows as follows:

...bisa jadi...karenakan kalau mungkin adanya teknologi yang digunakan dalam pembelajaran mungkin juga bisa menambah kayaknya memicu semangat dan juga menambahkan metode pengajaran baru sehingga mungkin kita bisa lebih terlibat dan aktif dalam pembelajaran...

“It could be...because if maybe there is a technology used in learning, it might also be able to increase the enthusiasm and also add new teaching methods so that maybe we can be more involved and active in learning.”(R2, June 2024)

...ya..cukup terlibat karena saya dapat bisa memberikan pertanyaan atau menjawab pertanyaan yang diberikan oleh guru...

“Yes, I am quite involved because I can ask questions or answer questions given by the teacher”(R4, June 2024)

Not only that, other students also gave the same response but with different opinions.

...saya merasa agak terlibat karena setiap kerja kelompok saya selalu dipanggil mempresentasikan tugas kelompok tersebut...

“I feel somewhat involved because in every group work I am always called upon to present the group's work.”(R1, June 2024)

...biasanya kadang terlibat kadang juga tidak karena...anggota kelompok ada yang pintar ada juga yang tidak...

“usually sometimes involved sometimes not because...some group members are smart and some are not...”(R5, June 2024)

There are also students who say that TPACK-based learning can facilitate communication.

...emm..saya merasa lebih terlibat dalam pembelajaran bahasa Inggris ketika teknologi digunakan dalam pembelajaran karena dengan adanya teknologi kita lebih gampang komunikasi dengan guru ataupun teman ketika kita tidak mengetahui suatu hal tentang pembelajaran bahasa Inggris kita langsung bisa mengkomunikasikannya disalam teknologi...

“umm..I feel more involved in learning English when technology is used in learning because with technology we can communicate more easily with teachers or friends when we don't know something about English learning we can immediately communicate it in technology.”(R3, June 2024)

...ya...karena lebih menarik dan menyenangkan menggunakan teknologi...

“yes...because it is more interesting and fun to use technology”(R6, June 2024)

...ya...cukup terlibat karena gampang berkomunikasi...

“yes...quite involved because it's easy to communicate”.(R7, June 2024)

From the interview results regarding student involvement in Technological Pedagogical and Content Knowledge (TPACK)-based learning, the researcher can conclude that each student is more involved with this learning method. Some are involved because they are more active in answering the teacher's questions, can communicate further with friends and teachers, and are more confident in presenting the results of the discussion. Students' involvement in using technology allows students to access and interact with learning content online. Students also feel actively involved in searching, accessing, and using various digital resources to enrich their understanding of the material studied such as making it easier for students to find additional materials to deepen the learning topics discussed in class.

2. Teachers' Views on TPACK-Based English Learning

In this finding, data were collected through semi-structured interviews with two teachers at SMAN 2 Barru. The interviews were collected through direct interviews in the teachers' room and in the school hall at different times based on availability. After that, it was transcribed and then analyzed. The interview topics covered the three frameworks of TPACK: Content knowledge, Pedagogical knowledge, and Technological knowledge. The data obtained are as follows:

a. Ease of teachers learning the technology

The application of TPACK-based learning is of course closely related to technology, which is the main framework of TPACK that is not only felt by students but also by the teachers themselves. This can be seen from the results of interviews with several teachers at SMAN 2 Barru.

...ya..emm..untuk perkembangan teknologi saat ini tent ee.. agak sulit ya cuman ee.. ketika kita melakukan pelatihan dan em.. mencari literasi tentu bisa...

“yes...emm...for the development of technology at this time tent ee... it's a bit difficult, but ee.. when we do training and em... looking for literacy, of course we can”.(R1, June 2024)

...ee.. kalau saya pribadi nak..belajar teknologi itu susah apalagi diumur saya yang sekarang sudah 43 tahun jadi em.. bukan berarti saya tidak mau belajar saya tetap belajar tapi tidak tidak dengan mudah saya harus belajar secara bertahap kalau saya...

