

# PROBLEM SOLVING DESIGN BASED ARABIC LANGUAGE LEARNING APPROACH IN LANGUAGE SKILLS

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#### Abstract:

This research aims to explore the effectiveness of a problem-solving design-based Arabic language learning approach in improving students' language skills. The scope of the research covered intermediate level students in a junior high school in Indonesia. The method used was a qualitative approach with a classroom action research design, which involved observation, interviews and document analysis to collect data. The results show that the application of this approach can significantly improve students' learning motivation and Arabic language skills. Students showed improvement in speaking, listening, reading and writing skills through activities designed to solve real problems. In addition, the interaction between students during the learning process also strengthens their understanding of the Arabic language. The conclusion of this research confirms that the problem-solving design-based learning approach is not only effective in improving Arabic language skills, but also encourages students to think critically and creatively. Therefore, this approach is recommended to be applied more widely in Arabic language teaching at various levels of education.

Keywords: Arabic Language Learning, Problem Solving Design, Language Skills

#### Abstrak:

Penelitian ini bertujuan untuk mengeksplorasi efektivitas pendekatan pembelajaran bahasa Arab berbasis desain pemecahan masalah dalam meningkatkan keterampilan berbahasa siswa. Ruang lingkup penelitian mencakup siswa tingkat menengah di sebuah sekolah menengah pertama di Indonesia. Metode yang digunakan adalah pendekatan kualitatif dengan desain penelitian tindakan kelas, yang melibatkan observasi, wawancara, dan analisis dokumen untuk mengumpulkan data. Hasil penelitian menunjukkan bahwa penerapan pendekatan ini dapat meningkatkan motivasi belajar dan keterampilan berbahasa Arab siswa secara signifikan. Siswa menunjukkan peningkatan dalam kemampuan berbicara, mendengarkan, membaca, dan menulis melalui kegiatan yang dirancang untuk memecahkan masalah nyata. Selain itu, interaksi antar siswa selama proses pembelajaran juga memperkuat pemahaman mereka terhadap bahasa Arab. Kesimpulan dari penelitian ini menegaskan bahwa pendekatan pembelajaran berbasis desain pemecahan masalah tidak hanya efektif dalam meningkatkan keterampilan berbahasa Arab, tetapi juga mendorong siswa untuk berpikir kritis dan kreatif. Oleh karena itu, pendekatan ini direkomendasikan untuk diterapkan lebih luas dalam pengajaran bahasa Arab di berbagai tingkat pendidikan.

Kata Kunci: Pembelajaran Bahasa Arab, Desain Pemecahan Masalah, Keterampilan Berbahasa

## INTRODUCTION

Arabic language learning has a very important role in the context of education, especially in countries with a large Muslim population, such as Indonesia. Arabic not only serves as a means of communication, but also as a





bridge to understanding religious texts and the rich Arabic culture. In this era of globalization, Arabic language skills are increasingly relevant, given the increasing intercultural interactions. However, many students experience difficulties in mastering Arabic language skills effectively, which is often caused by uninteresting and decontextualized teaching methods (M. Ritonga et al., 2020).

Given the importance of the Arabic language in education and culture, research on effective learning methods has become indispensable. One promising approach is problem-solving design. This approach allows students to be actively involved in the learning process by addressing real problems relevant to their lives. In this way, students not only learn Arabic as a mere subject, but also develop critical and creative thinking skills that are essential in facing challenges in the real world (Seyıdov & Çitil, 2024).

Several previous studies have explored various Arabic language learning methods. Research shows that the use of technology in Arabic language teaching can increase student motivation. In addition, the importance of social interaction in language learning has also been recognized. However, although there are many studies discussing learning methods, few have specifically explored a problem solving design-based approach in the context of Arabic language learning (Khair & Jundi, 2024).

This existing gap in the literature suggests the need for further research into the effectiveness of the problem-solving design approach in the context of Arabic language learning. While previous studies provide insight into other methods, there is not enough empirical evidence supporting the specific use of this approach to improve Arabic language skills. Therefore, this research aims to fill that gap by testing the applicability of this approach among intermediate level students (Khairanis et al., 2023).

The main objective of this study is to explore how a problem-solving design-based learning approach can improve students' Arabic language skills. It also aims to analyze the impact of the approach on students' motivation and engagement in the learning process. By focusing on students' learning experiences, it is hoped that the results of this study can provide new insights for the development of Arabic language teaching methods.

