

Cognitive Level Analysis of Bloom's Taxonomy Based on the Application of the TPACK Approach in Arabic Language Learning

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Abstract

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This study aims to analyze the cognitive level of students based on Bloom's Taxonomy in Arabic language learning that applys the TPACK approach. Using a literature review method, the research stages include selecting articles, similarities in research focus, and reviewing the articles. This study collected ten scientific articles and theses from national journals published in 2022-2024. The analysis results indicate that the utilization of TPACK supports the development of students' cognitive domains, including the abilities to remember (C1), understand (C2), apply (C3), and analyze (C4). However, no elements of affective and psychomotor domain development were identified in the implementation of TPACK. This study highlights the importance of the TPACK approach in fostering more innovative and effective learning, recommending the integration of affective and psychomotor domains to create a more holistic and relevant Arabic language learning experience in the digital era.

Keywords: Cognitive Levels Analysis; Bloom's

Taxonomy; TPACK Approach; Arabic Language Learning

INTRODUCTION

The development of the times that continues to develop places Arabic as one of the languages that has a crucial role. The learning of the Qur'an and hadith continues to develop in the digital era, because Arabic is not only used as a religious language but also a language of science used in various fields. In many Muslim-majority countries, mastery of the Arabic language is urgently needed, both in the academic and professional realms. However, in practice, Arabic language teaching in many educational institutions still uses a relatively conventional approach, where technology has not been utilized optimally in teaching and learning activities. This is a major obstacle for teachers in their efforts to optimize the Arabic language teaching process (Ahmadi, Triana, & Ritonga, 2024).

Along with the rapid advancement of technology, one of the main problems faced in learning Arabic is the lack of variety in teaching approaches. Students often feel bored because the approach used is not interesting and interactive enough. Monotonous teaching approaches and not keeping up with technological developments make students lose interest in learning. This condition requires a more innovative approach and is relevant to the needs of the generation growing in this digital era (Fitria, 2023).

This phenomenon shows that the teaching of Arabic needs to be adapted to the development of available technology. Thus, it is crucial to examine approaches that can overcome these problems, one of which is the TPACK (Technological, Pedagogical, and Content Knowledge) approach which integrates three essential elements in learning: mastery of lesson content (teaching materials), teaching methods (teaching strategies), and technology (tools or media used). This approach provides opportunities for Arabic language teaching to become more engaging and effective (Hasibuan, Haerullah, & Machmudah, 2023).

The application of the TPACK approach is also very relevant to be studied using the perspective of Bloom's Taxonomy on students, which divides student competencies into three main domains: cognitive (intellectual), affective (emotional), and psychomotor (motor ability). In learning Arabic, TPACK plays a role in supporting the level of cognitive, affective, and psychomotor abilities by utilizing technology in the learning process. According to Bloom's theory of Taxonomy, the cognitive domain consists of six levels: remembering (C1), understanding (C2), applying (C3), analyzing (C4), evaluating (C5), and creating (C6). The affective domain consists of five levels: receiving (A1), responding (A2), appreciating (A3), organizing (A4), and characterizing according to value (A5). Meanwhile, the psychomotor domain includes five levels: imitation (P1), manipulation (P2), precision (P3), articulation (P4), and naturalization (P5) (Nafiati, 2021).

In line with these challenges, the TPACK approach is a very relevant solution. This approach allows educators to design a more interactive and efficient learning process, combining content knowledge, pedagogy, and technology. TPACK provides opportunities for teachers to adapt teaching materials in a more engaging and interactive way, as well as use technology to

support learning in various domains in the Bloom Taxonomy (Hardanti, Murtinugraha, & Arthur, 2024).

For example, by using technology, teachers can help students remember Arabic vocabulary through interactive apps, understand the meaning and structure of sentences with the help of online learning platforms, apply knowledge in practical speaking or writing tasks, and analyze texts in Arabic using digital aids. By doing so, TPACK can enrich students's learning experiences, improve their understanding, and encourage them to think more critically and creatively (Ritonga, 2023).