“ for me personally, son... learning technology is difficult especially at my age which is now 43 years old so em... it doesn't mean that I don't want to learn I still learn but not easily I have to learn gradually if I”.(R2, June 2024)

The teachers' views of the use of technology for students' assignment learning activities are as follows:

...em saat inikan anak anak menyukai em..yang namanya handphone yaa tidak bisa lepas dari yang namanya handphone jadi ee.. saya akan memanfaatkan emm.. minat siswa terhadap handphone itu ee..untuk mempelajari materi seperti misalkan saya membagikan tugas melalui whatsApp kemudian mereka akan mengerjakan tugas melalui ee..berbagai media seperti itu...

“em at this time, children like em... the name of the cellphone, yaa can't be separated from the name of the cellphone so ee... I will take advantage of emm... students' interest in cellphones that ee... to learn material such as for example I share assignments via whatsApp then they will do assignments through ee... various media like that”.(R1, June 2024)

...emm saya pakai teknologi itu yang pertama ee..dikonten konten pembelajaran saya saya kadang membuat sendiri ee..menggunakan beberapa aplikasi kemudian mengaplikasikannya didalam kelas bagi yang suka ee.. materi visual terus yang suka materi bagi anak anak yang audio yang lebih suka nyaman belajar audio saya bikin rekaman suara ee.. kemudian ee.. untuk kinestetik mungkin saya kadang sediakan realita realita barang barang yang real yang bisa mereka touch ya... disentuh...

“umm I use technology that first ee..in my learning content I sometimes create my ee..using several applications and then apply them in the classroom for those who like eee.. visual material and then those who like audio material for children who prefer to be comfortable learning audio I make sound recordings ee.. then ee... for kinesthetics maybe I sometimes provide the reality of real goods that they can touch ... touch”.(R2, June 2024)

Based on the information above, it turns out that the TPACK components of technology content knowledge, technology pedagogy knowledge, and contextual knowledge have been used. Teachers' responses to the ease of learning technology show that teachers learn technology gradually by participating in training activities. Teachers who already have experience or basic skills in using technology will find it easier to learn new technology than those who are less familiar with technology. Teachers also often use technology to develop learning activities and student assignments. Teachers' challenges in learning technology are age and lack of sufficient time to explore and learn new technologies. Thus, access to good training, easy-to-use technology, and a supportive environment can help teachers more easily develop the technology skills needed to support TPACK-based learning.

b. Teacher strategies to develop English comprehension

The interview results regarding teachers' views on TPACK-based English learning for strategies used in developing an understanding of English are as follows:

...ya.. emm..strategi dan cara itu tentu kita sekarangkan dunia IT tentu banyak sekali ee.. kita bisa melihatnya melalui internet ya.. baik itu di youtube ataupun media sosial yang tersedia...

“yes ... emm ... strategies and methods, of course we are now in the IT world, of course there are a lot of ee ... we can see it through the internet ... be it on YouTube or social media available”.(R1, June 2024)

...kalau seorang guru itu belajar...seumur hidup nak jadi..ee.. haruski belajar terus caranya tentu saja sekarangkan ada em..media media online media sosial yang bisa dipakai untuk mencari informasi bisa dengan pelatihan mandiri sekarang adakan sekarang ada aplikasi ee.. bisa dengan mengikuti kegiatan

kegiatan seminar workshop juga ee... pelatihan pendidikan dan latihan yaa..diklat...

“if a teacher is learning ... for life, son so ... ee.. must continue to learn how of course now there is em ... online media social media that can be used to find information can be with independent training now there is now an application ee.. can be by participating in activities workshop seminars also ee ... training education and training ... training”.(R2, June 2024)

From the results of the above research, the researcher can conclude that each teacher has the same ways and strategies in developing their understanding of English, namely by using applications and social media that provide this, such as using YouTube as a medium for independent training, as well as participating in online training and attending workshops. He also stated that he has a broad and deep understanding of English. He can decide whether the material will be easy for students to understand or not, as well as the level of anticipation. The teacher is able to organize the content by providing materials and separating them into categories or components that are easy to understand by using various kinds of references found on online sites.

c. Ease of teachers in organizing classroom management

In the teaching and learning process, the teacher will usually organize the class to keep it conducive. Based on the interview, the results of the teachers' views on TPACK-based English learning for how teachers organize classroom management are as follows:

...em sebelum saya memasuki kelas saya akan membuat peraturan bersama murid yaa.. jadi ketika emm.. murid ada yang melanggar maka tentu mereka mengetahui sanksi apa yang akan mereka terima gitu sehingga ketika terjadi keributan...atau kah em..apa istilahnya ya..ada yang tidak..terlambat masuk

gitu ya..pasti mereka akan tau gitu harus berbuat apa karena ada konsekuensi yang dihadapinya...

