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## Integrating the TPACK Model in Teaching *Maharah al-Qirah* : An Educational Innovation Based on Technology

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### ABSTRACT

This study aimed to identify the concrete form of integrating the TPACK model in teaching reading skills (Mahārah al-Qirā'ah) to Arabic Language Education students at IAIN Lhokseumawe. Using a descriptive qualitative approach, data were collected through observations and interviews with the head of the study program, 2 lecturers, and 8 students. The data were analyzed through simplification, presentation, and conclusion drawing. The findings showed that the integration of the TPACK model in Mahārah al-Qirā'ah was carried out through three main stages: planning, implementation, and evaluation. Lecturers applied interactive and collaborative methods that enhanced students' Arabic reading skills, including comprehension, fluency, and digital literacy. These efforts led to increased student engagement and motivation in learning. Therefore, the study concludes that the integration of TPACK in teaching Qira'ah was effectively implemented and aligns with the aim of providing an alternative model to improve reading skills in the Arabic Language Education Study Program at IAIN Lhokseumawe.

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### Keyword

Arabic Language Education; Learning Model; Maharah al-Qira'ah; TPACK Model

## مستخلص البحث

يهدف هذا البحث إلى التعرف على الشكل العملي لدمج نموذج التكنولوجيا والتعليم والمحتوى (TPACK) في تعليم مهارة القراءة لطلاب قسم تعليم اللغة العربية في الجامعة الإسلامية الحكومية لهؤسمواي. استخدم الباحث المنهج الوصفي النوعي، وجمع البيانات من خلال الملاحظة والمقابلات مع رئيس القسم، والمحاضرين، وثمانية طلاب. وقد تم تحليل البيانات من خلال التبسيط، والعرض، واستخلاص النتائج. أظهرت نتائج البحث أن دمج التكنولوجيا والتعليم والمحتوى في تعليم مهارة القراءة تم عبر ثلاث مراحل رئيسية، وهي: التخطيط، والتنفيذ، والتقويم. وقد طبق المحاضرون أساليب تعليمية تفاعلية وتعاونية أسهمت في تنمية مهارات القراءة لدى الطلاب، بما في ذلك الفهم، والطلاقة، والكفاءة الرقمية. وأسهمت هذه الجهود في زيادة تفاعل الطلاب ودافعيتهم نحو التعلم. وبناءً على ذلك، خلص البحث إلى أن دمج نموذج التكنولوجيا والتعليم والمحتوى في تعليم مهارة القراءة قد تم تطبيقه بفعالية، ويُعد نموذجًا بديلًا يُسهم في تحسين مهارات القراءة في قسم تعليم اللغة العربية بالجامعة الإسلامية الحكومية لهؤسمواي.

كلمات أساسية: نموذج التعلم؛ مهارة القراءة؛ تعليم اللغة العربية؛ نموذج التكنولوجيا والتعليم والمحتوى

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## INTRODUCTION

The *Technological Pedagogical Content Knowledge* (TPACK) model in teaching *Mahārah al-Qirā'ah* is a continuously evolving study that requires further research (Hani'atul Khoiroh, 2022). The importance of this study can be illustrated through three crucial aspects. First, the teachers have not yet fully optimized the effective integration of technology in the learning process (Suyuti dkk., 2023). Secondly, there is a lack of use of innovative and effective teaching approaches to help students develop their abilities (Achmad Ja'far & Syukran, 2023). Third, the low achievement of students in *Mahārah al-Qirā'ah* emphasizes the need for concrete steps to improve student learning outcomes in *Mahārah al-Qirā'ah* (Syukran dkk., 2024). Furthermore, this urgency is also reinforced normatively through *Qanun Aceh* (regional Islamic bylaw) No. 9 of 2018 Articles 29, 30, dan 31, which emphasizes the standards of graduate competence for *Pendidikan Ula (elementary level)*, *Wustha (intermediate level)*, *Ulya (advanced level)*, and *Ma'had Aly /Dayah Manyang (Islamic higher education)*, including the mastery of reading classical Islamic texts (*kitab kuning*)(Ali Buto & Hafifuddin, 2020). This legal basis underlines the necessity for a structured and contextual approach in developing students' reading skills, particularly through the integration of technology, pedagogy, and local content as framed by the TPACK model.