Previous studies have shown that the TPACK approach has a positive impact on Arabic language learning. For example, a study by Renni Hasibuan et al. shows that the integration of TPACK in Arabic language teaching can increase student enthusiasm and engagement. In the study, the use of technological tools such as the YouTube application and other digital applications allows teachers to deliver material in a more innovative and collaborative manner (Hasibuan, Haerullah, & Machmudah, 2023). Another research by Rifda Haniefa & Mohamad Samsudin revealed that the implementation of TPACK not only develops students's interests but also deepens their understanding of the subject matter being taught, so that their learning outcomes increase significantly (Haniefa & Samsudin, 2023).

Hani'atul Khoiroh also found that the application of TPACK in the teaching and learning process of *maharah qira'ah* for PBA students at Unkafa Gresik resulted in a significant improvement in students's reading skills, with an average score that increased from 59.43 to 83.43 (Khoiroh, 2022). Research by Prayoga Saputra et al. at MAN 2 Payakumbuh also indicates that TPACK encourages the creativity of teachers and students and overcomes saturation in learning (Saputra, Ritonga, & Bahruddin, 2023). While research by Laili Mas Ulliyah Hasan et al. emphasizes that TPACK facilitates students's understanding of the material and improves their skills and concentration (Hasan, Naseha, & Hasan, 2024).

This study uses a literature review method by collecting ten references from scientific articles and theses published between 2022 and 2024. This study aims to analyze the cognitive level of students who apply the TPACK approach in learning Arabic based on Bloom's Taxonomy. With this study, it is hoped that it can make an important contribution to teachers to develop teaching and learning strategies that are more interactive and in accordance with the basic needs of students in this digital age.

RESEARCH METHOD

The method applied in this study is a literature study. Literature review in English is a literature-based search and research process that involves reading various sources such as literature, scientific articles, and other publications that are relevant to the topic being researched. The goal is to produce papers that focus on other specific issues or subjects (Marzali, 2016).

In this process, a writer will trace past works that discuss similar issues or topics.

both for the purpose of scientific papers such as theses, theses, and dissertations. This search includes various references related to the focus of the research, the context of the community or region that is the focus of the study, theories that have been used previously, and research methods relevant to the study (Marzali, 2016).

Literature review is carried out with the understanding that knowledge continues to develop and that topics, communities, and research areas have been studied before by others. From the results of this previous study, researchers can take lessons and continue research based on what has been achieved previously. Thus, the researcher realizes that he is not the first party to explore a particular topic, society, or region (Marzali, 2016).

This study adopts the Miles and Huberman analysis technique, which is considered appropriate to describe the conclusions of the study in detail because of its systematic and defined stages (Huberman & Miles, 1994). This model includes several stages, namely: first, data collection related to the application of the TPACK approach in Arabic language learning. Second, the grouping of data based on the focus of the research into two main subthemes: the application of the TPACK approach in learning Arabic and the analysis of the cognitive level of Bloom's Taxonomy in the application of the approach. Third, the presentation of data relevant to the research problem. Fourth, draw conclusions descriptively based on the results of the analysis. By following these stages, the research centered on the analysis of the cognitive level of Bloom's Taxonomy on the application of the TPACK approach in Arabic language learning.

The data collection process carried out by the researcher includes searching for scientific articles and theses from national journals published between 2022 and 2024. The literature study in the scientific article and thesis focuses on the TPACK approach in learning Arabic. This research produces qualitative data that tends to be narrative. The flow of the research process can be seen in Picture 5.



Source: Journ

nce Education

Article selection is done through Publish or Perish by using the search keyword "TPACK Approach". In the preparation of this study, the researcher applied the Systematic Literature Review (SLR) method in accordance with the Preferred Reporting Items for Systematic Review and Meta Analysis (PRISMA) guidelines (Zikriana & Marnita, 2023). After that, researchers searched for scientific articles that have a similar focus, namely the TPACK approach in learning Arabic. The selected articles are then presented in a table, and the discussion is briefly explained in the form of a narrative. The data included in the table includes the author's name, year, title, research method, and conclusion of each selected article.

RESULTS AND DISCUSSION

1. Application of the TPACK Approach in Arabic Language Learning

The results of the analysis that have been selected by the researcher contain ten articles that are relevant to the search keyword, namely the TPACK approach. In general, an overview of the research can be found in Table 1.

