



Teachers' Perceptions of Technological Knowledge in English Language Teaching Practices

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Article Info	Abstract
Received: 2025 -12-19 Revised: 2025 12-29 Accepted: 2026 05-31 Keywords: Technology, Technological Knowledge, Perception DOI: 10.24256/ideasv14i1.8950 Corresponding Author: Nila Irmayani yirma7488@gmail.com English Education Department, Graduate Program, Universitas Negeri Makassar	<i>This study explores English teachers' perceptions of technological knowledge in teaching English within the TPACK framework. Teachers' perceptions play an important role in determining how technology is selected and integrated into classroom instruction to support effective learning. This research employed a qualitative approach with a narrative inquiry design. The participants were English teachers at a junior high school in Mangkoso. Data were collected through interviews and classroom observations to capture teachers' experiences in using technology during the teaching process. The findings reveal that teachers have positive perceptions of technological knowledge, as they demonstrate confidence in operating various digital tools and integrating them into instructional activities to support student engagement and learning. However, the study also identifies several challenges related to teachers' digital skills, indicating the need for continuous professional development.</i>

1. Introduction

The curriculum serves as a fundamental guide for schools in achieving educational goals. In Indonesia, the Education Unit Level Curriculum is developed

based on national education standards as stated in Ministerial Regulations Number 22 and 23 of 2006, which emphasize the need for curriculum development to respond to rapid advancements in science and technology. As a result, technology has become an essential component in the teaching and learning process, as it supports instructional materials and enhances learning quality by reducing teachers' reliance as the sole source of information. In this context, understanding teachers' perceptions of technological knowledge is crucial, as these perceptions strongly influence how technology is adopted and applied in classroom practice.

Educational technology involves the effective use of technological tools, including digital media, machines, and networks, supported by appropriate theoretical understanding to ensure meaningful learning (Bruckner, 2015). Technology is not merely a supporting tool for delivering content but also a medium that facilitates students' cognitive, physical, and emotional development. Consequently, teachers' perceptions of their technological knowledge affect their confidence and decisions in integrating technology into instructional activities. However, previous studies indicate that many teachers continue to experience difficulties in using technology effectively. Lailiang and Zhang (2020) report that differences in digital skills often reduce teachers' confidence, leading them to depend on traditional teaching methods that may not align with the needs of today's learners.

At the national level, technology integration in Indonesian classrooms remains limited. Data from the Ministry of Education and Culture (2021) reveal that only a small proportion of teachers regularly utilize digital platforms in learning activities. This situation highlights a gap between curriculum expectations and actual classroom practices. The Technological Pedagogical Content Knowledge (TPACK) framework proposed by Mishra and Koehler (2006) explains that effective technology integration requires teachers to meaningfully combine technological, pedagogical, and content knowledge. Within this framework, teachers' perceptions of their technological knowledge play a significant role in shaping their readiness to design and implement technology-supported instruction.

Previous research has emphasized the importance of professional development in improving teachers' technological competence. Caena and Redecker (2019) argue that continuous professional development enables teachers to adapt to technological changes, enhance instructional decision-making, and improve learning quality. While these studies highlight the positive impact of training, most existing research focuses on general technology integration or short-term outcomes. Limited attention has been given to how teachers' perceptions of technological knowledge are constructed and sustained over time, particularly within specific subject contexts such as English language teaching and in school-level settings.

Based on the identified gaps, this study aims to examine English teachers' perceptions of technological knowledge in using technology for teaching English

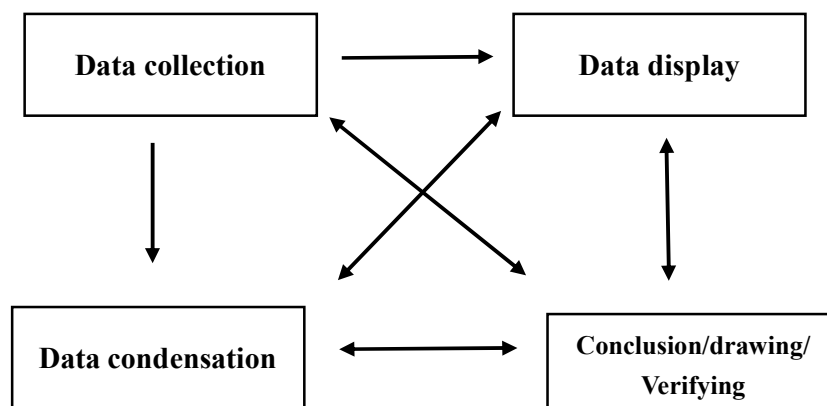
within a junior high school context. While previous studies on TPACK have largely employed quantitative approaches and focused on general technology integration, this study adopts a qualitative narrative inquiry approach to explore teachers' experiences in depth. Grounded in the TPACK framework, this research offers a subject specific and context sensitive perspective that distinguishes it from earlier studies. The findings are expected to contribute to a deeper understanding of teachers' technological knowledge and provide insights for improving technology integration in English language teaching.