Based on the three facts above, several efforts have been made to address this issue. Among the efforts undertaken by Diaz Putri Amelia is the implementation of Technological Pedagogical Content Knowledge (TPACK) in teaching skills at the elementary school level (Diaz Putri Amalia dkk., 2023). In addition, Bella Yurinda has also conducted an analysis of the TPACK of professional teachers in teaching (Bella Yurinda & Nurbaiti Widyasari, 2022). Next, the efforts undertaken by Bagas Kurnianto include the development of TPACK-based learning tools to enhance students' learning activities and problem-solving skills (Bagas Kurnianto & Ridha Sarwono, 2023). However, in the practice of teaching *Mahārah al-Qirā'ah* conducted by instructors, the researcher found that there are still weaknesses in learning innovation and the utilization of technology. Therefore, there is a need for a significant strengthening of the implementation of model updates in the teaching of *Mahārah al-Qirā'ah* in educational institutions (Mohammad Jailani, 2022).

One of the implementations that can be provided is through the Technological Pedagogical Content Knowledge (TPACK) model in teaching *Mahārah al-Qirā'ah* (Hani'atul Khoiroh, 2022). The theory regarding this learning model emphasizes that the TPACK model is crucial in assisting educators in designing and implementing effective teaching by appropriately

integrating technology(Javier Rodriguez Moreno dkk., 2019). Elya believes that TPACK enables educators to understand how technology can support content-based teaching and learning with appropriate pedagogical methods(Orathai & Apantee Poonputta, 2022).

Next, Jiwak Raj Bajracharya(Jiwak Raj Bajracharya, 2021) It is also important to emphasize the significance of developing TPACK through teacher training and professional development so that they can effectively integrate technology into their daily teaching practices. This is because the Technological Pedagogical Content Knowledge (TPACK) model theory highlights the necessity of a contextual approach that is relevant to the needs of learners and the learning environment(Jun Jie Tseng dkk., 2020). Therefore, the TPACK model is considered a comprehensive and flexible framework for integrating technology into education to enhance the quality of learning(Amber Yayin Wan, 2022).

From the discussion on the use of the Technological Pedagogical Content Knowledge (TPACK) model in learning, the researcher argues that this concept is highly relevant in the process of teaching *Mahārah al-Qirā'ah*. This concept emphasizes two in-depth aspects for students. First, through the learning process that applies the TPACK model, students gain knowledge about the concept of *Mahārah al-Qirā'ah* (Joko Suyanto dkk., 2020) Second, it can simultaneously enhance students' motivation to learn by using this approach (Rick Voithofer & Michael J Nelson, 2020).

The characteristics of *Mahārah al-Qirā'ah* which include understanding written texts, interpreting meanings, and building critical reading skills require not only mastery of language content but also strategic pedagogy and contextualization. Therefore, the TPACK model becomes a suitable choice because it integrates three essential components: content knowledge, pedagogical strategies, and technology-based media that support interactive and student-centered reading activities. The ideal integration pattern involves selecting digital texts or multimedia content relevant to students' contexts, using pedagogical techniques such as questioning, summarizing, and predicting, and leveraging technology tools like annotation apps, online dictionaries, or interactive quizzes (Saripudin & Muhammad Dzikri Fathur Robbani, 2024). Through this synergy, students are guided to achieve deeper comprehension, build vocabulary, and engage more actively with texts in Arabic.

One of the higher education institutions using the Technological Pedagogical Content Knowledge (TPACK) model in teaching *Mahārah al-Qirā'ah* is the Arabic Language Education Program at IAIN Lhokseumawe, Aceh. The uniqueness of the Arabic Language Education Program at IAIN Lhokseumawe is, first, that it has a language institute and *Makhad Ali* for the development of *Mahārah al-Qirā'ah* learning. In teaching *Mahārah al-Qirā'ah*, IAIN

Lhokseumawe not only focuses on linguistic aspects alone but also integrates technology into the learning process.

