



Investigating English Teachers' Perception About the Use of TPACK in EFL Learning

Yenny Ratnasarie Sy^{1*}, Patuan Raja², Tuntun Sinaga³

Faculty of Teacher Training and Education (Universitas Lampung, Bandar Lampung)¹

Faculty of Teacher Training and Education (Universitas Lampung, Bandar Lampung)²

Faculty of Teacher Training and Education (Universitas Lampung, Bandar Lampung)³

Article Information

Received: September 18, 2023

Revised: October 18, 2023

Accepted: November 01, 2023

Published: December 02, 2023

Keywords

EFL Learning; English Teachers' Perception; TPACK

Correspondence

E-mail: yennyratnasarie@gmail.com

ABSTRACT

The study explores English teachers' perceptions of integrating technology, specifically utilizing Technological Pedagogical Content Knowledge (TPACK), in EFL learning. Ten high school English teachers in South Lampung Regency, Lampung Province, were surveyed and interviewed. From the survey, limited facilities and knowledge were identified as barriers to technology adoption. The research, employing a descriptive qualitative method, revealed positive perceptions among English teachers regarding the effectiveness of TPACK in enhancing EFL learning outcomes.

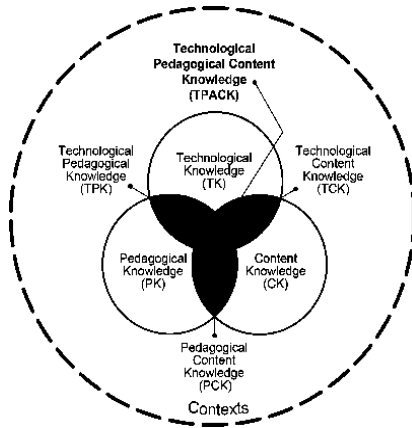
INTRODUCTION

Navigating the ever-changing landscape of education, today's teachers confront the dynamic challenge of seamlessly integrating new digital technologies into their teaching and learning. The shift from traditional to online-based instruction propels them to re-imagine their strategies, incorporating social media is one of them. This strategy belongs to Technological Pedagogical Content Knowledge (TPACK) theory. In English learning, teachers with TPACK perspective are required to comprehend the correct pedagogy concept using technology in teaching and learning activities (Abubakir & Alshaboul, 2023). According to Mishra and Koehler (2006), TPACK is an emergent form of knowledge that goes beyond all three 'core' components (content, pedagogy, and technology). Those three

components boost new knowledge for teachers and students in learning new concepts in practical ways. It also gives a new insight to the EFL teachers as the new framework which relates content, pedagogy, and technology knowledge in their teaching process.

Previous research done by Nur, Lynde, Sri, Dwi, and Hasan (2018) showed that the implementation of TPACK for English classroom provides the advantages to develop the quality of English teachers' professional development. Another research done by Salma (2019) showed that teacher who teaches by implementing TPACK would make the students more active and understand about the subject to be taught. Moreover, teacher also gives the best performance by implementing technology while teaching. Having those facts, we can assume that the use of TPACK gives some of positive effects to both teacher and students in their teaching learning process. According to Mishra and Koehler (2006), TPACK is one of the recent frameworks used to integrate technology in the classroom. It attempts to identify the nature of knowledge needed by teacher to use technology in their teaching learning process. TPACK has seven elements which are Content Knowledge (CK), Pedagogical Knowledge (PK), Technology Knowledge (TK), Pedagogical Content Knowledge (PCK), Technological Content Knowledge (TCK), Technological Pedagogical Knowledge (TPK), and Technological Pedagogical Content Knowledge (TPACK). The figure of TPACK components can be seen as follow:

Figure 1. TPACK components



1. Content Knowledge (CK)
It relates with what the teacher teach such as the theories about the materials.
2. Pedagogical Knowledge (PK)
It deals with how the teachers teach like the method or the techniques of their teaching.
3. Technology Knowledge (TK)
It is the tool that the teachers use, for example smartphone, laptop, flash disk, projector screen, etc.
4. Pedagogical Content Knowledge (PCK)
It relates with the ordinary teaching and learning process usually done by the teacher.
5. Technological Content Knowledge (TCK)
It is the specific technology for teaching, for example movie, videos, and song, etc.
6. Technological Pedagogical Knowledge (TPK)
It is the teaching learning when current technology is used, for example the use of social media for educational purpose. The social media can be instagram, facebook, twitter, line, and etc.
7. Technological Pedagogical Content Knowledge (TPACK)
It is the basis of effective learning using technology on its process.