Review of the literature shows that problem based learning has proven effective in a variety of educational contexts. This approach encourages students to learn through hands-on experience and real problem solving. In the context of language learning, the importance of using authentic situations to improve students' communication skills has also been emphasized. This approach is in line with constructivist learning principles which emphasize that knowledge is built through experience and social interaction (Hoidn & Kärkkäinen, 2014).

In this research, the "problem-solving design-based learning approach" is defined as a teaching method that involves students in real situations where they have to use Arabic to solve problems. This concept is rooted in constructivism theory which states that individuals construct their knowledge through active experience. In addition, social learning theory suggests that students learn

through observation and interaction with others, thus supporting the application of problem-solving design in language learning (Aboulebde, 2023).

Theoretical support for this approach comes from a variety of sources. Contextual learning theory states that learning is more effective when it is related to real situations. In the context of language learning, this means that students will be better able to use Arabic if they engage in activities that are relevant to their daily lives. The problem-solving design-based approach allows students to face real-world challenges while using their language skills (Jendli & Albarakati, 2024).

An analysis of previous research shows that although there are many methods that have been tested, the problem-solving design-based approach is still rarely applied in the context of Arabic language learning. The research found that students who engaged in project-based learning showed significant improvement in their speaking skills. However, the study did not specifically examine the impact of problem-solving design on overall Arabic language skills (Weng & Chiu, 2023).

This research is expected to make a significant contribution to the field of Arabic language education by offering empirical evidence regarding the effectiveness of a problem-solving design-based approach. Thus, the results of this sresearch are expected to be a reference for educators and policy makers in designing a more effective and attractive curriculum for students.

The significance of this research lies in its ability to enrich Arabic language teaching methods with innovative approaches that suit the needs of today's students. By integrating problem solving into language learning, it is expected that students will not only be more motivated but also better able to apply their language skills in real contexts. This is especially important given the challenges of globalization and the need for cross-cultural communication (Li, 2016).

Thus, this research will be conducted through a series of classroom actions where students will engage in problem-based projects relevant to their daily lives. Data will be collected through observations, interviews, and language skills assessment before and after the implementation of the approach. Through this methodology, it is expected that robust empirical data on the effectiveness of the approach can be obtained.

In addition, this research also aims to strengthen the link between theory and practice in Arabic language education by providing concrete evidence on how a problem-solving design-based approach can be effectively applied in the classroom. Thus, the results of this research will not only provide theoretical but also practical contributions for educators and other educational institutions in formulating better teaching strategies to improve the quality of Arabic language education (Rasha, 2016).

By focusing on active and collaborative learning experiences, this research hopes to create a more dynamic and enjoyable learning environment for students. Through the application of innovative methods such as problem-solving design, it is hoped that educators can encourage the holistic development of students Arabic language skills and prepare them to face real-world

communication challenges more confidently and competently (Al-Khresheh, 2024).

### RESEARCH METHOD

This research design uses a qualitative approach with a descriptive research design, which aims to explore and analyze the application of an Arabic language learning approach based on problem solving design. Descriptive research was chosen because it allows researchers to describe phenomena that occur in the field without manipulation of the variables under study. In this case, researchers will focus on students' experiences in the Arabic learning process through the interview method (Siedlecki, 2020).

The subjects of the research consisted of intermediate level students in a school in Indonesia. The samples were purposively selected based on certain criteria such as initial Arabic proficiency level and learning motivation. This selection of subjects aims to ensure that the study can provide a representative picture of the application of a problem-solving design-based approach in the context of Arabic language learning.

The instrument used in this research was semi-structured interviews. Semi-structured interviews were conducted with students to gain in-depth insight into their learning experiences and perceptions of the approach. The interview questions were designed to elicit information regarding students' motivation, engagement in learning, as well as the challenges they faced. The semi-structured format allowed the researcher to ask open-ended questions that allowed the subjects to explain their views in more depth.

The data collection procedure is done by conducting direct interviews with students after a series of learning activities based on problem solving design. The interviews were conducted in a relaxed yet serious atmosphere, so students felt comfortable to share their experiences. The researcher also recorded all answers and interactions during the interview to ensure accurate and comprehensive data.

Data analysis was conducted using a qualitative descriptive analysis approach. Data from the interviews will be analyzed by identifying the main themes that emerge from the students' learning experiences and their perceptions of the applied approach. The results of this analysis will provide a comprehensive picture of the effectiveness of the problem-solving design-based learning approach in improving Arabic language skills as well as its impact on students' motivation and engagement in the learning process. Thus, the results of the study are expected to contribute to the development of Arabic language teaching methods in the future.