Table 1. Overview of Research with TPACK Approach

Author's Name, Year	Title	Research Methods	Conclusion
Renni Hasibuan, Ira Safira Haerullah, and Umi Machmudah , 2023	TPACK in Arabic Language Learning (Implement ation and Effectivenes s Study)	The method used is a descriptive qualitative method with data collection techniques using literature review and observation through articles, books, conferences, and symposiums. The data obtained was analyzed using interpretation techniques.	The conclusion of the study shows that the application of TPACK in Arabic language learning, through the use of various media such as Plotagon Story, Learning.alj azeera.net, PowerPoint , and YouTube, has succeeded in improving students's understanding of listening, speaking, and reading skills. All

			students showed a significant increase in grades, affirming the importance of TPACK in achieving learning
Hani'atul Khoiroh, 2022	Implement ation of the Technologic al Pedagogical and Content Knowledge (TPACK) Model in Maharah Qira'ah Learning (Reading Skills)	The method used was Pre Experimental Designs with a student population of the 2nd semester of the Arabic Language Education Study Program Unkafa Gresik and a sample of 16 students. This study uses two variables, namely the Technological Pedagogical and Content Knowledge (TPACK) Model as the X variable and reading skills as the Y variable. The design used is One Group Pre-Test and Post-Test with data collection techniques in the form of observation,	goals. The conclusion of the study shows that the Technologic al Pedagogical and Content Knowledge (TPACK) model is effectively implemente d in learning maharah qira'ah for PBA students in the 2nd semester of Unkafa Gresik, with a significant improveme nt in reading skills, where the average score increased from 59.43 (sufficient category) to

		tests, questionnaires, and documentation.	83.43 (very good category).
Prayoga Saputra, Apri Wardana Ritonga, and Uril Bahruddin, 2023	Technologic al Pedagogical Content Knowledge (TPACK) Approach in Arabic Language Learning at MAN 2 Payakumbu h	The method used is a qualitative approach with case study techniques, which aims to obtain a comprehensive study of students's Arabic language mastery through learning creativity. Data was collected through interviews with teachers, observation of the learning process, and documentation.	The conclusion of this study is that the implementa tion of Technologic al Pedagogical Content Knowledge (TPACK) in learning Arabic at MAN 2 Payakumbu h can encourage the creativity of teachers and students, as well as overcome the learning problems faced, such as boredom and boredom among students.
Yondri Ahmadi, Titi Fitri, and Prayoga Saputra, 2024	TPACK Approach to Improving HOTS in Arabic Language Learning: Strategies and Challenges	The method used is a qualitative approach with case studies, which aims to provide an indepth understanding of how students	The conclusion of this study shows that although the Arabic language learning process has followed the

		master the Arabic language. Researchers collected data through interviews, observations, and documentation, and analyzed the data using the Miles and Huberman model to explain the findings descriptively.	convention al education model, there are challenges in developing students's high-level thinking skills (HOTS). The Technologic al Pedagogical Content Knowledge (TPACK) approach is proposed as a solution to improve the quality of learning and enable the developmen
Laili Mas Ulliyah Hasan, Siti Durotun Naseha, and Izzah Nur Hudzriyah Hasan, 2024	Study on the Implement ation and Effectivenes s of TPACK in Maharah Qiro'ah Learning	The method used is a qualitative approach that includes a literature review, semistructured interviews with Arabic teachers, and evaluation of learning materials to assess the integration of TPACK in the teaching of Maharah	t of HOTS. The conclusion of this study illustrates the importance of TPACK integration in Maharah Qiro'ah learning, especially through PowerPoint learning media in the Darussalam

Qiro'ah. The data were Campus analyzed Preparation qualitatively Class. The with a thematic approach and data highlight triangulation to validate the implementa findings. TPACK is an innovative step that has been proven to facilitate students's understanding of the subject matter taught and increase students's skill capacity and concentrati on. Nonetheles S. S. challenges such as lack of technologic al infrastructure and technologic al skills among teachers need to be addressed to achieve optimal		
Optimu	data were analyzed qualitatively with a thematic approach and data triangulation to validate the	Campus Preparation Class. The findings of this study highlight that the implementa tion of TPACK is an innovative step that has been proven to facilitate students's understandi ng of the subject matter taught and increase students's skill capacity and concentrati on. Nonetheles s, challenges such as lack of technologic al infrastructu re and technologic al skills among teachers need to be addressed to achieve