“em before I enter the class I will make rules with the students ... so when emm ... students violate it, of course, they know what sanctions they will receive so that when there is a commotion ... or em ... what is the term ... someone is not ... late entering so yes ... surely they will know what to do because there are consequences they face”.(R1, June 2024)

...saya mengatur manajemen kelas itu berdasarkan em..kebutuhan siswanya..jadi saya usahakan untuk mengenali siswa saya kemudian menerapkan pembelajaran yang berdiferensial...

“I organize my classroom management based on the needs of the students, so I try to recognize my students and then implement differentiated learning”.(R2, June 2024)

Based on the results of the interviews above, the researcher concluded that the way teachers organize classroom management each has a different opinion by knowing and based on student needs and making class rules before starting the teaching and learning process. She stated that to attract students' attention, she must first create a pleasant environment. One teacher stated that she has to be pleasant in the classroom. The teacher also revealed that students' abilities and attitudes regarding English content improved after they were directed to form groups and submit their work. Because the quality of students is different. So the teacher must know the appropriate teaching techniques for her class.

d. Ease of teachers in guiding students in the learning process

In implementing TPACK-based English learning, an effective teaching approach will make it easier for teachers to guide students. This can be seen from the results of interviews with teachers at UPT SMAN 2 Barru.

...yaa emm saya..menggunakan ini ya..kita memahami dulu minat siswa itu kemana ketika siswanya lagi gak mood untuk belajar mode lama maka kita akan bagaimana membuat anak anak itu itu bermain dahulu em..bagaimana bermain itu emm..bisa lebih memahami tertarik terhadap bahasa Inggris seperti itu...

“yes, my emm...using this, yes...we first understand where the student's interest is when the student is not in the mood to learn the old mode then we will how to make the children play first em..how to play it emm..can understand more interested in English like that”.(R1, June 2024)

...oh iya sesuai dengan kebutuhannya lagi mereka kembali kebutuhannya mereka nak toh kalau anak ini ee..memilih suka bekerja mandiri maka saya akan menyuruh dia untuk ee..bekerja secara mandiri kalau referensinya akan ini suka bekerja kolaboratif dengan temannya saya kasih dia pembelajaran yang didalam kelompok kelompok kecil...

“oh yes according to his needs again they go back to their needs son if this child ee..choose to like to work independently then I will tell him to ee..work independently if his reference will like to work collaboratively with his friend I give him learning in small groups”.(R2, June 2024)

The perceptions for the approach with various software to improve student comprehension in English learning were generated as follows:

...ya kalau saya sendiri menggunakan selalu menggunakan discovery learning ya..em..dalam artian anak anak dikasih sebuah problem based learning ya..jadi dikasih masalah lalu em...mereka akan menyelesaikan masalah masalah tersebut gitu melalui sumber yang tidak hanya dari buku tapi juga melalui internet gitu...

“yes, for myself, I always use discovery learning ... in the sense that children are given a problem-based learning ... so they are given a problem and then ... they will solve the problem through sources that are not only from books but also through the internet”.(R1, June 2024)

...iya seperti yang saya jelaskan tadi dan ee..saya pakai software software yang ee..kadang bisa memudahkan anak anak untuk belajar canva misalnya dipakai ee..bagi yang suka ya..yang suka bagi anak anak visual suka ini terus yang untuk rekaman mungkin suara ee..saya kadang meminta mereka untuk mengumpulkan tugasnya melalui ee..rekaman suara saja terus yang ee..yang suka yang anak kinestetik ini kadang mereka kadang langsung ke bendanya sendiri realita yang mereka suka ya...