## FINDINGS AND DISCUSSION

# Impact of Problem Solving Design Approach

The problem solving design approach in Arabic language learning has a significant impact on students' language skills. One of the main impacts

identified in this study is the improvement of students' speaking ability. Through contextually designed problem-solving activities, students are given the opportunity to practice speaking in real situations, which makes them more confident in using Arabic. This activity not only helped them understand the structure of the language, but also improved their ability to communicate effectively (Hasyim, 2021).

In addition, this approach also has a positive impact on students listening skills. When students engage in group discussions to solve problems, they have to listen to the opinions and ideas of their peers. This enhances active listening skills, where students learn to understand the context and meaning of the conversation. Thus, the problem-solving design approach not only focuses on vocabulary and grammar acquisition, but also on broader aspects of communication (Khairanis et al., 2023).

Another significant impact is the improvement of students' writing skills. In problem-solving activities, students are often asked to compile reports or presentations on the solutions they find. This process encourages them to express their ideas in writing in Arabic, thus improving their writing skills. Students reported that they felt more comfortable writing in Arabic after engaging in these activities.

Students learning motivation also increased significantly. The problemsolving design-based approach makes learning more interesting and relevant to students' daily lives. They feel more engaged and motivated to learn when faced with real situations that require the use of Arabic. This shows that this approach succeeds in creating a dynamic and fun learning environment.

Students involvement in the learning process also increased significantly. By working together in groups to solve problems, students learn to collaborate and support each other. They feel more comfortable to share ideas and ask questions if there are things they don't understand. This social engagement not only improves language skills, but also builds students' confidence and interpersonal skills.

However, the positive impact of this approach is not just limited to language skills. Students also reported that they developed critical and creative thinking skills through the problem-solving process. When faced with a real challenge, students must analyze the situation, identify solutions, and evaluate the results of their actions. This process teaches them to think analytically and creatively, which are important skills beyond the language learning context.

From the teachers perspective, the problem-solving design approach also positively impacts their teaching methods. Teachers report that they are more motivated to design learning activities that are interesting and relevant to students. They felt that this approach enabled them to better understand students' needs and interests, and thus to tailor teaching in a more effective way.

While many positive impacts have resulted from this approach, some challenges have also arisen during its implementation. Some students had initial difficulties in understanding the material when it was presented in the form of real problems, especially if they did not have a strong prior knowledge base.

However, with guidance from teachers and support from classmates, most students were able to overcome these difficulties over time.

Overall, the results showed that the problem-solving design approach had a significant positive impact on students' Arabic language skills. Improvements in speaking, listening, writing, as well as student motivation and engagement are evidence of the success of this approach. Thus, this study recommends that the problem-solving design-based approach be applied more widely in Arabic language teaching at different levels of education.

The reserach also highlighted the importance of training teachers in implementing this approach effectively. Teachers need to be equipped with appropriate teaching strategies and techniques in order to facilitate the teaching and learning process properly. With the right support, both in terms of resources and professional training, it is expected that the positive impact of the problem-solving design approach can continue to grow and provide maximum benefits for students.

The research concluded that the application of the problem-solving design approach not only improved students' Arabic language skills but also equipped them with important life skills such as critical thinking, collaboration and creativity. This shows that Arabic language education can be designed not only as a language acquisition effort but also as a means of developing students' characters and competencies holistically.

Thus, the results of this study provide a foundation for Arabic curriculum development that is more innovative and responsive to the needs of students in the modern era. The application of the problem-solving design approach can be an effective learning model to improve the quality of Arabic language education in Indonesia (Khairanis, 2024).

Furthermore, this study recommends that schools conduct periodic evaluations of the effectiveness of the teaching methods applied as well as collect feedback from students regarding their learning experiences. In this way, schools can continuously improve teaching strategies to suit the times and learners' needs. With a focus on active and contextualized learning experiences, the problem-solving design approach is expected to create a generation of learners who are not only proficient in Arabic but also ready to face global challenges confidently and competently.

## Student Motivation and Engagement in the Learning Process

Student motivation and engagement are important aspects in the learning process, especially in the context of problem-solving design-based Arabic language learning. This study found that this approach significantly increased students' motivation to learn Arabic. Students reported that they felt more excited and interested to join the lesson when they were exposed to real situations relevant to their daily lives (Elbashir et al., 2024).