			implementa tion.
Fira Herlina, 2024	Developme nt of TPACK- Based Arabic Learning E- Module for Students of Madrasah Ibtidaiyah Muhamma diyah 14 Talang Ulu	The method used is research and development (R&D) which follows a cycle that consists of studying product-related results, developing products, testing in the field, and reviewing products until they meet specific goals.	The conclusion of this study is that the TPACK-based Arabic language learning electronic module developed for second grade students in MI is declared feasible to use without the need for further revision, with positive assessment s from material experts and media experts. This electronic module is expected to facilitate students's independen t learning in learning Arabic language materials, help improve student

			undomtandi
			understandi ng, and
			make the
			learning
			process
			more
			interesting
			and
			interactive.
Laili Mas	Diving into	The method	The
Ulliyah	Curriculum	used is a	conclusion
Hasan,	Integration	qualitative	of this study
Muhammad	for the	approach with a	is that the
Tareh Aziz,	Implement	case study	integration
and	ation of	method. Data	of TPACK
Muhammad	TPACK in	were collected	by teachers
Rido'i, 2024	Arabic	through	in Arabic
	Language	classroom	language
	Learning	observations,	teaching
		interviews with	has succeeded
		Arabic teachers,	in
		and analysis of curriculum	increasing
		documents to	student
		evaluate the	engagement
		implementation	through
		of TPACK in the	technologie
		Arabic teaching	s such as
		and learning	online
		process.	applications
		r	. Teachers
			play an
			important
			role in
			connecting
			technology
			with the
			curriculum,
			but the need
			for
			continuous
			training for
			them
			cannot be
			ignored.
			Analysis of
			curriculum

			documents
			shows the
			importance
			of
			technology
			in achieving
			student
			competence
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			. Therefore,
			it is
			important
			to continue
			to provide
			continuous
			training for
			teachers, as
			the
			integration
			of TPACK
			brings
			essential
			benefits in
			the Arabic
			teaching
			C
			and
			learning
			process.
Laili Mas	Study on	The method	The
Ulliyah	the	used is a	conclusion
Hasan, 2023	Implement	qualitative	of this study
1145411, 2023	-		
	ation and	approach with a	highlights
	Effectivenes	type of literature	the
	s of TPACK	research, which	importance
	in <i>Maharah</i>	involves in-	of TPACK
	Kalam	depth literature	integration
		analysis and	in the
	Learning		
		observational	teaching of
		studies of	Maharah
		relevant	Kalam
		researches. The	Arabic. The
		goal is to	right
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		understand the	integration
		application and	of
		effectiveness of	technology
		TPACK in	can
		improving	optimize
		Arabic language	the quality

		skills, especially in the aspect of Maharah Kalam.	of teaching and offer more interesting and relevant learning alternatives for students in the digital era. This research shows that TPACK is not only a concept, but an effective tool in improving the quality and relevance of Arabic language
Rifda Haniefa and Mohamad Samsudin, 2023	Application of Technologic al Pedagogical and Content Knowledge (TPACK) in Teaching Arabic Language Skills	The method used is qualitative research through literature study, which involves collecting literature sources, data classification, data processing, citing references, and interpretation to draw conclusions.	learning. The conclusion of this study is that the use of technology in Arabic language teaching, which aims to master the four Arabic language skills (maharah al-istima', maharah al-kalam, maharah al-qira'ah,

			and
			maharah
			al-kitabah),
			•
			is very
			helpful in
			achieving
			the desired
			competenci
			es. This
			requires
			educators to
			have the
			ability to
			integrate
			intellectual
			abilities,
			namely
			content
			knowledge,
			pedagogy,
			2 0 00
			and
			technologic
			al insights
			in learning,
			known as
			TPACK.
Nurul Maula	Implement	The method	The
Miftahurroh	ation of	used is a	conclusion
mah, 2023	TPACK-	qualitative	of this study
111411, 2025	Based	research that	is that the
	Arabic	aims to describe	planning of
	Language	the application	the TPACK-
	Learning at	of TPACK-based	based
	MTsN 4	Arabic language	Arabic
	•	learning in	
	Bojonegoro		teaching
		MTsN 4	and
		Bojonegoro.	learning
		This research is	process in
		a case study	MTsN 4
		with data	•
			Bojonegoro
		obtained	has
		through	included
		interviews,	the use of
		observations,	technology,
		The state of the s	
		and	pedagogical
		documentation	knowledge,
		to explore	and
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information adequate content from teachers and students. through platforms such as Alef for Education, Microsoft PowerPoint , and Google Forms. its application, teachers use the lecture method with PowerPoint and WhatsApp media for the division of tasks. As result, TPACKbased learning is effective, although there are obstacles in the form of limitations in the use of several platforms that have been planned, so that not all technologie can function optimally and affect the effectivenes

s of learning
implementa
tion.