The choice of the Arabic Language Education Program at IAIN Lhokseumawe as the research subject was due to the discovery of a concept that integrates technology into the learning process, specifically through the application of the Technological Pedagogical Content Knowledge (TPACK) model in teaching reading skills (*Mahārah al-Qirā'ah*). This is further supported by the vision and mission of IAIN Lhokseumawe, as well as by programs such as *Makhad Ali* and language institutions that support foreign language development for students.

There are several studies that serve as the foundation for the researcher in developing this research; 1) Rico Hermawan & A. Syahruraji, 2024, "Analysis of TPACK-Based Learning on Students" states that TPACK can be used as a technology-based learning approach to adapt to the evolving times. This approach must be supported by various tools such as laptops, cell phones, projectors, educational videos, and the internet. The impact of TPACK-based learning is evident in students' ability to understand the material and use technology (Rico Hermawan dkk., 2024). 2) Abdul Quddus, 2020, Implementation of Technological Pedagogical Content Knowledge (TPACK) in Professional Teacher Education (PPG) for Islamic Education (PAI)." The study mentions that the implementation of online learning through TPACK at UIN Mataram has successfully improved teachers' competencies. The competencies that have improved include online class management, downloading and reading modules, reading materials in PDF and PowerPoint formats, watching educational videos, summarizing and uploading assignments, being active in online discussions, and participating in online exams in the form of pre-tests, formative assignments, summative assignments, and final online module assignments (Abdul Quddus, 2020). 3) Iskandar & Cicyn Riantoni, 2023, "The Difficulties of Islamic Education Teachers in Integrating TPACK-Based Learning During and Post-COVID-19 Pandemic." This study mentions that teachers still find it difficult to integrate this knowledge into their teaching. Teachers continue to struggle with determining which learning model is suitable for specific materials and what technology should be used. Teachers' understanding of TPACK aspects remains low (Iskandar & Cicyn Riantoni, 2023). 4) Nurhayani & Sri Kemala Sandi Yuanita, 2021, "TPACK (Technological, Pedagogical, and Content Knowledge) for Enhancing Teacher Professionalism.", in this study, they discuss teachers' ability to apply technology in delivering learning materials. The results found indicate that the implementation of TPACK by teachers falls into the good category (Nurhayani dkk., 2021).

From several relevant studies on the integration of the Technological

Pedagogical Content Knowledge (TPACK) model in teaching *Qirā'ah* skills, there are some similarities, including: 1) having a common understanding of the theoretical concepts contained in the Technological Pedagogical Content Knowledge (TPACK) model, and 2) *Qirā'ah* skills play a role in delivering the information needed by students. The difference between this study and previous research is that this study focuses on teaching *Qirā'ah* skills using the Technological Pedagogical Content Knowledge (TPACK) model and includes a research object that is different from others, conducted in the Arabic Language Education Study Program at IAIN Lhokseumawe. This indicates that the study offers novelty compared to previous research. The objective of the study on the implementation of the Technological Pedagogical Content Knowledge (TPACK) model in teaching *Qirā'ah* skills at IAIN Lhokseumawe is to understand and identify the concrete forms of the implementation process of the Technological Pedagogical Content Knowledge (TPACK) model in teaching *Qirā'ah* skills.

## METHOD

This study employed a descriptive qualitative research method, with data derived from observations of the implementation of the TPACK (Technological Pedagogical Content Knowledge) model in teaching at IAIN Lhokseumawe, Aceh. The research subjects consisted of 25 fourth-semester students from the Arabic Language Education Study Program who were enrolled in the *Mahārah al-Qirā'ah* course during the even semester of the 2024/2025 academic year. Observations were conducted over six sessions (approximately three weeks) to examine the application of the TPACK model in reading skill instruction in the classroom.

The data sources included classroom observations and interviews with two course instructors and eight purposively selected students. The purpose of the observations was to analyze the integration of technology, pedagogy, and content within the teaching process, including the strategies employed and students' responses. The interviews aimed to explore the supporting and inhibiting factors in the implementation of the TPACK model from the perspectives of both lecturers and students.