“yes as I explained earlier and ee..I use software-software that ee..sometimes can make it easier for children to learn Canva, for example, is used ee..for those who like yes..who like for visual children like this and then for recording maybe sound ee..I sometimes ask them to submit their assignments through ee..voice recording only and then ee..who like kinesthetic children sometimes they sometimes go directly to the material itself the reality that they like yes”.(R2, June 2024)

From the interview results described above, the researcher can conclude that an effective teaching approach to guide students in learning English is to know the interests and needs of students. Teachers also choose effective teaching approaches to guide students in thinking and learning. They can understand the material with several sub-concepts and its flexible application. The application of English language development when they teach the material becomes creative and innovative in classroom learning. Therefore, they appear to have a deep mastery of the content in the way they teach it, so it appears that English teachers can improve their ability to be professional.

e. Ease with which teachers can combine content, technology, and pedagogy

The next interview results regarding the strategies used by teachers in combining the three important aspects of TPACK, namely content, technology, and pedagogy. The following is the teacher's view on combining the three aspects of TPACK:

...ya contoh misalkan ini kita mau mengajarkan em..teks report yakan ataukah news item gitu anak anak em.. kita ajarkan kita berikan tugas yakan kemudia melalui tugas itu kita minta anak anak untuk tampil dimedia sosial nah contoh misalkan emm..melalui ig atau tiktok ya..seperti itu jadi ya..murid murid bisa lebih ee..apa istilahnya ya.. berpengaruh ke dalam diri mereka gitu jika mereka tampil...

“yes, for example, we want to teach em...text report or news items so children em... we teach we give assignments then through that assignment we ask children to perform on social media, for example emm...through Ig or TikTok yes... like that so yes... students can be more ee...what is the term yes... influence themselves so if they perform”(R1, June 2024)

...emm konten materi saya kadang saya bikin ee.. dalam beberapa software mungkin saya pakai aplikasi canva kadang saya pakai power point saya pakai kadang quiziz ee..terus ee..kahootjuga kadang untuk kalo software yang saya pakai dikonten konten pembelajaran saya...

“emm my material content sometimes I make ee.. in some software maybe I use the canva application sometimes I use powerpoint I use sometimes quiz ee..then ee..Kahoot also sometimes for the software that I use in my learning content”.(R2, June 2024)

From the results of the interview above, the researcher concluded that the teacher's view of the incorporation of TPACK aspects by paying attention to the needs of the material

to be taught in class and the preparation of tools such as power points in order to facilitate the learning process. One of the teachers said that teachers use technology to support students' learning approach in learning. This shows that teachers use presentation slides or PowerPoint, Canva and Quiziz as tools during classroom learning as a reference for students so that they can understand the material more easily if they see examples. Finally, teachers are well prepared (have lesson plans) and able to operate technology to present relevant learning content.

B. Discussion

This study was designed to find out the views on TPACK-based English language learning. In this section, are two aspects explained, firstly students' views on TPACK-based English learning, and secondly teachers' views on TPACK-based English learning which are explained in the discussion below:

1. Students' Views on Technological Pedagogical and Content Knowledge (TPACK)-Based on English Learning

In the application of the eight main components of the TPACK framework to students' views at UPT SMAN 2 Barru, the results show that students fulfill several components or aspects of the indicators of the application of TPACK values in English language learning. Students perceive that of the eight components, the thing that students understand the most is: 1) Technological Knowledge (TK) and Technological Pedagogical Knowledge (TPK), which is indicated by the results of an interview with one of the students who said that the use of technology during the learning process can increase enthusiasm and enthusiasm for learning; 2) Pedagogical Knowledge (PK) and Pedagogical Content Knowledge (PCK), characterized by the results of interviews saying that they feel involved in the learning process with active learning methods such as group discussions; 3) Content Knowledge (CK) and Technological Content Knowledge (TCK), the interview results said that students'

understanding of English improved because the teacher explained English concepts specifically and gave relevant examples. Meanwhile, the TPACK components that are less implemented according to students' views are 1) Technological Pedagogical Content Knowledge (TPACK), where this component is a comprehensive knowledge that integrates technology, pedagogy, and content simultaneously and effectively. So that students feel that learning becomes monotonous or too focused on one aspect only; 2) Contextual Knowledge (CK), this is indicated by one of the students who said in the interview that the learning process was monotonous and the material was heavy so that it was difficult to understand.