By using TPACK, mainly in EFL teaching learning process, both teacher and student will involve in the teaching and learning activities easily. The students will also get motivated in participate into the learning actively. It happens because the use of technology relates into their daily life nowadays. Young age generations are the internet generation who use technology in almost all of their life aspect, including in their learning activities. So, the use of technology in learning is acceptable for them. Being related with those theories, the implementation of TPACK in Indonesia still finds some problems deal with some factors, especially in EFL teaching for English teachers. Based on previous study done by Khan (2011), teaching English as a second or foreign language was a difficult task when it came to areas that teachers need to create a creative and modern teaching performance by using technology. Here, EFL teachers have to adjust their pedagogic skills with the rapid development of technology as a medium in gaining knowledge. According to Batiibwe and Bakkabulindi (2016), the utilization of ICT in instructional method decidedly affects the educating and learning measure. The use of ICT can be seen from the use of PC, laptop, web, email, video conferencing, application, social media, and many others. The use of those tools and media includes in the implementation of TPACK.

Besides the important aspect of technology, EFL teachers should have enough pedagogical and content knowledge to teach their students. As mentioned by Elas (2019), teachers need to conduct and develop the three major knowledge in teaching such as technology, pedagogy, and content knowledge. If technology knowledge relates with teachers' skill in using ICT tools and media in their teaching, pedagogy and content knowledge relate with teachers' strategy in delivering their teaching learning process and teachers' knowledge about the content of the subject taught to the students. As stated by Putri (2019), the implementation of TPACK in English learning process will make the learning be more interesting because of some of reasons. Firstly, teacher will realize the benefit of using technology in their teaching and learning process. Secondly, the use of TPACK is the basic of effective teaching through technology, the illustration of idea through technology, education

329|English Education: Jurnal Tadris Bahasa Inggris Vol. 16 (02): 326-338 (2023)

techniques that use technology, and technological use to create new understanding that teachers need to encourage their students to be more active and independent. Those previous researches showed the benefits of implementing TPACK in teaching learning process but they did not find about the teachers' perception toward TPACK as the subject who use TPACK itself. Thus, this research tries to investigate English teachers' perception about the use of TPACK in EFL learning.

RESEARCH METHOD

In this research, the researcher used descriptive qualitative method. According to Sugiyono (2017), qualitative research method is a research method based on postpositive philosophy, used to examine the condition of natural objects where researchers are as a key instrument. The data of the research was collected by using questionnaire and interview. The process of collecting data was administered in some following steps:

1. Making some questions for questionnaire.
2. Giving the questionnaire to the students.
3. Asking the participant to fill the questionnaire.
4. Collecting the questionnaire from the participant.
5. Doing the interview and organizing the data.

Next, the subjects are 10 English teachers who teach in some of Senior High Schools in South Lampung Regency, Lampung Province. After the data had been collected, it then was analyzed in order to answer the research question. The data analysis techniques are:

1. Reading the responses from the participant.
2. Sorting all of the gained data.
3. Organizing and coding.
4. Analyzing the data.

By using descriptive qualitative method, it will help to describe the situation, problem, phenomenon, service or program. It is also useful to provide information

330|English Education: Jurnal Tadris Bahasa Inggris Vol. 16 (02): 326-338 (2023)

about the current condition of society these days, or describe the thought or perception toward the issue (Lambert, 2013).

FINDING AND DISCUSSION

Findings

The findings of this research were divided based on seven domains of TPACK namely Content Knowledge (CK), Pedagogical Knowledge (PK), Technology Knowledge (TK), Pedagogical Content Knowledge (PCK), Technological Content Knowledge (TCK), Technological Pedagogical Knowledge (TPK), and Technological Pedagogical Content Knowledge (TPACK). The data were collected from questionnaire and interview with English teachers at those schools. The result can be seen in Table 1.