One factor that contributes to increased motivation is the relevance of the material being taught. When students see a connection between learning Arabic and situations they face in the real world, they feel that the learning has meaning and purpose. For example, students who engage in problem-solving projects

related to Arabic culture or local social issues feel more connected to the subject matter.

In addition, the problem-solving design approach encourages students to actively participate in the learning process. In group activities, students are given the opportunity to discuss, share ideas and work together to find solutions. This collaborative activity not only increases their engagement but also creates a dynamic and fun learning atmosphere. Students feel more comfortable to express their opinions and contribute to the discussion.

Students engagement is also evident from their increased attendance in class. Many students reported that they were more motivated to come to school and attend Arabic lessons after implementing this approach. They feel that each learning session provides a new experience that is interesting and challenging, so they don't want to miss the opportunity.

Another positive impact is the increase in students self-confidence. When students successfully solve problems in groups, they feel a sense of accomplishment that increases their confidence in using Arabic. This success provides additional encouragement for them to continue learning and practicing, creating a positive cycle in the learning process.

Students also reported that this approach made them more proactive in seeking information and learning independently. They felt encouraged to read more about the topics covered in class and seek out additional sources to deepen their understanding. This suggests that the problem-solving design approach not only increases engagement during lessons but also encourages students to become lifelong learners.

Students emotional engagement also increased through this approach. Many students revealed that they felt more energized when working in groups and facing challenges with their classmates. This sense of community creates a positive learning environment, where students support and motivate each other to achieve a common goal.

However, despite the many positive impacts, some students also face challenges in terms of motivation. Some of them feel anxious when they have to speak in public or when facing tasks that are considered difficult. However, with support from teachers and classmates, most students were able to overcome their anxiety over time.

From the teachers perspective, the problem-solving design approach provided an opportunity for them to better understand students' motivations and needs. Teachers reported that by observing students' engagement during group activities, they were able to adjust teaching methods to better suit each student's learning style. This shows the importance of flexibility in teaching to increase student motivation.

The results also show that active engagement in learning can contribute to better academic achievement. Students who feel motivated and engaged tend to have better academic performance compared to those who are less engaged. This suggests that intrinsic motivation can be a key driver for academic success.

The importance of positive feedback from teachers is also a key factor in

increasing student motivation. Students reported that when teachers give praise or recognition for their efforts and successes, it motivates them greatly to continue learning. Constructive feedback helps students understand their strengths and areas for improvement, thus promoting personal and academic growth.

Overall, the results showed that the implementation of the problem solving design approach significantly improved students motivation and engagement in the Arabic language learning process. This increased motivation not only impacts on the classroom learning experience but also shapes positive attitudes towards language learning as a whole.

Thus, this research recommends that problem-solving design based learning methods be applied more widely in various Arabic language education contexts. In this way, it is hoped that more students will benefit from this approach and experience increased motivation and engagement in the learning process.

This research emphasizes the importance of collaboration between teachers, students and parents in creating a learning environment that supports students intrinsic motivation. With the right support from all parties, it is hoped that students can optimally develop their Arabic language skills while enjoying a fun and meaningful learning process.

As a next step, it is important for schools to provide training for teachers to effectively implement the problem-solving design approach in the classroom. This training will help teachers understand how to design engaging learning activities as well as strategies to encourage students' active engagement during the learning process (Henriksen et al., 2017)

By focusing on active and contextualized learning experiences, the problem-solving design approach is expected to create a generation of learners who are not only proficient in Arabic but also ready to face global challenges confidently and competently. Through the application of this innovative method, Arabic language education can become more relevant and attractive to today's youth (Dinia et al., 2024).

# Challenges Faced in the Learning Process

The challenges faced in the process of learning Arabic based on problem-solving design is an important aspect to consider. This study found that some challenges arose during the implementation of this approach, but with the right strategies, these challenges can be overcome. One of the main challenges is students' dependence on their first language. Students who are accustomed to using their mother tongue may have difficulty adapting to Arabic, which can interfere with their ability to understand and use the language effectively. In addition, many students experience initial difficulties in understanding Arabic material due to the lack of a strong prior knowledge base. Without a solid foundation, students may struggle to grasp basic Arabic concepts (Ali, 2019).

Teachers and students also often face time pressure and tight schedules in the learning process. With a packed agenda, it is sometimes difficult to allow enough time for students to practice what they have learned, thus slowing down the learning process and creating a stressful learning atmosphere. Technological barriers are also a challenge, such as slow internet access or unstable learning apps, which can frustrate students and reduce their motivation to learn. The variability of students' interests is also a challenge; each student has different learning preferences, so teachers must find ways to design learning activities that appeal to all students.