Data collection procedures involved direct observation with field notes and semi-structured interview protocols. Data analysis followed the Miles and Huberman model, which consists of data collection, reduction, display, and conclusion drawing (Miles, M.B, Huberman, A.M, & Saldana, J., 2014)



## RESULTS & DISCUSSION

### Planning to Integrate the TPACK Model in Maharah al-Qira'ah Instruction

Based on an interview with J. Nurhawani, M.A. it was conveyed that the learning objectives of *Mahārah al-Qirā'ah* have been formulated in a specific and measurable manner, aligned with the principles of TPACK integration (J Nurhawani, MA, komunikasi pribadi, 3 Juni 2024). These objectives are designed not only to encompass mastery of Arabic reading texts but also to cultivate students' ability to utilize technology effectively in the learning process. This aligns with the view of Mishra and Koehler, who emphasized that in the TPACK framework, the integration of technology must synergistically support both content and pedagogy, rather than serving merely as the use of digital tools (Koehler, 2014).

The instructional materials have been contextualized to reflect the local culture of Aceh in order to enhance relevance and student engagement. This approach is consistent with Kathy Brodie, who emphasized that effective implementation of TPACK must be responsive to the learners' social and cultural backgrounds (Kathy Brodie, 2024). The localization of materials also supports the local wisdom-based approach, which forms a key innovation in the learning environment at IAIN Lhokseumawe.

The teaching methods applied are innovative and interactive, combining effective instructional strategies with the use of digital technology. According to Laely Armiyati and Miftahul Habib Fachrurozi, the TPACK integration enables the creation of adaptive and collaborative learning environments, especially in Arabic language instruction (Laely Armiyati & Miftahul Habib Fachrurozi, 2022). Instructors utilize various digital media such as AI-based applications, interactive videos, and online simulations to enrich students' learning experiences (Habibi et al., 2020). Through this approach, students become more actively engaged in the learning process. As affirmed by Aina Salsabila, M.Pd.I, the use of relevant technologies can significantly enhance student involvement and active participation in *Qirā'ah* learning (Aina Salsabila, M. Pd. I, komunikasi pribadi, 3 Juni 2024).

The assessment framework outlined in the Semester Learning Plan (*Rencana Pembelajaran Semester* or RPS) has been designed comprehensively, encompassing cognitive, affective, and psychomotor domains. The evaluation not only measures students' comprehension of reading texts but also their ability to utilize technology to support their understanding. This is in line with the principles of holistic evaluation in contemporary education, which seeks to assess competence in a well-rounded manner (Emy Budiastuti dkk., 2023).

Based on the collected data, the instructor has successfully developed ten RPS documents within one month. These RPS documents cover components such as learning outcome indicators, instructional processes, and assessment strategies, all of which are designed in accordance with the TPACK integration framework. This demonstrates a strong readiness to implement TPACK meaningfully in the teaching of *Mahārah al-Qirā'ah*.

**Table 1.** Analysis of the Planning Components in the TPACK-based RPS for *Mahārah al-Qirā'ah*

<i>Learning Objectives</i>	Clearly designed Specific
<i>Learning Materials</i>	Adapted to local context Acehnese culture
<i>Teaching Methods</i>	Innovative Interactive Utilization of Technology
<i>Learning Evaluation</i>	Cognitive aspect Affective aspect Psychomotor aspect

### Implementation of Integrating the TPACK Model in the Teaching of *Mahārah al-Qirā'ah* at the Arabic Language Education Program of IAIN Lhokseumawe



**Figure 1.** The Process of Teaching *Mahārah al-Qirā'ah* Through the TPACK Model

The implementation of the Technological Pedagogical Content Knowledge (TPACK) model in teaching *Mahārah al-Qirā'ah* in the Arabic Language Education Program at IAIN Lhokseumawe represents a paradigm shift from conventional approaches toward more integrative, contextual, and technology-

responsive teaching strategies. Based on observations, interviews, and documentation, it was found that lecturers have begun to proportionally integrate content, pedagogy, and technology elements to enhance the effectiveness of Arabic reading comprehension skills.