1. Cognitive Level Analysis of Bloom's Taxonomy on the Implementation of the TPACK Approach in Arabic Language Learning

Based on Table 1, there are ten scientific articles and supporting theses related to the TPACK approach and its use in learning Arabic. Furthermore, Bloom's Taxonomy analysis was carried out on the conclusions of each scientific article and thesis. The results of the analysis show that the utilization of the TPACK approach focuses on the development of cognitive abilities covered in the Bloom Taxonomy as follows:

2.1 Cognitive C1 – Remembering (Knowledge)

Research by Fira Herlina (2024) entitled "Development of TPACK-Based Arabic Learning E-Module for Students of Madrasah Ibtidaiyah Muhammadiyah 14 Talang Ulu" shows that TPACK-based e-modules are very effective in helping students's independent learning. This module is designed to be interactive, engaging, and supportive for students to learn and remember material independently outside of the classroom. The use of this e-module can attract students's attention and increase their active participation in the learning process (Herlina, 2024). In the framework of Bloom's Taxonomy, the level achieved is C1 - Remembering (Knowledge), where students are able to learn and remember Arabic language materials.

2.2 Cognitive C2 – Understanding

Research by Rifda Haniefa and Mohamad Samsudin (2023) entitled "The Application of Technological Pedagogical and Content Knowledge (TPACK) in Teaching Arabic Language Skills" shows that the application of TPACK helps students understand four Arabic language skills in an integrated manner, namely maharah al-istima' (listening), maharah al-kalam (speaking), maharah al-qira'ah (reading), and maharah al-kitabah (writing). Students are able to understand and master these four skills through technology that supports their teaching and learning (Haniefa & Samsudin, 2023). Based on Bloom's Taxonomy, the level achieved is C2 - Understanding, where students can understand and master these skills through a systematic and technology-based approach.

Research conducted by Laili Mas Ulliyah Hasan, Siti Durotun Naseha, and Izzah Nur Hudzriyah Hasan (2024) entitled "Study on the Implementation and Effectiveness of TPACK in *Maharah Qiro'ah* Learning" shows that the implementation of TPACK is proven to be able to increase students's concentration and their understanding of learning materials, especially with the

use of PowerPoint media. This media helps students visualize the material more clearly, so they can follow the learning more focused and effective (Hasan, Naseha, & Hasan, 2024). Based on Bloom's Taxonomy, the level achieved is C2 - Understanding, where students can understand the learning material better because technology helps to delay information and make it more accessible and understandable.

2.3 Cognitive C3 – Applying

Research conducted by Renni Hasibuan, Ira Safira Haerullah, and Umi Machmudah (2023) entitled "TPACK in Arabic Language Learning (Implementation and Effectiveness Study)" shows that the application of the TPACK approach using media such as Plotagon Story, Learning.aljazeera.net, PowerPoint, and YouTube successfully improve students's listening, speaking, and reading skills. These media help students interact with the learning material directly, allowing them to understand and apply knowledge in a more effective way (Hasibuan, Haerullah, & Machmudah, 2023). In this case, based on Bloom's Taxonomy, the level achieved is C3 - Applying, that is, students are able to use technology-based learning media to improve their skills practically. This shows that they are able to utilize the knowledge they have learned to solve challenges in the process of teaching and learning Arabic.

Research conducted by Prayoga Saputra, Apri Wardana Ritonga, and Uril Bahruddin (2023) entitled "Technological Pedagogical Content Knowledge (TPACK) Approach in Arabic Language Learning at MAN 2 Payakumbuh" shows that the application of TPACK has succeeded in increasing the creativity of teachers and students in the Arabic language teaching and learning process. Teachers can find new methods to make learning more engaging, while students become more motivated to actively participate. This study shows that this approach helps overcome learning boredom by providing more varied and innovative experiences (Saputra, Ritonga, & Bahruddin, 2023). Based on Bloom's Taxonomy, the level achieved is C3 - Applying, where students are able to find creative solutions in learning, such as using technology to solve problems in daily learning, which makes the student learning process more dynamic.

