



**TRANSFORMATION OF ISLAMIC RELIGIOUS EDUCATION LEARNING
THROUGH DIGITAL ROLE PLAYING: AN EFFORT TO INCREASE
STUDENTS' LEARNING INTEREST**

Putri Ziljian¹ Alamsyah²

^{1,2,3}**Universitas Muhammadiyah Makassar**

Email: Putriziljian@Unismuh.ac.id, Alamsyah@unismuh.ac.id

Abstract

This study aims to analyze the influence of implementing *Digital Role Playing* on students' learning interest in Islamic Religious Education at SMP Negeri 23 Makassar. The background of this research is based on the low level of student engagement, which is often attributed to conventional teaching methods that are predominantly one-way and lack active student involvement or experiential learning. The integration of digital innovations into the role-playing method is expected to create a more interactive and engaging learning environment.

This research employed a quantitative approach using an ex post facto design. The data collection instrument was a Likert-scale questionnaire, and data were analyzed descriptively and inferentially using simple linear regression. The findings revealed that the average score of Digital Role Playing implementation was 4.09, and the average student learning interest was 4.20, both categorized as high. Regression analysis indicated a significant influence of *Digital Role Playing* on students' learning interest, contributing 44.9% to the variance.

These findings demonstrate that transforming Islamic Religious Education through Digital Role Playing can enhance students' learning interest by fostering an interactive, contextual, and reflective classroom atmosphere. Therefore, this method is recommended for broader implementation in Islamic education at the junior high school level as part of a digital transformation effort in contemporary Islamic learning.

Keywords: Digital Role Playing, Learning Interest, Islamic Religious Education, Interactive Learning, Junior High School



INTRODUCTION

Islamic Religious Education (IRE) plays a vital role in shaping students' religious character, social ethics, and spiritual integrity amidst the challenges of the digital era (Taufik, 2020; Siregar et al., 2020; Pabbajah et al., 2021; Mohd Yusoff et al., 2022; Suryati, Giatman, et al., 2023; Afriyanto & Anandari, 2024; Zakiyyah, 2024; Abubakari & Kalinaki, 2024; Arif et al., 2025). As part of the national character education framework, IRE not only serves as a vehicle for religious knowledge transmission but also functions as a tool for nurturing moral values and social piety (Suryati, Simatupang, et al., 2023). However, in practice, IRE often faces challenges related to students' low active participation (Oktavia et al., 2021). The lack of motivation and attention toward religious subjects results in the insufficient internalization of Islamic values (Izzah et al., 2025). One of the main contributing factors is the lack of innovative methods that can stimulate emotional and cognitive engagement among students (Hidayat, 2024). Therefore, pedagogical approaches that align Islamic values with interactive and contextual methods are urgently needed (Prayoga et al., 2024), including the integration of digital media into value-based learning (Hasibuan & Iqbal, 2021); (Ferdinan & Pewangi, Mawardi, 2024).

Learning interest is a psychological variable that significantly determines the quality of student engagement in the learning process (Roure et al., 2019; Huang & Cherng, 2021; Purnomo et al., 2021; Firduas & Sulandra, 2021; Bai et al., 2023; Verdeflor et al., 2024; Chen et al., 2024; Sidiq et al., 2025). The higher the interest in learning, the greater the likelihood that students will participate actively, absorb the material, and apply it in their behavior (Wardani & Budiono, 2023). However, in IRE subjects, students' learning interest tends to be low due to the prevailing use of one-way, monologic teaching methods (Sugiarto & Dewantara, 2021). When students do not feel involved in the learning process, they tend to become passive and unmotivated (Siregar* et al., 2023). Consequently, the development of activity- and experience-based learning methods, such as Role Playing, becomes highly relevant (Amalia & Julia, 2022). This approach enables students not only to conceptually understand religious teachings but also to experience and reflect on them directly (Muhammad et al., 2024). Furthermore, this active learning model has been shown to improve critical thinking and social skills (Rahman et al., 2024).