**Figure 2.** Local Wisdom-Based *Qirā'ah* Skills Material

Research findings reveal that the objectives of teaching *Mahārah al-Qirā'ah* have expanded beyond the mastery of linguistic aspects such as vocabulary and sentence structure. The learning goals now include the development of critical thinking, cultural contextual understanding, and digital literacy skills. Students are guided not only to comprehend the content of the texts but also to interpret and relate them to the local wisdom values of Aceh, as reflected in thematic texts such as *Peusijuek*, *Meugang*, and *Khanduri*.

Learning materials are developed based on the principle of authenticity, those that represent the real-life experiences of students. In addition to classical texts such as *nathr* and *shi'ar*, lecturers also utilize online articles, Arabic-language documentaries on Acehnese culture, and Arabic-language podcasts. This strategy aims to foster learning motivation and create contextual and meaningful reading experiences for students.

From a methodological perspective, the instruction adopts a student-centered learning approach, incorporating methods such as Project-Based Learning (PJBL) and collaborative reading. Students were assigned to analyze



Arabic texts containing Acehese cultural elements and then present their findings in the form of video presentations, digital infographics, or visual reports. This method encourages collaboration, reflection, and active use of technology throughout the learning process.

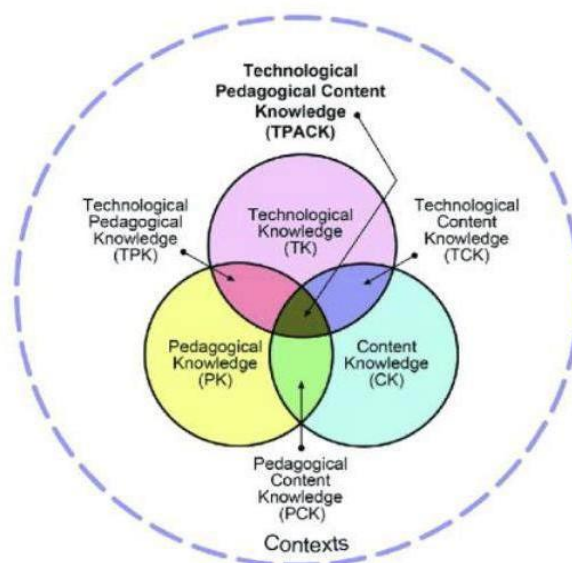


**Figure 3.** Assessment Process of the TPACK Model in Teaching *Maharah Qira'ah*

A wide variety of learning media is employed. In addition to textbooks, lecturers use digital platforms such as Learning Management Systems (LMS), YouTube, Quizizz, Kahoot, and Android-based applications. One innovative example is the *Qirā'ah Aceh* app, which provides culturally themed texts and digital practice exercises. These media facilitate flexible access to learning and increase student engagement and interest.

Assessment was conducted both formatively and summatively, through online and offline modes. Evaluation instruments include e-assessments, digital portfolios, self-reflection via Google Forms, and peer feedback. The assessment focuses not only on final outcomes but also on students' thinking processes, creativity, and engagement. The scoring rubrics are designed based on 21st-century skills such as critical thinking, teamwork, and the ability to utilize technology effectively.

The role of the lecturer has also undergone transformation. Lecturers are no longer mere transmitters of knowledge but serve as learning designers, discussion facilitators, digital mentors, and local content developers. They design learning scenarios that connect Arabic texts with Acehese cultural contexts, manage the use of digital platforms, and produce videos or digital teaching materials. Institutional support, such as ICT training and the facilities at *Makhad 'Ali*, further strengthens the effectiveness of these roles.