2. Method

This study employed a qualitative approach using a narrative inquiry design to explore English teachers' perceptions of technological knowledge in English language teaching. This design was selected to gain an in-depth understanding of teachers' experiences, perspectives, and practices related to the use of technology in classroom instruction. Narrative inquiry is appropriate for capturing teachers' stories and meanings constructed through their teaching experiences.

The study was conducted at MTs Putri DDI Mangkoso from May to July 2025. The participants were English teachers at the junior high school level who had experience integrating technology into their English language teaching. A snowball sampling technique was used to identify participants, beginning with one English teacher who met the research criteria and subsequently recommending other teachers with similar teaching experiences. This technique was chosen to access participants who were actively involved in technology integration and able to provide rich, relevant narratives related to the research focus.

Data were collected through multiple qualitative instruments to ensure data triangulation. In-depth interviews were conducted to explore teachers' perceptions and experiences regarding their technological knowledge. Classroom observations were carried out using observation checklists to document how technology was used during English language teaching activities. In addition, document analysis was employed to examine lesson plans, teaching materials, and digital resources used by the teachers.



1.1 Data Analysis Components: Interactive Model Source: Miles, Huberman (1994)

Data analysis followed the interactive model proposed by Miles and Huberman (1994), which consists of four stages: data collection, data condensation, data display, and conclusion drawing and verification. During data condensation, relevant information was selected and simplified to identify emerging patterns. The data were then organized and presented in a systematic manner to support interpretation. Finally, conclusions were drawn and verified through continuous comparison and triangulation across data sources. This analytical process enabled a comprehensive understanding of teachers' perceptions of technological knowledge in English language teaching.

The narrative inquiry approach, as suggested by Creswell (2018), allowed the researcher to capture teachers' experiences and perceptions in natural classroom settings. This approach ensured that the findings reflected authentic teaching practices and provided meaningful insights into the factors influencing teachers' technological knowledge and technology integration in English language teaching.

3. Result and Discussion

This section presents the findings related to English teachers' perceptions of technology integration in teaching English at MTs DDI Putri Mangkoso. The findings are discussed based on the Technological Knowledge (TK) component of the TPACK framework and are organized into clear themes derived from classroom observations and interview data.

1. Technology as Support for Instruction

The findings show that teachers perceived technology as a useful support for instructional activities in English language teaching. Classroom observations indicated that teachers used digital tools such as Smart TVs, videos, songs, and online resources to support vocabulary learning and pronunciation practice. For example, teachers displayed vocabulary on the Smart TV while students listened to audio materials to practice pronunciation. In other lessons, English songs were used to help students learn new vocabulary.

Interview data supported these observations. One teacher stated:

"Yang pertama, memudahkan guru menyampaikan materi... Anak-anak lebih cepat paham karena bisa melihat contoh langsung."

(T2, July 14, 2025)

This statement indicates that the teacher perceived technology as helping deliver materials more clearly and efficiently. The availability of online resources allowed teachers to explain lessons using visual examples, which supported students' understanding. These findings reflect teachers' technological knowledge in selecting and using appropriate digital tools for instructional purposes.

2. Technology and Student Engagement

Another important finding is that teachers perceived technology as increasing student engagement. Teachers reported that the use of technology made the classroom atmosphere more active and enjoyable. One teacher explained:

"Sebelum ada Smart TV, suasana kelas terasa kaku. Sekarang siswa lebih aktif dan semangat."

(T2, July 14, 2025)

Similarly, another teacher stated:

"Sejak menggunakan televisi, kelas jadi lebih menarik dan pembelajaran lebih efisien."