The Role Playing method provides ample space for the holistic development of Islamic values through role simulation in real-life contexts (Widaningsih et al., 2023). This activity allows learners to develop empathy, decision-making abilities, and communication skills within relevant social situations (Aji, 2022). Such learning experiences strengthen the connection between Islamic teachings and students' everyday life dynamics (Ibrahim & Megawati, 2025). Moreover, this method encourages emotional and intellectual participation from students who were previously passive (Noveliana & Ghani, 2022). In the context of the *Merdeka Belajar* (Freedom to Learn) policy, approaches like Role Playing are crucial to realizing learning that is autonomous, creative, and enjoyable (Anggara & Enramika, 2024). This is also aligned with the demands of 21st-century learning management that emphasizes collaboration, communication, and student engagement (Adri et al., 2021). Furthermore, supportive school leadership in fostering active learning has been proven to create a more adaptive learning atmosphere (Setiawan et al., 2023).

The application of the Role Playing method has proven effective in enhancing student participation across various studies, including the development of e-learning-based student worksheets (LKPD) that emphasize interaction and value reflection (Agustina et al., 2022). In addition to improving conceptual understanding, this method encourages emotional and social involvement in the learning process (Wahyugi & Fatmariza, 2021). When students engage in role-playing, they learn to internalize religious values through action rather than merely listening (Purba et al., 2021). This has a direct impact on increasing learning interest, particularly among previously passive students (Bagaskara & Putra, 2022). The simulated context offered by Role Playing brings religious learning closer to the students' social realities (Partono et al., 2021). Moreover, this approach enables students to express values through observable behavior and actions, which teachers can evaluate (Javanis et al., 2024). Thus, Role Playing provides a concrete pathway for the internalization of values in Islamic Religious Education (Afriansyah et al., 2024).

Although many studies have highlighted the importance of innovation in IRE learning, few have specifically examined the effectiveness of the Role Playing method in enhancing students' learning interest within formal education settings in public schools, particularly at the junior high school level. Furthermore, the integration of experiential approaches and Islamic values through this method



has not been extensively explored within the local educational culture of Makassar. Therefore, this study seeks to fill that gap.

The aim of this study is to analyze the influence of the Role Playing method on students' interest in learning Islamic Religious Education at SMP Negeri 23 Makassar. Specifically, this study investigates the extent to which the method encourages active participation, emotional involvement, and motivation in IRE learning.

The implications of this study serve as a basis for IRE teachers in developing more active, reflective, and contextual learning strategies. The findings are expected to contribute significantly to the development of experiential and value-based IRE learning models and provide input for schools in implementing pedagogical approaches that are responsive to the needs of today's learners.

RESEARCH METHOD

1. Type and Approach of the Study

This study employed a quantitative approach with a correlational research design. The quantitative approach was chosen because the research aims to examine the relationship between two variables: the implementation of the *Digital Role Playing* method as the independent variable (X) and students' interest in learning Islamic Religious Education as the dependent variable (Y). The correlational design was used to determine the extent to which the application of the *Digital Role Playing* method influences students' learning interest at SMP Negeri 23 Makassar.

2. Research Hypotheses

The hypotheses proposed in this study are as follows:

- a. H_0 (Null Hypothesis): There is no significant influence of the *Digital Role Playing* method on students' interest in learning Islamic Religious Education.
- b. H_a (Alternative Hypothesis): There is a significant influence of the *Digital Role Playing* method on students' interest in learning Islamic Religious Education.

3. Data Processing Techniques

The data collection technique utilized a Likert-scale questionnaire with five response options (Strongly Agree, Agree, Disagree, Strongly Disagree,



Strongly Disagree), supported by observation and documentation. The collected data were processed through the following stages:

- a. Editing: Checking the completeness of questionnaire responses.
- b. Scoring: Assigning scores to each item response.
- c. Tabulation: Organizing the data for further analysis.
4. Hypothesis Testing Techniques and Data Analysis
The data analysis was carried out through several stages:
 - a. Descriptive Statistical Analysis to identify the tendency of each variable.
 - b. Validity and Reliability Tests to ensure the appropriateness of the research instruments.
 - c. Simple Linear Regression Test to measure the influence of variable X on variable Y, using the formula $Y = a + bX$.
 - d. t-test to assess the statistical significance of the relationship, with a significance level of 0.05.
 - e. Coefficient of Determination (R^2) to determine the extent of contribution of the independent variable to the dependent variable.