**Figure 4.** TPACK Components

The detailed explanation of integrating the TPACK (Technological Pedagogical Content Knowledge) model in teaching *Mahārah al-Qirā'ah* through teaching and learning activities in the Arabic Language Education Program at IAIN Lhokseumawe is as follows:

#### ***CK (Content Knowledge)***

Mastery of learning materials in the context of *Mahārah al-Qirā'ah* at IAIN Lhokseumawe includes a deep understanding of Arabic texts as well as texts that contain the local wisdom values of Aceh. The *Mahārah al-Qirā'ah* language instructors applied this content mastery by selecting relevant Arabic literary texts, such as those discussing the customs of *Peusijek* or *Meugang*, and explaining how these texts reflect social values within Acehnese traditions. The placement of content that supports the achievement of reading competence was embedded in the learning objectives and reading activities, where selected texts were aligned with specific reading skills such as identifying main ideas, understanding context, and interpreting cultural messages. These contents were structured in a progressive manner within the syllabus, starting from simpler texts to more complex ones, to ensure gradual development of students' reading proficiency.

#### ***PK (Pedagogical Knowledge)***

Knowledge about effective learning strategies for *Mahārah al-Qirā'ah* at IAIN Lhokseumawe involved using relevant methods for reading skills while considering the local context of Aceh. The lecturers used scaffolding techniques by linking reading texts with Acehnese local wisdom, such as organizing group discussions about texts related to Acehnese traditions and how these values are understood through reading. Other examples include pair reading activities that focus on Arabic texts reflecting Acehnese culture.

### ***TK (Technological Knowledge)***

The ability to use digital technology to support the learning of *Mahārah al-Qirā'ah* at IAIN Lhokseumawe was evident in the utilization of Arabic language learning applications by lecturers. The lecturers used applications that not only provide Arabic language learning materials but also integrate explanations about Acehese customs. Additionally, the software used also offered videos and information related to Acehese culture, which helps students understand the connection between the Arabic language and local Acehese wisdom.

### ***TPK (Technological Pedagogical Knowledge)***

Knowledge of how to integrate digital technology with teaching strategies in the context of *Mahārah al-Qirā'ah* and local wisdom from Aceh was demonstrated by the instructors. The *Mahārah al-Qirā'ah* instructors at IAIN Lhokseumawe integrate e-learning platforms such as Moodle or Google Classroom to share reading materials that connected Arabic texts with Acehese culture, as well as using discussion forums to discuss the relationship between values in Arabic texts and Acehese local traditions.

### ***PCK (Pedagogical Content Knowledge)***

Understanding how to integrate pedagogical knowledge with *Mahārah al-Qirā'ah* content and local wisdom from Aceh to create a deep learning experience. The lecturers of *Maharah Qira'ah* at IAIN Lhokseumawe connected reading techniques with texts that contained Acehese cultural values, such as teaching intensive reading using texts that depict Acehese customs and traditions, so that helped students better understand the relationship between Arabic texts and local culture.

### ***TCK (Technological Content Knowledge)***

Knowledge about the use of technology to access and represent *Mahārah al-Qirā'ah* material with an emphasis on Acehese local wisdom was very important for lecturers. Lecturers used technology to visually present Arabic texts connected to Acehese cultural information. For example, they might use technology-based learning tools to display Arabic texts and content related to Acehese traditions, such as the *Peusijek* ceremony.

### ***TPACK (Technological Pedagogical Content Knowledge)***

The *Maharah al-Qira'ah* lecturers at IAIN Lhokseumawe integrated digital technology, learning strategies, and *Mahārah al-Qirā'ah* content with Acehese local wisdom in their teaching modules. They designed materials that included tutorial videos on Tajweed, interactive applications for practicing reading texts with Acehese cultural elements, and relevant reading materials. The lecturers also ensured that Acehese local wisdom was integrated into every aspect of the learning process, so students not only learned reading techniques but also developed an understanding the local cultural context.

The integration of the TPACK model (Technological Pedagogical Content Knowledge) in reading instruction demonstrated significant potential for enhancing the quality of learning. This model emphasized the importance of balance and coherence between content knowledge, pedagogy, and technology in the teaching process (Koehler, M. J. dkk., 2013). In the context of reading instruction, the application of TPACK not only supported the use of digital tools as a medium for delivering material but also involves deeper pedagogical integration through interactive and contextual strategies. However, the effectiveness of the learning process observed in this study was not solely attributed to the implementation of the TPACK framework, but it was also influenced by other variables, such as students' learning motivation, technological readiness, and the relevance of local content used. Therefore, the success of this model can be interpreted as the result of synergy between technological approaches, adaptive teaching strategies, and cultural contexts closely related to students' lives.