The implementation of TPACK-based English learning has just been implemented at UPT SMAN 2 Barru, with conditions and situations of students who have not adapted to this system, and those who are still struggling with the teaching method. Furthermore, the interview results revealed various students' views on TPACK-based English learning implemented at the school. All participants were able to use and had good experience with the use of technology during learning which is one of the important aspects of TPACK-based learning. There are some students who state that the use of technology in learning English can facilitate the learning process because they can find references that are not in books but can be accessed on the Internet.

The results of the interviews conducted show that the TPACK-based English learning method can improve students' English skills easily they use technology as a tool in finding additional materials. This study shows the same response as the research, M Virgiawan (2021) where the results of the application of TPACK framework-based English learning to improve students' writing skills show quite effective results to improve students' writing skills. This is evidenced by the results of the N-gain score calculation, the N-gain score for the experimental class is 57.21% which is included in the moderately effective category. Meanwhile, the average N-Gain score for the control class is 23.31%, including in the

ineffective category. So it can be concluded that the TPACK framework-based learning tools integrated with Virtual Reality media are effective enough to improve students' writing skills at SMA Batik 2 Surakarta. Based on the results of this study, the researcher hopes that in the future TPACK-based English learning will be carried out more optimally so that students' knowledge can develop.

Furthermore, students' views on the challenges faced in TPACK-based English learning. It shows that most of the participants said that they lack knowledge in using technology, lack internet access, or can be said to be constrained by the network and limitations in accessing materials provided by educators. Not all students have equal access to technological devices such as computers, tablets, or the Internet. This limitation can hinder the application of technology in learning. In this case, it is directly proportional to the research (Hastuti and Syukur 2021), in his research which shows the results of research conducted by the author in the field which is an inhibiting factor in the implementation of HOTS-based 21st-century learning using the TPACK approach, namely internet access in schools is still very concerning. Students are very difficult if they have to update on a problem that they need to analyze or find information. Learning media is also still lacking such as LCD and Laptop facilities. Based on the description of the research above, the researcher hopes for collaborative efforts between teachers, schools, government, and the education community. With investments in infrastructure, training, and ongoing support, TPACK-based learning can become more effective and beneficial for all students.

In addition, in response to the question regarding students' engagement in TPACK-based English learning when used in teaching, most students stated that with this learning method, they are required to be productive. One of the interviewees said that this learning method made them master the material more effectively and meaningfully in the learning process. They can easily communicate the material if they still lack understanding of the

material. They will feel involved and active in cooperating with other students when required to work collaboratively. This was also found in the research (Hastuti and Syukur 2021), which shows that students at SMA Negeri 11 Enrekang are indeed able to work well together as evidenced by every task that requires cooperation both learning tasks and tasks outside of learning such as cleaning being able to be done together, being able to work together in a group during the learning process or when there are activities that require cooperation and being able to become leaders in working together, actively participating and being able to express opinions during discussions in the learning process.

Students' views with TPACK, it can be seen that success in the application of TPACK is highly dependent on how technology is integrated with pedagogy and content harmoniously. Teachers must be able to balance technology with effective pedagogy and appropriate content. This can be challenging, especially for teachers who may lack experience or familiarity with technology. Failure in any of these components can reduce the effectiveness of technology in supporting learning, ultimately affecting students' views of TPACK-based learning. To remedy this, teachers need to more deeply understand and apply the principles of TPACK so that technology truly enriches students' learning experience. This is by the opinion of (Koehler, 2011) who said that although it has several advantages, TPACK also has weaknesses, including; New technologies often create new opportunities that can represent content and pedagogy that did not previously exist and most of the technologies used by teachers are usually not designed for educational purposes, for example, they are used for offices, businesses, and others.