All analyses were performed using SPSS version 26 for Windows.

RESEARCH FINDINGS AND DISCUSSION

1. Implementation of the Digital Role Playing Method in Islamic Religious Education Learning

The implementation of the Digital Role Playing method at SMP Negeri 23 Makassar was carried out systematically through four key stages: preparation, execution, discussion-reflection, and evaluation.

In the preparation stage, the teacher introduced the concept of role playing to students, selected learning themes relevant to Islamic Religious Education (IRE) content, and assigned specific roles to the students. This stage achieved an average score of 4.02 (categorized as good), indicating that the teacher effectively provided initial guidance, enabling students to clearly understand the objectives and flow of the activity.

The execution stage, where students engaged in role-playing simulations, recorded the highest average score of 4.15. In this phase, students played the roles of prominent figures in Islamic history or portrayed everyday social situations infused with Islamic values. The active participation of students



demonstrated that the method effectively stimulated emotional and social engagement.

The discussion and reflection stage, conducted after the simulation, obtained an average score of 4.08. The teacher facilitated reflection sessions where students discussed their experiences, explored the values embedded in their roles, and connected them to real-life situations. This helped reinforce students' understanding of Islamic teachings as not merely theoretical, but practical and applicable.

The evaluation stage achieved an average score of 4.12, suggesting that the teacher conducted effective assessments of students' engagement and comprehension. Evaluation was conducted both orally and in written form, reinforcing students' grasp of Islamic values learned through the *Digital Role Playing* activity.

Overall, the average score for the implementation of the *Digital Role Playing* method reached 4.09, categorized as good. This indicates that the method was optimally implemented in fostering active, contextual, and engaging learning for students.

The successful application of the *Digital Role Playing* method in IRE learning at SMP Negeri 23 Makassar, through the four main stages, reflects the teacher's success in designing and delivering a participatory and meaningful learning experience. The preparation stage's average score of 4.02 confirmed clarity in conveying learning objectives and student responsibilities. The execution stage, with the highest score of 4.15, showcased the effectiveness of role playing in activating emotional and social student engagement.

The discussion-reflection stage's score of 4.08 indicated that students were able to internalize and connect values to real-life contexts. Meanwhile, the evaluation stage's score of 4.12 demonstrated the teacher's ability to assess students' comprehension and participation thoroughly.

Thus, the method not only created an active and engaging learning environment but also fostered contextual and applicable understanding of Islamic values in students' lives.

2. Students' Learning Interest in Islamic Religious Education

Students' learning interest was measured through four main indicators: attention, enthusiasm, perseverance, and curiosity.



The attention indicator recorded an average score of 4.22, showing that students remained focused, listened attentively to the teacher, and expressed interest in the material. This highlights the effectiveness of the *Digital Role Playing* approach in capturing student attention.

The enthusiasm indicator achieved the highest average score of 4.25. Students were actively involved, showed excitement during role-playing sessions, and expressed enjoyment in interacting during the learning process.

The perseverance indicator had an average score of 4.18, indicating that students became more diligent in attending classes and consistently completed assigned tasks.

The curiosity indicator scored 4.16, suggesting that students were motivated to ask more questions and seek additional information related to the Islamic content presented.

The overall average score of students' learning interest was 4.20, categorized as high. This indicates that the *Digital Role Playing* method successfully enhanced student engagement, emotional involvement, and learning motivation in Islamic Religious Education.

These results affirm that all indicators of students' learning interest increased positively following the implementation of the *Digital Role Playing* method. The attention indicator (4.22) reflected students' strong focus and interest throughout the lessons. Students were actively engaged with the teacher's explanations and the lesson content, validating the method's ability to foster deep learning concentration.

The enthusiasm indicator (4.25), the highest among all, signified that students were not only cognitively but also emotionally involved. Their engagement in role play, enthusiastic participation, and overall energy in the learning process showed that this method created a joyful and meaningful learning experience.