Research by Yondri Ahmadi, Titi Fitri, and Prayoga Saputra (2024) entitled "TPACK Approach to Improving HOTS in Arabic Language Learning: Strategies and Challenges" highlights the importance of the TPACK approach to optimize students's Higher Order Thinking Skills (HOTS). This approach allows students to explore and come up with new ideas relevant to the learning material, while also helping them solve more complex problems (Ahmadi, Fitri, & Saputra, 2024). In this case, based on Bloom's Taxonomy, the level achieved is C3 - Applying, where students explore their critical and creative thinking skills to come up with new solutions and ideas in the Arabic learning process.

Research conducted by Laili Mas Ulliyah Hasan, Muhammad Tareh Aziz, and Muhammad Rido'i (2024) entitled "Diving into Curriculum Integration for

the Implementation of TPACK in Arabic Language Learning" shows that teachers who use the TPACK approach have succeeded in increasing student involvement through the integration of technology in the curriculum. Technology, such as online applications, helps students connect with learning materials, making the learning process more engaging (Hasan, Aziz, & Rido'i, 2024). Based on Bloom's Taxonomy, the level achieved is C3 - Applying, where technology is used to connect learning materials with the curriculum to support the achievement of educational goals.

Research by Laili Mas Ulliyah Hasan (2023) entitled "Study on the Implementation and Effectiveness of TPACK in *Maharah Kalam* Learning" shows that TPACK offers a more interesting and relevant learning alternative in the digital era. Technology provides opportunities for students to learn at a more modern pace, which makes them more engaged and motivated to learn (Hasan, 2023). Based on Bloom's Taxonomy, the level achieved is C3 - Applying, where students use the TPACK approach to increase their involvement in the learning process and develop more relevant learning methods.

Research by Nurul Maula Miftahurrohmah (2023) entitled "Implementation of TPACK-Based Arabic Language Learning at MTsN 4 Bojonegoro" shows that the implementation of TPACK using platforms such as Alef for Education, Microsoft PowerPoint, and Google Forms improves the efficiency and quality of learning. Although there are several obstacles in the use of certain technologies, this approach is still able to improve the effectiveness and quality of learning (Miftahurrohmah, 2023). Based on Bloom's Taxonomy, the level achieved is C3 - Applying, where students use available technology to help a more structured and effective learning process.

2.4 Cognitive C4 – Analyzing

Research by Hani'atul Khoiroh (2022) entitled "Implementation of the Technological Pedagogical and Content Knowledge (TPACK) Model in *Maharah Qira'ah* Learning (Reading Skills)" shows that the application of the TPACK approach has succeeded in improving students's reading skills. This study shows that the average score of students increased from the fair category to very good, which reflects their mastery in analyzing texts and understanding the content of the texts better (Khoiroh, 2022). In the framework of Bloom's Taxonomy, the level achieved is C4 - Analyzing, where students are able to analyze the content of the text read, distinguish the main and supporting ideas, and provide conclusions on the material they are learning.

Based on the results of the above analysis, it was found that the research by Fira Herlina (2024) entitled "Development of TPACK-Based Arabic Language Learning E-Module for Students of Madrasah Ibtidaiyah Muhammadiyah 14 Talang Ulu" is not only at the cognitive level of C1 – Remembering, but also at the cognitive level of C2 – Understanding, where students can understand the material through the use ofe-modules

independently which make the learning process more interesting and interactive. Similarly, the research by Renni Hasibuan, Ira Safira Haerullah, and Umi Machmudah (2023) entitled "TPACK in Arabic Language Learning (Implementation and Effectiveness Study)" is not only at the cognitive level of C3 – Applying, but also at the cognitive level of C2 – Understanding, where students can understand the material in a more effective way.

It can be concluded that these studies develop students's cognitive domains by utilizing the TPACK approach in learning Arabic. These studies show achievement at four levels of cognitive domains in Bloom's Taxonomy, namely remembering (C1), understanding (C2), applying (C3), and analyzing (C4). However, it should be noted that in the application of this TPACK approach, the affective and psychomotor domains do not receive special attention. After analysis, there are no elements that focus on the development of the affective or psychomotor domains in the use of this TPACK approach. The main focus of this study lies in the cognitive realm only with these four levels, especially for students at the *Ibtidaiyah*, *Tsanawiyah*, *Aliyah*, and Strata 1 levels.