2. Teachers' Views on Technological Pedagogical and Content Knowledge (TPACK)-Based English Learning

Based on the teachers' views above, this indicates that the application of the eight main aspects or components of the TPACK framework at SMAN 2 Barru, the results showed that

teachers fulfilled some of the components and indicators of TPACK values in English language learning, the following TPACK were fulfilled: 1) Technological Knowledge (TK), this is indicated by the interview result of one of the teachers who said that they could learn technology and master it by attending training and seeking literacy; 2) Pedagogical Knowledge (PK), this is explained by one of the teachers who stated that teaching strategies are tailored to the needs and interests of students, such as active or collaborative learning; 3) Content Knowledge (CK), this is evidenced by the teacher's statement that with the development of IT they can master the material well so that they can provide in-depth explanations; 4) Technological Content Knowledge (TCK), this is in line with the teacher's statement who said that they will adjust to the interests of students with the use of mobile phones, students will access the material by sharing assignments via WhatsApp; 5) Pedagogical Content Knowledge (PCK), the interview results said they will adjust to the needs of their students by providing relevant examples to explain English concepts; 6) Technological Pedagogical Knowledge (TPK), teachers always use discovery learning e-learning platforms to facilitate group discussions; 7) Technological Pedagogical Content Knowledge (TPACK), this is characterized by teachers' statements that they design learning using several learning application software such as, Canva, Powerpoint, and Quiziz which can enable direct practice in real contexts; 8) Contextual Knowledge (CK), teachers adjust needs with an understanding of the students' context so that the subject matter is more easily understood and accepted by students. There are 2 components that have a low level of implementation in the learning process, namely TCK (Technological Content Knowledge) and TPK (Technological Pedagogical Knowledge). Due to the monotonous use of technology, technology is often only used to visually display information or material without making a real contribution to the understanding of more complex concepts. This causes students to feel that technology does not help them much in understanding the lesson

in depth. Students feel that technology is used in a less creative or interactive way in the teaching process.

The researcher argues that teachers who implement TPACK-based English learning at SMAN 2 Barru have advantages and disadvantages. In the findings, the teachers' views stated that the positive views they face are that they can easily access materials and learn English through applications and training provided on the internet, increase their knowledge about the use of technology, the content presented in the classroom is also quite diverse which is tailored to the requested needs of students and get closer to students who have different interests. This result is supported by one of the studies by Dzakia, Sulaeman, and Subagiyo (2023), which states that teachers have utilized technology-based learning media. The media that is widely used is PowerPoint followed by other technology-based media. The reasons and considerations of the teacher in choosing the media are that it is easy to use or access and the media can increase student interest in learning.

Meanwhile, one of the teachers who expressed a negative view of this learning method was that older teachers find it difficult to use technology, but they still participate in training and workshops. All teachers also have their own strategies for dealing with the times when they use technology well to find references. One teacher said the use of additional applications as a tool in the preparation of content material such as the use of Quiziz applications, canva, and PowerPoint. It is also said in the research by Dzakia, Sulaeman, and Subagiyo (2023), that quizzes is a quiz in the form of a game, students are increasingly motivated to get high scores, so students pay attention to the material explained before the quiz. Students are formed into groups and then each group must answer the questions in the quiz. quizzes.

Furthermore, teachers' views on TPACK-based English learning, teachers always try to interact with students. They will try to identify the needs and constraints encountered during

the learning process. Teachers tolerate things that can hinder students' involvement in understanding the material well. Teachers always look for ways and strategies so that students can understand and develop their knowledge in English. One of the teachers said that with the use of mobile phone technology students will be enthusiastic in learning the material and students will be influential if they utilize social media but with positive things. The problems faced by students and teachers will be the key to finding solutions so that future learning will be better and maximized.

CHAPTER V

CONCLUSION AND SUGGESTION

This chapter consists of two parts. The first part is the conclusion, which is based on the research findings. The second is suggestions based on the conclusions.

A. Conclusion

In conclusion, the purpose of this study is to find out the views of students and teachers regarding Technological Pedagogical and Content Knowledge (TPACK) based English learning. The researcher has completed the research process in accordance with the procedures that have been set at the beginning and the results show that the implementation of the use of TPACK-based learning in English language learning has not been implemented objectively or maximally at the School because there are still TPACK components that have not been realized. Based on the findings of the research conducted at SMAN 2 Barru, the researcher drew the following conclusions: (1) Students' views on TPACK-based English learning at SMAN 2 Barru have inadequate TPACK and have not been maximized in its implementation because of the eight TPACK components there are two components that are still not well implemented, namely Technological Pedagogical Content Knowledge (TPACK), where this component is a comprehensive knowledge that integrates technology, pedagogy, and content simultaneously and effectively. So that students feel that learning becomes monotonous or too focused on one aspect only and Contextual Knowledge (CK), this is indicated by one of the students who said from the results of the interview that the learning process was monotonous and the material was heavy so it was difficult to understand; (2) Teachers' views on TPACK-based English learning at SMAN 2 Barru have good TPACK. Teachers said that they have good knowledge of technological advances for online learning, they did not find any difficulties or problems in implementing this learning system.