The perseverance indicator (4.18) showed improved discipline and consistency. Students became more punctual, showed dedication in completing assignments, and maintained active involvement throughout the learning sessions.

Lastly, the curiosity indicator (4.16) reflected students' desire to explore the subject further, ask questions, and seek out additional knowledge related to



Islamic values. This suggests that the method effectively stimulated students' intrinsic motivation to learn.

In conclusion, the *Digital Role Playing* method not only increased students' active participation but also nurtured learning interest holistically by strengthening the elements of attention, enthusiasm, perseverance, and curiosity—all of which are essential foundations for meaningful and sustainable learning in Islamic Religious Education.

3. The Influence of Digital Role Playing Implementation on Students' Interest in Learning Islamic Religious Education

The statistical analysis using simple linear regression yielded a *t-count* value of 7.813, with a significance value of 0.000 (<0.05). This indicates a positive and statistically significant influence of the *Digital Role Playing* method on students' interest in learning. The result supports the acceptance of the alternative hypothesis (H_a), confirming that this method contributes meaningfully to enhancing student engagement in Islamic Religious Education.

The coefficient of determination (R^2) was found to be 0.449, meaning that 44.9% of the variation in students' learning interest can be explained by the implementation of the *Digital Role Playing* method. In other words, nearly half of the changes in students' interest in learning are influenced by how effectively the method is applied in the learning process.

The remaining 55.1% of the variation is likely attributed to other external factors not directly examined in this study, such as students' intrinsic motivation, individual learning styles, family support, and their social and cultural learning environment. These factors should also be considered in the future development of instructional strategies.

Overall, the findings affirm that the *Digital Role Playing* method is not merely a learning aid but an effective pedagogical strategy that transforms a traditionally passive classroom atmosphere into one that is active, creative, and character-oriented. The direct experiential learning through role simulation allows students to grasp Islamic teachings more contextually and applicably, while simultaneously increasing their motivation to learn.

The ability of students to actively engage in simulations, reflect on values, and connect those experiences to daily life promotes deeper comprehension beyond theoretical understanding. Thus, *Digital Role Playing* serves as a powerful



tool to develop students' character, foster participation, and stimulate curiosity and sustained interest in Islamic Religious Education.

DISCUSSION

The findings of this study demonstrate that the Digital Role Playing method has a significant influence on enhancing students' interest in learning Islamic Religious Education (IRE). With an average implementation score of 4.09 and a student interest score of 4.20, the results confirm that role-based instructional approaches are capable of effectively stimulating students' emotional and cognitive engagement.

Through role simulations, students are not only encouraged to develop conceptual understanding of IRE material but also to express Islamic values through real-life actions. This is supported by Agustina et al. (2022), who found that the Role Playing method improves interactivity in e-learning-based instruction. Wahyugi and Fatmariza (2021) also noted that participatory learning media positively impact elementary students' learning motivation.

The coefficient of determination (R^2) of 44.9% affirms that a substantial portion of the variation in students' learning interest is explained by the use of the *Digital Role Playing* method, while the remaining 55.1% is attributed to external factors such as parental support, individual character traits, and school environment. These findings align with those of Purba et al. (2021), who noted that interactive, value-based online learning fosters greater student understanding. Similarly, Bagaskara and Putra (2022) emphasized that student engagement increases significantly when they are given active roles in the learning process.

From a psychological perspective, this method also addresses the persistent challenge of low student interest in religious subjects, which are often perceived as theoretical and monotonous. This contextual approach bridges the gap between learning experiences and students' social realities, as demonstrated in Partono et al.'s (2021) study on interactive learning strategies at the Indonesian School in Kuala Lumpur. Javanis et al. (2024) also highlighted the importance of experiential learning as an effective medium for instilling character values in students.

Furthermore, the role-playing experience provides students with opportunities for deep reflection on the meaning behind Islamic teachings, going



beyond mere memorization. This is reinforced by Afriansyah et al. (2024), who concluded that the Role Playing method effectively mediates between conceptual knowledge and students' social practices in daily life.