Table 1. the Calculation of the questionnaire

No.	TPACK Domains	Percentage (%)
1.	CK	90.12%
2.	PK	88.76%
3.	TK	78.41%
4.	PCK	89.85%
5.	TCK	87.69%
6.	TPK	88.37%
7.	TPACK	85.90%

Content Knowledge (CK)

The data shows that the average of this score is 90.12%. This is the highest average score among those seven domains of TPACK. Based on this result, teachers' knowledge of CK in those schools was great. It is in line with the previous research done by Yolanda and Aryuliva (2022) who found that Content Knowledge is the highest domain of TPACK which is mastered by EFL teachers. The study showed that most of English teachers have enough knowledge about English materials since it is their major matter as the English teacher. The examples of interview result from the respondents are:

Respondent 4: as an English teacher, I totally agree that English teacher should have a good understanding of the materials that are going to be taught to the students. It is because teacher is one of learning sources for the students to be able to gain information about the subject learned.

Respondent 7: having good knowledge of the subject we taught as the English teacher is a must for us. It is because it reflects our professional competency as a teacher so we can serve our students well.

Pedagogical Knowledge (PK)

The average score for Pedagogical Knowledge (PK) is 88.76% which is the third highest score among others. Based on the questionnaire obtained, all statements in PK category were good enough. Since PK relates with teachers' knowledge in using appropriate strategy in their teaching, the questionnaire was focus on how do they use appropriate approach or strategy to deliver their teaching. Previous research done by Yunika, Nur, Hye-Jong and Sumardi (2021) showed that Pedagogical Knowledge is important in order to solve the students' problem in their learning because teacher with good understanding of PK will teach better. The examples of interview result from the respondents are:

Respondent 1: one of teacher's tasks before teaching is preparing the lesson plan. In creating the lesson plan, we have to have good Pedagogical Knowledge (PK) so that we can choose the suitable method in our teaching.

Respondent 2: teachers will get some problems if we don't have a good knowledge of pedagogy. It is because the strategies we use in our teaching define whether we can reach our learning goal or not.

Technology Knowledge (TK)

Table 1 result shows that the average score of Technology Knowledge (TK) is the lowest score among all of TPACK domains. It gained 78.41% scores which seems acceptable but need to be improved. This low result is caused by the low knowledge in using some kinds of technology. Teachers seem do not really have a good skill

in operating some ICT tools except the ICT tools they usually use in their daily teaching. Since the rapid development of technology has become a new phenomenon in our daily life, there are many new technologies that are unfamiliar for the teachers, especially for senior teachers. It is in line with the finding in previous research done by Arif, Irfan, and Ozkan (2019) which showed that the use of some types of technology tools in daily life and also education context constantly renews and updates day by day. That is why some teachers face some problems when they have to use those new technologies in their teaching. The examples of interview result related to this domain are:

Respondent 8: since we use some technology tools during Covid-19 pandemic, we are already familiar with the use of some application such as WhatsApp and Telegram. But we have lack understanding in using other new technology tools that seem so many nowadays.

Respondent 10: as a senior teacher, I am not used to use such kind of technology tools. I usually teach my students by conventional way. If I have to use technology tools, I can only operate laptop and LCD Projector.

Pedagogical Content Knowledge (PCK)

The average score for PCK showed in Table 1 is 89.85%. It is the second highest score among other domains. PCK relates with the blending of content and pedagogy into an understanding of how particular topic are presented for instruction. In this research, teachers do not have any problems in deciding the appropriate way to deliver the materials in their teaching. Previous research done by Syamdianita and Bambang (2021) showed that teachers with good PCK will design the teaching material as good as possible in order to make sure that students will be more attracted and interested to learn. This will also create an active learning atmosphere in the classroom so students will be involved actively in the learning process. The examples of interview result for this domain are:

Respondent 5: as a teacher, we need to always consider which teaching strategy is appropriate with our learning material or learning topic. By
333|English Education: Jurnal Tadris Bahasa Inggris Vol. 16 (02): 326-338 (2023)

having good understanding of PCK, it will help us to decide it because not every teaching strategy matches with our topic delivered to the students.

Respondent 6: by collaborating the knowledge of pedagogy and content, it helps me much in deciding the method that I am going to use at class during my teaching learning process.