According to Koehler and Mishra, TPACK provides a framework that enables teachers to design effective and relevant technology-based instruction. Teachers are expected not only to understand the content being taught, but also to master pedagogical strategies and to leverage technology to strengthen the learning process. This is particularly crucial in reading instruction, where students must be trained to comprehend, analyze, and evaluate texts using various approaches (Abdulwahab Alharbi, 2022).

Moreover, the appropriate use of technology can enhance students' motivation and engagement in reading activities. As stated by Nurfadilah & Ivan Achmad Nurcholis, the use of digital media and technological tools can create a more dynamic and interactive learning environment (Nurfadilah & Ivan Achmad Nurcholis, 2025). This aligns with the views of Medeleine, who argue that integrating TPACK can support the development of students' critical thinking and digital literacy skills (Madeleine Mejia & Joshua M Sargent, 2023).

Additionally, TPACK-based instruction supports student-centered learning. According to Ai Hayati Rahayu, teachers with a strong understanding of TPACK are more likely to adopt constructivist approaches, where students actively engage in constructing their own knowledge through exploration and problem-solving (Ai Hayati Rahayu dkk., 2024).

In the local context, integrating local wisdom into teaching content through the TPACK approach made the material more relevant to students' lives. As noted by Margarita, contextual education becomes more meaningful because students can connect what they learn with cultural values and the social realities they face (Margarita D. I Ottu dkk., 2024).

Furthermore, the use of technology in reading activities also supported

differentiated instruction. Tomlinson highlights that a responsive teaching approach tailored to individual student needs is essential in improving learning outcomes (Tomlinson, B., 2003). In this regard, TPACK enabled teachers to select appropriate technologies that support the learning styles and needs of each student.

Another study by Amalia indicates that teachers who integrate TPACK into their instruction tend to be more reflective and innovative, as they actively adapt their methods and tools based on classroom dynamics. This adaptive ability is crucial in teaching reading skills, which require different approaches depending on students' proficiency levels (Amalia Defrianti Putri dkk., 2024).

Meanwhile, research by Dina Ahmed and Ensaf Naseer, shows that teacher training in TPACK can increase their readiness to integrate technology into instruction (Dina Ahmed Ismaeel & Ensaf Naseer Al Mulhim, 2022). This highlights the importance of institutional support and ongoing professional development to ensure optimal implementation of TPACK.

Anderson, in their revision of Bloom's Taxonomy, also emphasize the importance of incorporating technology in the development of higher-order thinking skills, including the ability to understand and evaluate reading texts (Anderson, 2008).

## CONCLUSIONS

Based on the research findings and discussion of the study entitled "Integrating the TPACK Model in Teaching *Mahārah al-Qirā'ah*: A Technology-Based Educational Innovation at IAIN Lhokseumawe, Aceh," it can be concluded that the process of integrating the Technological Pedagogical Content Knowledge (TPACK) model in *Mahārah al-Qirā'ah* instruction at IAIN Lhokseumawe has been implemented through various methods, both in-class and out-of-class activities.

Based on the findings of this study, it was revealed that the integration of the Technological Pedagogical Content Knowledge (TPACK) model in *Mahārah al-Qirā'ah* teaching is still limited in terms of strategy variation, student engagement, and the utilization of digital resources. Based on these findings, several recommendations can be made: (1) *Mahārah al-Qirā'ah* instructors are advised to broaden their understanding of using the TPACK model in *Mahārah al-Qirā'ah* teaching, which includes diverse strategies and methods, so that students do not become bored with the material presented. (2) Instructors should assign varied and group-based tasks that allow students to apply the material they have learned collaboratively, thereby enhancing both comprehension and



engagement. (3) For future research, it is recommended that researchers explore the application of the TPACK model in more depth using mixed or advanced research methods, so that the data obtained is more accurate and contributes to more effective implementation strategies. Thus, these recommendations are grounded in the study's findings and are expected to serve as a clear basis for follow-up efforts in the development of *Mahārah al-Qirā'ah* teaching.

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