In conclusion, the implementation of the *Digital Role Playing* method not only enhances students' cognitive learning outcomes, but also strengthens the internalization of Islamic values and character development. As such, it is a highly relevant strategy for addressing the challenges of religious education in the digital era and is recommended as an innovative pedagogical tool for IRE teachers seeking to create more meaningful, engaging, and value-oriented classroom experiences.

CONCLUSION

This study concludes that the implementation of the Digital Role Playing method significantly and positively influences students' interest in learning Islamic Religious Education (IRE) at SMP Negeri 23 Makassar. The findings reveal that both the application of the method (average score of 4.09) and students' learning interest (average score of 4.20) are categorized as high, indicating that this approach is effective in creating an active, engaging, and meaningful learning environment.

The simple linear regression analysis confirms that 44.9% of the variation in learning interest is explained by the method, while the remaining 55.1% is influenced by other factors such as intrinsic motivation, learning style, family support, and socio-cultural context.

By promoting emotional engagement, contextual understanding, and active participation, Digital Role Playing serves not only as an innovative instructional technique but also as a transformative strategy to internalize Islamic values and foster students' motivation. Therefore, this method is strongly recommended for broader implementation in Islamic education to respond to the challenges of the digital learning era and to support character development in a more reflective and experiential way.

Bibliography

Abubakari, M. S., & Kalinaki, K. (2024). Digital competence in islamic education for lifelong learning: Preliminary analysis using DigComp 2.1 framework. In *Embracing Technological Advancements for Lifelong Learning* (pp. 1–31).



- <https://doi.org/10.4018/979-8-3693-1410-4.ch001>
- Adri, F. M., Giatman, M., & Ernawati, E. (2021). Manajemen pembelajaran pada masa pandemi covid-19 berbasis blended learning. *JRTI (Jurnal Riset Tindakan Indonesia)*, 6(1), 110–118. <https://doi.org/10.29210/3003875000>
- Afriansyah, A. G. K., Asmaroini, A. P., & Cahyono, H. (2024). Implementasi Dimensi Kebhinekaan Global dalam Pendidikan Karakter di SMPN 2 Kecamatan Pulung, Ponorogo. *JPK (Jurnal Pancasila Dan Kewarganegaraan)*, 9(1), 84–92. <https://doi.org/10.24269/jpk.v9.n1.2024.pp84-92>
- Afriyanto, D., & Anandari, A. A. (2024). Transformation of Islamic Religious Education in the Context of Multiculturalism at SMA Negeri 9 Yogyakarta Through an Inclusive Approach. *Jurnal Pendidikan Agama Islam*, 21(1), 1–21. <https://doi.org/10.14421/jpai.v21i1.7142>
- Agustina, E., Muhfahroyin, M., & Sujarwanta, A. (2022). PENGEMBANGAN LEMBAR KERJA PESERTA DIDIK (LKPD) INKUIRI TERBIMBING BERBASIS E-LEARNING PADA MATERI PLANTAE. *BIOLOVA*, 3(2). <https://doi.org/10.24127/biolova.v3i2.1737>
- Aji, P. (2022). Pemanfaatan Whatsapp Group (WAG) pada Pembelajaran Jarak Jauh di Masa Pandemi Covid-19. *Proceedings Series on Social Sciences & Humanities*, 3, 339–343. <https://doi.org/10.30595/pssh.v3i.399>
- Amalia, D. Y., & Julia, J. (2022). Transisi Pendidikan Era New Normal: Analisis Penerapan Blended Learning di Sekolah Dasar. *Jurnal Basicedu*, 6(2), 1618–1628. <https://doi.org/10.31004/basicedu.v6i2.2171>
- Anggara, E., & enramika, T. (2024). Pemanfaatan Platform Merdeka Mengajar terhadap Peningkatan Kompetensi Guru Sekolah Dasar di Era Digital. *ARSEN: Jurnal Penelitian Pendidikan*, 2(1), 37–44. <https://doi.org/10.30822/arsen.v2i1.3408>
- Arif, M., Aziz, M. K. N. A., & Ma'arif, M. A. (2025). A recent study on islamic religious education teachers' competencies in the digital age: a systematic literature review. *Journal of Education and Learning*, 19(2), 587–596. <https://doi.org/10.11591/edulearn.v19i2.21311>
- Bagaskara, A. D. B. A. D., & Putra, I. N. T. A. (2022). Penerapan Pembelajaran Secara Daring Aplikasi Google Classroom Di SMPTK Galang Kasih. *Jurnal Pembelajaran Inovatif*, 5(1), 49–55. <https://doi.org/10.21009/jpi.051.06>
- Bai, X., Cui, Y., & Ikem, F. (2023). Practical activities to engage students in face-to-face and synchronous online teaching environments. *Issues in Information*