Furthermore, although the cognitive domain has developed well, the higher levels of Bloom's Taxonomy, namely C5 - Evaluating and C6 - Creating, were not found in these studies. The researches focused more on students from elementary to secondary levels, as well as undergraduate students, with the aim of developing basic cognitive skills that include knowledge, understanding, application, and analysis. Therefore, the C5 and C6 levels, which are relevant to the level of further education, were not obtained in this study.

CONCLUSION

The application of the Technological, Pedagogical, and Content Knowledge (TPACK) approach in learning Arabic has made a significant contribution to the development of students's cognitive domains, as analyzed through Bloom's Taxonomy. Research shows that this approach supports the achievement of various cognitive levels, such as remembering, understanding, applying, and analyzing, through the integration of technology in engaging and interactive learning.

However, the results of the analysis of the reviewed articles revealed that the application of the TPACK approach in Arabic language learning so far has only focused on the development of the cognitive domain. No elements were found specifically directed to develop the affective or psychomotor realm. This shows that the development of these two domains has not been the main concern in the application of TPACK in the context of teaching and learning Arabic.

This study indicates the need for further exploration to integrate the affective and psychomotor domains into the TPACK approach. This aims to create Arabic language learning that is more holistic and in accordance with the needs of students in this digital age.

REFERENCES

- Ahmadi, Yondri, Fitri, Titi, & Saputra, Prayoga. (2024). "TPACK Approach to Improving HOTS in Arabic Language Learning: Strategies and Challenges." Shaut Al-'Arabiyah 12 (2).
- Ahmadi, Yondri, Waluati Triana, Hetti, & Ritonga, Mahyudin. (2024). "TPACK Approach to Improving HOTS in Arabic Language Learning: Strategies and Challenges." Jurnal Shaut Al-'Arabiyah 12 (2).
- Amaliah Nafiati, Dewi. (2021). "Revisi Taksonomi Bloom: Kognitif, Afektif, Dan Psikomotorik." HUMANIKA 21 (2).
- Anderson, Lorraine, & R. Krathwohl, David. (2001). A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives. New York: Longman.
- Aris Dhawati, Dwi Anis, & Hariyatmi. (n.d.). "Kemampuan Technological Knowledge (TK) Calon Guru Biologi FKIP UMS." In Seminar Nasional Pendidikan Biologi Dan Saintek II.
- Bloom, Benjamin. (1956). Taxonomy of Educational Objectives: Cognitive Domain. New York: Longman.
- Fakhriyah, Fina. (2022). TPACK Dalam Pembelajaran IPA. Jawa Tengah: NEM.
- Fatimatur Rusydiyah, Evi. (2019). Teknologi Pembelajaran: Implementasi Pembelajaran Era 4.0. Surabaya: UIN Sunan Ampel.
- Fitria, Nurmala. (2023). "Dampak Penggunaan Teknologi Dalam Pembelajaran Bahasa Arab Menurut Perspektif Psikologi." Al-Tarqiyah 6 (2).
- Haniefa, Rifda, & Samsudin, Mohamad. (2023). "Penerapan Technological Pedagogical And Content Knowledge (TPACK) Dalam Pengajaran Keterampilan Berbahasa Arab." Ta'limi 2 (1).
- Hardanti, Pragita, Eka Murtinugraha, R., & Arthur, Riyan. (2024). "Studi Literatur: Pemanfaatan Pendekatan TPACK (Technological, Pedagogical, And Content Knowledge) Pada Pengembangan E-Modul Pembelajaran." Jurnal Teknologi Pendidikan 1 (3).
- Hasibuan, Renni, Safira Haerullah, Ira, & Machmudah, Umi. (2023). "TPACK Dalam Pembelajaran Bahasa Arab (Studi Implementasi Dan Efektivitas)." Jurnal IMLAH 5 (1).
- Herlina, Fira. (2024). "Pengembangan E-Module Pembelajaran Bahasa Arab Berbasis TPACK Bagi Siswa Madrasah Ibtidaiyah Muhammadiyah 14 Talang Ulu." Al-