(T3, July 21, 2025)

These findings indicate that teachers believed technology helped reduce student boredom and increased attention during lessons. Within the TPACK framework, this shows that teachers applied their technological knowledge to create more engaging learning experiences.

3. Teachers' Confidence in Using Technology

The findings also reveal that teachers generally felt confident using technology, although some acknowledged that their technological knowledge was still limited. One teacher stated:

"Cukup percaya diri, meskipun pengetahuan saya masih terbatas."

(T2, July 14, 2025)

Another teacher added:

"Saya percaya diri karena penggunaan teknologi sudah sesuai dengan perkembangan zaman."

(T1, July 7, 2025)

These statements suggest that teachers' confidence was shaped by their classroom experiences and their awareness of students' digital needs. This confidence reflects positive perceptions of technological knowledge and a willingness to continue learning.

4. Challenges in Technology Integration

Despite generally positive perceptions, teachers also reported several challenges in using technology. One teacher mentioned:

"Guru-guru senior masih kesulitan menggunakan teknologi karena belum terbiasa."

(T2, July 14, 2025)

Another teacher noted past technical problems related to facilities and internet access. However, teachers explained that these issues had improved over time and did not significantly reduce their use of technology in teaching.

Overall, the findings indicate that English teachers at MTs DDI Putri Mangkoso demonstrated positive perceptions of technology integration in teaching English. Within the TPACK framework, these perceptions reflect teachers' technological knowledge, shown through their ability to use digital tools to support instruction

and student engagement. Teachers' perceptions were mainly shaped by their direct classroom experiences, leading them to view technology as an effective support for English language teaching, despite the presence of certain challenges.

4. Discussion

The findings of this study indicate that English teachers' perceptions of technology integration in teaching English are strongly influenced by their daily classroom experiences. This finding supports the theory of perception proposed by Robbins and Judge (2019), which states that perception is formed through individuals' interpretations of experiences and expectations. In this study, teachers developed positive perceptions of technology when digital tools helped them explain English materials more clearly, increase student engagement, and create a more enjoyable learning environment. These experiences strengthened teachers' confidence in using technology as part of their instructional practices.

Within the TPACK framework, the findings reflect teachers' technological knowledge (TK), particularly in their ability to operate and apply basic digital tools such as Smart TVs, laptops, PowerPoint presentations, and online learning materials. Classroom observations showed that technology was integrated in a simple yet organized manner, especially in teaching vocabulary and pronunciation. This finding is consistent with previous studies by Lailiang and Zhang (2020), which found that teachers who possess basic technological skills tend to use technology more confidently to support language learning activities. Similarly, Caena and Redecker (2019) reported that teachers' positive perceptions of technology often develop through repeated and meaningful classroom use.

However, this study also found challenges among senior teachers who had limited digital skills, which affected their confidence in integrating technology into English language teaching. This result aligns with earlier research indicating that differences in digital competence can create barriers to effective technology integration (Bruckner, 2015). Unlike some previous studies that focus on advanced technology use, the present study highlights that even basic technology integration can be effective when aligned with teachers' experiences and classroom needs, particularly in junior high school English instruction.

The findings of this study have important implications for teacher training and educational policy. Professional development programs should focus not only on introducing new digital tools but also on strengthening teachers' basic technological skills through continuous and practice-based training. Schools and policymakers are encouraged to provide ongoing support, mentoring, and access to relevant technological resources, especially for senior teachers who may require additional guidance. By addressing teachers' perceptions and technological confidence, schools can promote more effective and sustainable technology integration in English language teaching.

5. Conclusion

Based on the discussion of teachers' perceptions of technological knowledge in teaching English, this study found that teachers perceived themselves as able to integrate various hardware and software effectively to support the learning process. The use of Smart TVs, digital presentations, and online platforms contributed to more interactive and easier-to-understand lessons, reflecting teachers' positive perceptions of their technological knowledge in selecting appropriate tools for instructional needs. In line with the TPACK framework, these teaching practices demonstrate a balanced use of technology, where digital tools function as meaningful support to enhance lesson clarity, student interaction, and overall learning quality. In conclusion, effective technology integration depends not only on the availability of digital tools but also on teachers' perceptions of their technological knowledge and their ability to align it with pedagogical goals in English language teaching.

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