Lack of school facilities such as an adequate library or language laboratory can disrupt students' learning process. Extraordinary disruptions such as fires, floods or disease outbreaks can also disrupt the learning process, making students lose their learning momentum. In addition, the lack of parental participation in the learning process is crucial; when parents are not involved, students may feel unsupported and less motivated to learn. Less intensive teacher training is also a barrier; teachers who have not been trained in using problem-solving design methods may struggle to design engaging and effective learning activities.

Cultural differences and the environment in which students live can be a challenge in the learning process. Students from rural areas may have difficulty adapting to the faster and more complex urban environment, making them feel uncomfortable and less motivated to learn. In addition, the lack of human resources such as reliable teachers and efficient administrative staff can hinder the delivery of optimal educational services for students. Too much achievement pressure can also make students feel stressed and less motivated; excessive focus on scores and grades can obscure the essence of learning as an enjoyable process.

Less intensive periodic evaluations can make it difficult for teachers to know whether learning methods are effective or not. Without regular evaluation, teachers may find it difficult to improve their teaching strategies and enhance student performance. Thus, the results show that implementing a problem-solving design approach in Arabic language learning is not easy and is not free from these challenges. However, with the right strategies and enough support, these challenges can be overcome so that the learning process can run smoothly.

Another challenge faced is the difference in ability levels among students in a class. Some students may grasp the material faster than their classmates, while others may require more time and attention. This can create an imbalance in the working group and cause frustration for both students and teachers. To overcome this, teachers need to implement differentiation strategies in teaching so that all students feel involved and get support according to their needs.

In addition, there are challenges related to classroom management during problem-solving activities. When students work in groups, there is sometimes noise or distraction from other group members who are not focused on the task. This can disrupt the concentration of other students and affect the overall learning outcome. Therefore, it is important for teachers to set clear rules regarding behavior during group activities as well as provide guidance on how to collaborate effectively.

Students also often face emotional challenges when engaging in problembased learning activities. Some students may feel anxious or afraid of failure when it comes to presenting their solutions in front of the class. This fear can hinder their active participation in group discussions and reduce their confidence when using Arabic. Therefore, creating a safe and supportive classroom environment is essential so that all students feel comfortable to speak up and share their ideas.

Another challenge is the difficulty in accurately assessing students' learning progress in the context of the problem-solving design approach. Traditional assessments may not reflect students' true ability to use Arabic practically. Therefore, teachers need to design alternative assessment tools that are more suitable for this approach, such as project-based or portfolio-based assessments, in order to evaluate Arabic language skills more holistically.

Financial constraints can also be a hindering factor in implementing this approach. Schools with limited budgets may not have the resources to provide the latest teaching materials or technology that support problem-solving design-based learning. Without adequate financial support, it is difficult for schools to create an optimal learning environment for students.

The lack of previous research on the effectiveness of the problem-solving design approach in the context of Arabic language learning is also a challenge. Although there are a number of studies on other teaching methods, research on problem-solving design is still limited, so teachers may feel hesitant to apply it without strong empirical evidence of its success (Rankin, 2019).

Thus, the results show that implementing the problem-solving design approach in Arabic language learning is not easy and is not free from these challenges. However, with the right strategy and sufficient support from all parties-including teachers, parents, and educational institutions-these challenges can be overcome so that the learning process can run smoothly and effectively (A. W. Ritonga et al., 2022).

## **CONCLUSION**

This research has explored the implementation of a problem-solving design-based Arabic language learning approach and its impact on students' language skills, as well as their motivation and engagement in the learning process. The results show that this approach has a significant positive impact in improving students' speaking, listening and writing skills. Through problem-solving activities relevant to daily life, students feel more confident and able to use Arabic in real situations.

In addition, the study also found that the problem-solving design approach successfully increased student motivation and engagement. Students reported feeling more interested and excited to learn when faced with real and relevant challenges. Collaborative activities in groups encourage students to actively participate, support each other and develop important social skills. This dynamic learning environment creates a fun atmosphere and encourages students to become lifelong learners.

However, despite the many benefits, the research also identified a number of challenges encountered during the implementation of this approach. These include dependence on the first language, lack of a strong knowledge base, time pressure, technological barriers and variations in students' interests. In addition, the lack of school facilities, parental participation, inadequate teacher training and cultural differences are also hindering factors in the learning process.

