EFL Teachers' Technological Pedagogical Content Knowledge (TPACK) Competence at the Madrasa in Indonesia: A Post-Pandemic Analysis Study

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ABSTRACT

This study will explore about the Technological Pedagogical Content Knowledge (TPACK) competence of EFL teachers in Madrasahs in Indonesia, especially in the post-pandemic period. The participants in the research will be 10 English teachers at madrasas from several provinces in Indonesia. Data will be collected from reflective journals, interviews and documentation, then analyzed using thematic analysis. It is hoped that the findings of this research will provide an overview of the current condition of EFL teachers in madrasas and their actual competency which has been analyzed through the TPACK framework, so that the results of this research can become a new knowledge for academics and as consideration for policy makers in the field of education before they apply various rules.

Keywords: EFL Teachers, TPACK, Madrasa

INTRODUCTIONS

The contribution of Islam to the advancement of science and technology is essentially twofold. Muslims should own this paradigm, not the secular paradigm that exists now (Zuhdi, 2015). According to this Islamic paradigm, Islamic aqeedah must be employed as the foundation of thought (*qa'idah fikriyah*) for all science (Ilmi, 2012). This does not imply that Islamic Aqeedah becomes a source of all knowledge, but rather that it becomes a norm for all information. So knowledge that adheres to Islamic Aqeedah can be accepted and practiced, whilst knowledge that contradicts it must be rejected and cannot be practiced.

Science and teaching abilities are both improving currently. The teacher should plan for the quick development of science. Teacher readiness in terms of science competence is appropriate to constantly be prepared to confront the problems of the times in today's global society. Teachers' abilities should also be strengthened in order to meet problems and increase educational quality (Nahar, 2022). Teacher competence in the twenty-first century necessitates continuous improvement. According to BSNP (*Badan Standar Nasional Pendidikan*), one of the most notable aspects of the twenty-first century is the increasingly interconnected world of science, which allows for faster synergy between them (Suprayitno & Wahyudi, 2020). As a result, the relationship between education and technology in the twenty-first century is critical and cannot be avoid.

The use of the internet has now influenced all individuals inside the educational system. Individuals must be involved in technological progress and development, and they must be taught to do so. Now that learning environments are being enhanced with technology and changes in course content, classroom management, and applications are being made in response to these technologically enhanced arrangements, teachers must have the necessary knowledge and skills for integrating technology in education. Teachers now require a structure that allows for the integration of technology in their divisions and branches.

With the advancement of technology that continues to advance, teachers must be able to use it to promote learning. Teachers' enhanced technological skills in learning will, of course, improve the process and learning outcomes. As a result, an awareness of technology that is integrated into the learning process would undoubtedly increase educational quality. Teachers' abilities are required not only to build pedagogical or content skills in learning, but also to grasp technology so that learning keeps up with the trends in this modern period.

However, on a global scale, teachers' literacy and efficacy in technology integration in their teachings are still far from optimal. The problems are mainly found in the countries from the third world (Sidi et al, 2023). For example, 80% of the teachers in rural areas of African nations did not have reliable expertise in the use of technology for supporting their classroom activities. As in Indonesia, even though the teachers in big cities have become better prepared compared to they were decades ago, the development does not impact those teaching in the villages as access to technology is still highly limited (Danu et al, 2023).

The incorporation of technology, pedagogy, and content into the learning process offers teachers with a fresh perspective on how to improve the process as well as learning outcomes. TPACK refers to the combination of technology pedagogy and this material. TPACK is a framework that can integrate components of technology knowledge, pedagogy, and content as a whole, resulting in a new way of thinking about mixing these three factors in learning (Archambault & Barnett, 2010). Indeed, integrating the three characteristics of technology, pedagogy, and content in learning can create variation.