Based on the results of the above research, the researcher found that during the implementation of TPACK-based English learning, there was a good response from students. Students show higher levels of engagement and motivation when technology is used in English learning. Multimedia and interactive tools help to make learning more interesting and fun. Students' English comprehension also becomes better when the integration of technology in learning can help students understand English concepts better. However, the obstacles or challenges students face with this teaching method are that some students face technical difficulties such as unstable internet connections and lack of access to technological devices, which hinder their learning process.

Meanwhile, teachers feel the same way about TPACK-based English learning at school. From the results of teacher interviews at UPT SMAN 2 Barru also showed that it was good. The researcher found it easy for teachers to present the material, teachers felt an increase in effectiveness in teaching when using the TPACK approach. Technology allows for more varied and interactive delivery of materials that are easy to communicate and obtain information. However, on the other hand, teachers feel that they need continuous training to master the latest technology and how to integrate it in teaching. Support from the school and related parties is essential. Teachers also face limitations in terms of adequate technology resources and digital materials. This poses a challenge for optimal TPACK implementation.

The students' and teachers' views indicate that the implementation of Pedagogical Technology and Content Knowledge (TPACK)-based English learning at UPT SMAN 2 Barru has been quite effective. However, the inhibiting factors in the learning implementation process are expected to trigger the attitude and performance of teaching staff to further develop or create new learning styles according to their needs. In addition, the use of this media can be further developed by utilizing the available features more varied in accordance with current technological advances. By understanding students' and teachers'

views on TPACK-based English language learning, it is hoped that this research can make a meaningful contribution to the development of more effective and innovative educational practices.

Overall, this study emphasizes that TPACK has great potential to improve the quality of English language learning. Despite the positive outlook, the study also highlighted significant challenges faced by teachers and students, such as limited technological infrastructure and differences in digital skills. Teachers feel there is a need for more in-depth and continuous training to ensure they can utilize TPACK to its full potential. Students, on the other hand, require more equitable access to technology and support in overcoming the digital divide. However, the successful implementation of TPACK relies heavily on the continuous commitment of teachers to develop their competencies, as well as adequate support from the school and government in providing the necessary infrastructure and training. Teachers and students increasingly realize the importance of their active role in the success of TPACK-based learning. Teachers need to continuously adapt and find new ways to integrate technology with pedagogy and content, while students need to take the initiative in using technology to support their learning. With a sharpened view of the benefits and challenges of TPACK, teachers and students can more effectively utilize technology to achieve better and more relevant learning outcomes in the digital era.

B. Suggestion

Based on the above conclusions, the researcher proposes suggestions for implementing English language learning based on Technology Pedagogical and Content Knowledge (TPACK). The first suggestion for future researchers is that further research can be conducted with a larger and more diverse sample to get a more comprehensive picture and evaluate the long-term impact of Pedagogical and Content Knowledge (TPACK)-based learning on students' skills and motivation. The second is that teachers need continuous

support in the form of training and professional development to effectively implement Pedagogical and Content Knowledge (TPACK). This includes technical training as well as innovative pedagogy. Teachers' strategies must be implemented because this is how teachers determine learning objectives during the teaching and learning process. Furthermore, advice for students, Pedagogical and Content Knowledge (TPACK)-based learning can increase students' engagement and understanding of English materials. Therefore, schools need to ensure that all students have adequate access to technological devices and infrastructure. Schools are also expected to invest in technology infrastructure and digital education resources are essential to support the implementation of Pedagogical and Content Knowledge (TPACK). Policies that support equitable access and training for teachers need to be strengthened.

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