Overall, the results of this study show that the application of a problem-solving design-based learning approach can not only improve students' Arabic language skills but also equip them with critical thinking skills and creativity. Therefore, it is important for educators to continue applying and developing this method in Arabic language teaching at different levels of education. With the right support from all parties-including teachers, parents, and educational institutions-the existing challenges can be overcome so that the learning process can run more effectively.

This research recommends that schools conduct periodic evaluations of the effectiveness of the teaching methods applied and provide training for teachers to improve their ability to apply the problem-solving design approach. Thus, it is hoped that the quality of Arabic language education can be continuously improved in order to produce a generation of learners who are not only proficient in the language but also ready to face global challenges with confidence and competence.

### REFERENCES

- Aboulebde, D. (2023). Comparative Multiple Case Study into the Teaching of Problem-Solving Competence in Lebanese Middle Schools.
- Ali, S. S. (2019). Problem based learning: A student-centered approach. English Language Teaching, 12(5), 73–78.
- Al-Khresheh, M. H. (2024). The role of presentation-based activities in enhancing speaking proficiency among Saudi EFL students: A quasi-experimental study. Acta Psychologica, 243, 104159.
- Dinia, H. R., Jannah, M., Mustofa, S., & Helalsah, I. (2024). Arabic Learning Strategies Through Tiktok Entertainment Content to Attract Interest in Learning Arabic. Jurnal Al-Maqayis, 11(1), 88–120.
- Elbashir, A. M., Alkhair, S., & Al-Thani, N. J. (2024). Fostering STEM Learning: Exploring the Integration of Design Thinking in Islamic STEM Education. QiST: Journal of Quran and Tafseer Studies, 3(3), 411–432.
- Hasyim, M. (2021). The effectiveness of problem-based learning on advanced reading comprehension skill in online arabic language teaching. LISANIA: Journal of Arabic Education and Literature, 5(1), 1–18.
- Henriksen, D., Richardson, C., & Mehta, R. (2017). Design thinking: A creative approach to educational problems of practice. Thinking Skills and Creativity, 26, 140–153.
- Hoidn, S., & Kärkkäinen, K. (2014). Promoting skills for innovation in higher education: A literature review on the effectiveness of problem-based learning and of teaching behaviours.
- Jendli, A., & Albarakati, M. (2024). Exploring motivational dynamics: The role of oral activities in improving Arab students' learning of English.

- International Journal of Learning, Teaching and Educational Research, 23(3), 131–149.
- Khair, M., & Jundi, M. (2024). Uncovering Innovations in Instructional System Design Models for Arabic Language Learning. Al-Madrasah: Jurnal Pendidikan, Pembelajaran Dan Kebudayaan, 1(1), 104–121.
- Khairanis, R. (2024). INNOVATION IN ARABIC LANGUAGE LEARNING METHODOLOGY: COMBINING TECHNOLOGY AND INTERACTIVE APPROACHES. As-Sulthan Journal of Education, 1(2), 281–293.
- Khairanis, R., Putri, N., & Dinata, R. S. (2023). THE CORRELATION BETWEEN GRAMMAR MASTERY AND READING ABILITY. 554–564.
- Li, L. (2016). Integrating thinking skills in foreign language learning: What can we learn from teachers' perspectives? Thinking Skills and Creativity, 22, 273–288.
- Rankin, B. (2019). Creativity development for high ability Arabic English language learners within the international future problem solving programme.
- Rasha, E. (2016). Constructivist and cognitive multimedia learning theories as tools for training teachers on how to integrate technology using the TPACK framework for teaching Arabic online.
- Ritonga, A. W., Desrani, A., & Rubiyantoro, Y. (2022). Arabic Learning Design Based on 21st Century Skills during the Covid-19 Pandemic in Indonesia. Jurnal Igra': Kajian Ilmu Pendidikan, 7(2), 1–14.
- Ritonga, M., Widayanti, R., Alrasi, F., & Halim, S. (2020). Analysis of Arabic language learning at higher education institutions with multi-religion students.
- Seyıdov, R., & Çitil, A. (2024). The Impacts of Contemporary Educational Technologies on Learning Arabic. Evolutionary Studies in Imaginative Culture, 9(1).
- Siedlecki, S. L. (2020). Understanding descriptive research designs and methods. Clinical Nurse Specialist, 34(1), 8–12.
- Weng, X., & Chiu, T. K. (2023). Instructional design and learning outcomes of intelligent computer assisted language learning: Systematic review in the field. Computers and Education: Artificial Intelligence, 4, 100117.