- Systems*, 24(3), 105–115. https://doi.org/10.48009/3_iis_2023_110
- Chen, F., Wang, J., Zhang, W., Li, P., Zeng, Y., & Zou, H. (2024). The Relationship between Parental Educational Involvement and Learning Engagement among Chinese Middle School Students: The Mediating Effect of Gratitude and Hope. *Behavioral Sciences*, 14(8). <https://doi.org/10.3390/bs14080687>
- Firduas, C. A., & Sulandra, I. M. (2021). The students' interest in a guided inquiry learning. *AIP Conference Proceedings*, 2330. <https://doi.org/10.1063/5.0043122>
- Hasibuan, U. G., & Iqbal, M. (2021). Budaya Literasi Digital di SMA Panca Budi Medan. *Jurnal Antropologi Sumatera*, 19(2), 74. <https://doi.org/10.24114/jas.v19i2.31701>
- Hidayat, R. (2024). Pelaksanaan Literasi Kewarganegaraan Siswa Di SMA Kabupaten Simeulue Dalam Era Globalisasi. *Pedagogi: Jurnal Ilmu Pendidikan*, 24(1), 63–71. <https://doi.org/10.24036/pedagogi.v24i1.1976>
- Huang, Y.-T., & Cherng, B.-L. (2021). Study on reciprocal relations among academic emotions, situational interest, and learning engagement. *Bulletin of Educational Psychology*, 52(3), 571–594. [https://doi.org/10.6251/BEP.202103_52\(3\).0004](https://doi.org/10.6251/BEP.202103_52(3).0004)
- Ibrahim, A. M., & Megawati, S. (2025). Implementasi Program Cakap Digital di SMK Krian 2 Kecamatan Krian Kabupaten Sidoarjo. *Publika*, 12(4), 1.053-1.066. <https://doi.org/10.26740/publika.v12n4.p1.053-1.066>
- Izzah, N., Zainuddin, Z., & Jamilah, J. (2025). Identifikasi Program Pokok Peningkatan Literasi Digital Siswa Studi Kasus SDN Pabian IV Kabupaten Sumenep. *Journal Of Human And Education (JAHE)*, 5(2), 154–158. <https://doi.org/10.31004/jh.v5i2.2372>
- Javanis, D. S., Sartini, S., Nawanti, R. D., Purnomo, S., Handayaningsih, A. C. R., & Utama, S. (2024). Peranan Guru Penggerak dalam Penerapan Kurikulum Merdeka SMP Negeri 16 Surakarta. *Journal of Education and Instruction (JOEAI)*, 7(1), 24–31. <https://doi.org/10.31539/joeai.v7i1.8789>
- Mohd Yusoff, M. Z., Hamzah, A., Fajri, I., Za, T., & Yusuf, S. M. (2022). The effect of spiritual and social norm in moral judgement. *International Journal of Adolescence and Youth*, 27(1), 555–568. <https://doi.org/10.1080/02673843.2022.2156799>
- Muhammad, K., Rahmat, A., & Carsiwan, C. (2024). Permainan Tradisional Terhadap Minat Belajar Siswa dalam Aktivitas Pembelajaran Pendidikan