Technological Content Knowledge (TCK)

Table 1 result shows that the average result of TCK is 87.69%. Since TCK relates with knowledge about the manner in which technology and content are mutually related, it allows teachers to use such kind of technology which suitable to the content being taught. By having good knowledge of TCK, teachers will be able to decide the technology that is going to be used when they teach one of the learning topics. For example, when they have to teach song, they may choose to use YouTube, laptop, LCD Projector, and speaker as technology tools. Previous research done by Thooptong (2016) showed that the use of technology in delivering the content of the subject support the curriculum goal and facilitate the students to learn easier. The examples of interview result related with this TPACK domain are:

Respondent 3: the knowledge of TCK helps us to create an interesting English learning. Students will not get bored when we explain the lesson and they can also learn how to use technology during the class.

Respondent 7: by using technology and match it with the content of our learning, teacher will be able to create an innovative teaching learning process. Of course, it will help teacher and students to reach the learning objective.

Technological Pedagogical Knowledge (TPK)

The data shows that the average score for this domain is 88.37% which is considered to be quite good score. TPK is the knowledge of the existence, components, and capabilities of various technologies as they are used in teaching and learning settings, as well as knowledge of how teaching may change as a result

of using specific technologies. Related to this, teachers have good perception since they relate their teaching strategy with the technology they use in their teaching process. For example, during Covid-19 pandemic, they use WhatsApp application to do online learning strategy. Previous research done by Amber (2022) showed that the use of suitable technology in doing teaching strategy significantly and positively correlated with students' learning success. The examples of interview results related with this domain are:

Respondent 1: the use of technology will definitely help the teacher to develop learning media which support our teaching strategy.

Respondent 10: the development of technology gives us many choices to choose the appropriate technology which can be used in our teaching method.

Technological Pedagogical Content Knowledge (TPACK)

The average score of TPACK domain is 85.90%. This domain is the most complete domain which unites the entire domain into one. Teacher's perception toward this domain is good enough since almost all of the steps in their teaching relate with TPACK. They can utilize technology appropriately into their teaching and learning activities in various material contents, as well as teaching materials using appropriate technology and pedagogical methods. It is in line with the previous research done by Joyce, Ching and Min (2015) which showed that TPACK is beneficial as the theoretical framework to guide teachers' planning of technological, pedagogical and content improvements during lesson planning and implementation. The examples of interview results for this domain are:

Respondent 2: the knowledge of TPACK is very helpful in both online and offline learning. It also important since it helps teachers to improve their teaching quality to be better.

Respondent 8: since it is needed for us to upgrade our teaching, the understanding of TPACK motivates us to create our teaching to be more

interesting and qualified. The use of technology make everything becomes easier to do.

Discussion

The qualitative data analyzed in this study provided the answer of the research question. In line with the data analysis, the results indicate that English teachers have good perception toward the use of TPACK in EFL learning. Some previous studies that have similar findings were conducted by Mahdum (2015) and Cahyono (2016) show that most EFL teachers have good perception toward TPACK. Teachers' good perception mostly relate with the importance of every TPACK domains which were implemented in the teaching learning process. Even so, teachers also face some difficulties in one of TPACK domains namely Technology Knowledge (TK). It happened because of their lack understanding of using many kinds of technology tools. They may be familiar in using some technologies usually used in educational context but they do not really understand how to use other kind of technology. This finding is in line with previous research done by Yolanda and Aryuliva (2022) which showed that EFL teachers face some problems in using some technologies.

CONCLUSION

Based on the data that have been analyzed and discussed, it can be concluded that most teachers have good perception toward the use TPACK in their EFL learning. Their good perceptions were given to almost all of TPACK domains. They believe that the use of TPACK is important in supporting their competency to create an innovative and creative teaching. By having this framework in their teaching process, students will involve actively in the learning process and not get bored. Both teacher and students can also learn how to operate various kinds of technology which can be used in educational context meaningfully. Those kinds of technology are much helpful and interested instead of conventional text book.

In pedagogic and content domain, it can be said that most teachers have enough skills on it. By having good knowledge in pedagogy and content, teachers will be able to define the most appropriate teaching strategy to be used in their teaching. Besides that, they will also be able to develop a good lesson plan, learning media, and learning material to be more ideally and understandable. Without this ability, teachers will find it difficult to produce interesting teaching materials, determine the topics needed to be taught, or choose appropriate media to be used in each topic.