One of the most important factors in the educational process is the teacher. The presence of a teacher is the primary actor as a facilitator of the student learning process. As a result, his presence and professionalism have a significant impact on the implementation of the national education program. Professional teachers must always be able to improve their skills (Darling-Hammond & Bransford, 2007; Shagrir, 2010). The utilization of technology and information is a tool that can be used to fulfill competency development objectives.

Technology, such as the internet, can also be utilized to help instructors develop their professional skills. With the availability of technology and information, a teacher is expected to be able to use technology and information in the learning process, in addition to being a medium for self-development. As a result, it can provide additional obstacles to students. Students are now accustomed to technological and information advancements in their daily lives.

Based on the results of pre observation at some Madrasah in some provinces in Indonesia, researcher conducted interviews with the teachers. It was revealed that there were several obstacles experienced by teachers. First, there is not enough time for teachers to attend seminars and training related to technology integration to support their TPACK and lack of teachers' understanding of technology. Another problem is some teachers do not really familiar how to use digital applications and tools, such as Zoom meeting, Google Classroom, or Google Forms. The available tools are very limited, such as computers/ laptops, and infocus. The geographical situation makes it difficult for internet access to use online learning resources. Most of English teachers aged 40 or older have difficulty learning new technologies. In addition, even after several teachers were sent to attend a seminar held by the Ministry of Education and Culture (KEMENDIKBUD) or Ministry of Religious Affairs (KEMENAG), the sharing session held at the school was not maximized because it was only in some meetings. Finally, computers and other supporting media available in schools are very limited, as a result, teachers frequently have to cancel implementation in class.

Although many scholars have studied pedagogical content knowledge both internationally and in Indonesia, the research on technology pedagogical content knowledge is rather restricted. Research on Technological Pedagogical Content Knowledge (TPACK) has been widely conducted, and the results usually conclude that perceptions of Technological Pedagogical Content Knowledge (TPACK) are critical for teachers preparing for 21st-century education (Masrifah et al, 2022; Irwanto et al, 2022; Lie & Tamah, 2023; Liando et al, 2023).

However, research on the knowledge of teachers' technology pedagogical content in Madrasa has not been widely carried out. Moreover, based on the preliminary research through some interviews with some English teachers at Madrasah in Indonesia, the teachers provided information regarding the problems that they faced such as there was not enough time for teachers to join seminars and trainings regarding the integration of technology to support their TPACK, there were very limited numbers of tools available, such as computer/

laptop and infocus. Beside that, the geographical situation made it difficult to get internet access to use online learning resources. To investigate further regarding the teachers' capacity in Technological Pedagogical Content Knowledge (TPACK), the researcher proposes this research project that will be focus to English teachers in Madrasa in Indonesia.

RESEARCH METHODOLOGY

This study will use a qualitative research approach. Qualitative research is research that is descriptive and tends to use analysis (Freeman, 1998). Process and meaning (subject perspective) are more highlighted in qualitative research. According to Moleong (2005), qualitative research intends to understand the phenomena of what is experienced by research subjects such as behavior, perceptions, motivations, actions, etc., holistically, and using descriptions in the form of words and language. A particular context that is natural and by utilizing various natural methods.

In this study, researcher will use qualitative research methods as an approach or search to explore and understand a central phenomenon by using interview, reflective journal and documentation process. Information is then collected in the form of words or text. This collection of information will be analyzed by researcher. From the analysis results, the researcher then will describe it with the studies of other relevant research. The final results of qualitative research will be stated in the form of a written report. The purpose of qualitative research is to explain a phenomenon as profoundly as possible by collecting the most profound data, which shows the importance of depth and detail of the data about ELT Teachers' TPACK competence in Madrasah in Indonesia.

From the definition above, it can be concluded that qualitative research understands the phenomena that occur in the subject. In this case, interviews will be taken to collect some data and information at some Madrasa, which is poured in written form. Then the researcher will use triangulation to analyze the result and describe how the application of knowledge of pedagogical technology content and the obstacles to the implementation of the track by the English teachers of Madrasa in Indonesia..

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RESEARCH TIMEFRAME

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