- Journal homepage: https://ejournal.iaialmuslimaceh.ac.id/index.php/IMTIYAZ

 Muktamar As-Sanawi Li Al-Lughah Al-'Arabiyyah (MUSLA) 2 (1).
- Khoiroh, Hani'atul. (2022). "Implementasi Model Technological, Pedagogical and Content Knowledge (TPACK) Dalam Pembelajaran Maharah Qira'ah (Keterampilan Membaca)." JALIE 6 (1).
- Lutfiyatin Najwa, Irma. (2022). "Technological Pedagogical Content Knowledge (TPACK) Guru Pada Pembelajaran Tematik Kelas V Di Madrasah Ibtidaiyah Negeri 3 Jembrana." UIN Kiai Haji Achmad Siddiq Jember.
- Marzali, Amri. (2016). "Menulis Kajian Literatur." Jurnal Etnosia 1 (2).
- Maula Miftahurrohmah, Nurul. (2023). "Implementasi Pembelajaran Bahasa Arab Berbasis TPACK Di MTsN 4 Bojonegoro." IAIN Kediri.
- Michael Huberman, A., & B Miles, Matthew. (1994). Data Management and Analysis Methods.
- Ritonga, Syaipuddin. (2023). "Strategi Dalam Mengatasi Tantangan Pembelajaran Bahasa Arab Bagi Guru Di Era Teknologi Modern." Jurnal Hikmah 12 (2).
- Rizqiyah, Nayla. (2021). "Implementasi Technological Pedagogical Content Knowledge Sebagai Modernisasi Di Bidang Pendidikan." Jurnal NIAGAWAN 10 (2).
- R. Krathwohl, David. (2002). A Revision of Bloom's Taxonomy: An Overview, Theory Into Practice. Ohio: College of Education, The Ohio State University.
- R. Krathwohl, David. (1964). Taxonomy of Educational Objectives: The Classification of Educational Goals, Handbook II: Affective Domain. New York: David McKay Company.
- Saputra, Prayoga, Wardana Ritonga, Apri, & Bahruddin, Uril. (2023). "Pendekatan Technological Pedagogical Content Knowladge (TPACK) Dalam Pembelajaran Bahasa Arab Di MAN 2 Payakumbuh." Shibghoh 2 (2).
- Simpson. (1966). The Classification of Educational Objectives in the Psychomotor Domain. Illinois: University Press.
- Suyamto, Joko. (2020). "Analisis Kemampuan TPACK (Technological, Pedagogical, and Content Knowledge) Guru Biologi SMA Dalam Menyusun Perangkat Pembelajaran Materi Sistem Peredaran Darah." Jurnal Pendidikan IPA 9 (1).
- Ulliyah Hasan, Laili Mas. (2023). "Studi Implementasi Dan Efektivitas TPACK Dalam Pembelajaran Maharah Kalam." MUMTAZA: Journal of Arabic Teaching, Linguistic And Literature 3 (1).
- Ulliyah Hasan, Laili Mas, Durotun Naseha, Siti, & Hudzriyah Hasan, Izzah Nur.

- (2024). "Studi Implementasi Dan Efektivitas TPACK Dalam Pembelajaran Maharah Qiro'ah." Jurnal Pendidikan Pascasarjana Universitas Qomaruddin 1 (2).
- Ulliyah Hasan, Laili Mas, Tareh Aziz, Muhammad, & Rido'i, Muhammad. (2024). "Menyelami Integrasi Kurikulum Untuk Penerapan TPACK Dalam Pembelajaran Bahasa Arab." Journal of Practice Learning and Educational Development 4 (3).
- Wibowo, Tri. (2007). Dasar-Dasar Taksonomi: Pengembangan Klasifikasi Dalam Pendidikan. Yogyakarta: Graha Ilmu.
- Winkel. (2007). Psikologi Pengajaran. Jakarta: Gramedia.
- Yaumi, Muhammad. (2013). Pembelajaran Berbasis Teknologi Informasi Dan Komunikasi. Jakarta: Kencana.
- Zikriana, Lissa, & Marnita. (2023). "Pemanfaatan Media Simulasi Phet Dalam Pembelajaran Sains." Jurnal Edukasi Matematika Dan Sains 4 (2).