REFERENCES

- Arif, S., Irfan, T., and Ozkan. (2019). A Technological Pedagogical Content Knowledge (TPACK) Assessment for Pre-service EFL Teachers Learning to Teach English as Foreign Language. *Journal of Language and Linguistic Studies*, 15(3). <https://doi.org/10.17.263/jlls.631552.1122-1138>.
- Amber, Y. (2022). Understanding Levels of Technology Integration: A TPACK Scale for EFL Teachers to Promote 21st Century Learning. *Journal of Education and Information Technologies*, 27, 9935-9952. <https://doi.org/10.1007/510639-022-11033-4>.
- Batiibwe, M., and Bakkabulindi, F. (2016). Technological Pedagogical Content Knowledge (TPACK) as a Theory on Factors of the Use of ICT in Pedagogy: A Review of Literature. *International Journal of Education and Research*, 4(11), 123-138.
- Cahyono. (2016). Quality of Indonesian EFL Teachers: The Implementation of Lesson Study to Improve Teacher Pedagogical Content Competence. *Recent Issues in English Language Education: Challenges and Directions* (pp.65-88). Surakarta, Indonesia: Sebelas Maret University Press.
- Elas, N. (2019). Development of Technological Pedagogical Content Knowledge (TPACK) for English Teachers: The Validity and Reliability. *International Journal of Emerging Technologies in Learning*, 14(20), 18-33.
- Joyce, H., Ching, S., and Min, H. (2015). Technological Pedagogical Content Knowledge (TPACK) for Pedagogical Improvement: Editorial for Special Issue on TPACK. *Asia-Pacific Edu Res*, 24(3), 459-462. <https://doi.org/10.1007/s40299-015-0241-6>.

- Khan, I. (2011). Challenges of Teaching/Learning English and Management. *Global Journal of Human Social Science*, 11(8), 68-80.
- Lambert. (2013). Qualitative Descriptive Research: An Acceptable Design. *Pacific Rim International Journal of Nursing Research*, 16, 255-256.
- Mahdum. (2015). Technological Pedagogical Content Knowledge (TPACK) of English Teachers in Pekanbaru, Riau, Indonesia. *Mediterranean Journal of Social Science*, 6(5), 168-176.
- Mishra, P., and Koehler, J. (2006). Introducing TPCK. In AACTE Committee on Innovation and Technology (Eds). *Handbook of Technological Content Knowledge (TPCK) for Educators*. New York: Routledge.
- Nur, A., Lynde, T., Sri, A., Dwi, and Hasan, Z. (2018). Investigating English Language Teachers in Developing TPACK and Multimodal Literacy. *Indonesian Journal of Applied Linguistics*, 7(3), 575-582.
- Putri, S.E. (2019). The Implementation of TPACK in Teaching Writing Recount Text in Senior High School Level. *Journalmahasiswa.unesa.ac.id*. volume 7(2), 156-163.
- Sugiyono. (2017). *Metode Penelitian Kuantitatif dan Kualitatif dan R&D*. Bandung: Alfabeta.
- Syamdianita and Bambang, Y. (2021). The EFL Pre-service Teachers' Experiences and Challenges in Designing Teaching Materials using TPACK Framework. *Studies in English Language and Education*, 8(2), 561-577. <https://doi.org/10.24815/siele.v8i2.19202>.
- Thooptong, K. (2016). Examining EFL Pre-service Teachers' TPACK through Self-report, Lesson Plans, and Actual Practice. *Journal of Education and Learning*, 10(2), 103-108.
- Yolanda, A., and Aryuliva. (2022). An Analysis of EFL Teachers' Perceptions on the Integration of TPACK in Teaching English as SMA-MAN Solok. *Journal of English Language Teaching*, 11(2), 304-313. <https://doi.org/10.24036/jelt.v11i2.116290>.
- Yunika, R., Nur, A., Hye-jong, O., and Sumardi. (2021). Enhancing EFL Teacher's Technological Pedagogical Content Knowledge (TPACK) Competence through Reflective Practice. *TEFLIN Journal*. <https://doi.org/10.15639/teflinjournal.v32il/117-133>.