- Jasmani Sytematic Literature Review. *Gelanggang Olahraga: Jurnal Pendidikan Jasmani Dan Olahraga (JPJO)*, 7(2), 260–269. <https://doi.org/10.31539/jpjo.v7i2.8037>
- Noveliana, J., & Ghani, A. R. (2022). Literasi Membaca dan Dampaknya Terhadap Hasil Belajar Bahasa Indonesia Siswa Sekolah Dasar. *MIMBAR PGSD Undiksha*, 10(3), 469–475. <https://doi.org/10.23887/jjpgsd.v10i3.50750>
- Oktavia, R., Hera, R., . M., & Rokhman, N. (2021). ASESMEN PENGGUNAAN MULTIMEDIA PEMBELAJARAN INTERAKTIF BIOLOGI OLEH SISWA SEBAGAI KLASIFIKASI TINGKAT DIGITAL LITERACY PENDUKUNG PROGRAM MERDEKA BELAJAR DI ACEH BARAT. *Jurnal Teknologi Pendidikan (JTP)*, 14(1), 69–74. <https://doi.org/10.24114/jtp.v14i1.24106>
- Pabbajah, M., Jubba, H., Abdullah, I., & Pabbajah, M. T. H. (2021). From the scriptural to the virtual: Indonesian engineering students responses to the digitalization of Islamic education. *Teaching Theology and Religion*, 24(2), 122–130. <https://doi.org/10.1111/teth.12581>
- Partono, P., Fitriyani, U., Alawiyah, R., Maghfiroh, A. I., & Darojah, I. (2021). Strategi Pembelajaran Sekolah Indonesia Kuala Lumpur (SIKL) di Era New Normal. *TERAMPIL: Jurnal Pendidikan Dan Pembelajaran Dasar*, 8(1), 75–82. <https://doi.org/10.24042/terampil.v8i1.7573>
- Prayoga, A., Purwoko, B., & Habsy, B. A. (2024). Bimbingan dan Konseling Sekolah di Era Society 5.0: Sebuah Kajian Sistematis. *JURNAL BIMBINGAN DAN KONSELING AR-RAHMAN*, 10(1), 52–61. <https://doi.org/10.31602/jbkr.v10i1.14982>
- Purba, S. T., Sinaga, D. P., & Marini. (2021). Analisis Pembelajaran Daring Terhadap Evaluasi Belajar IPA Pada Kelas VII MTs MESRA Pematang Siantar TA.2020/2021. *BEST Journal (Biology Education, Sains and Technology)*, 4(2), 311–317. <https://doi.org/10.30743/best.v4i2.4720>
- Purnomo, Y. W., Safitri, E., Rohmah, N., Rahmawati, R. D., & Abbas, N. (2021). Parental Involvement in Online Mathematics Learning: Examining Student Report and Links with Engagement. *New Educational Review*, 66, 120–130. <https://doi.org/10.15804/tner.2021.66.4.10>
- Rahman, F. S., Febriani, A., Annisak, F., Sabina, I., & Ananda, P. (2024). Kolaborasi Sekolah dan Industri: Menyiapkan Siswa Untuk Dunia Kerja. *Jurnal Bintang Pendidikan Indonesia*, 2(3), 158–166. <https://doi.org/10.55606/jubpi.v2i3.3076>



- Roure, C., Kermarrec, G., & Pasco, D. (2019). Effects of situational interest dimensions on students' learning strategies in physical education. *European Physical Education Review*, 25(2), 327–340. <https://doi.org/10.1177/1356336X17732964>
- Setiawan, S., Qalyubi, S., & Laugu, N. (2023). Peran kepala sekolah dalam pengelolaan perpustakaan untuk mendukung pembelajaran di masa pandemi COVID-19. *Berkala Ilmu Perpustakaan Dan Informasi*, 19(1), 96–110. <https://doi.org/10.22146/bip.v19i1.6907>
- Sidiq, A., Raharjo, M. R., Trinizaa, I., Agustini, D., & Faridha, M. (2025). Pelatihan Aplikasi Perpustakaan Digital pada Siswa MAS Darrul Mukarram. *Jurnal Pengabdian Masyarakat (ABDIRA)*, 5(1), 130–136. <https://doi.org/10.31004/abdira.v5i1.534>
- Siregar*, Y. A., Matondang, A. M., Fitriani, Ammy, P. M., Harahap, M. Y., Rossiah, R., Siregar, A. M., Sholih, R., & Pohan, E. N. (2023). Pengembangan Kemampuan Literasi Numerasi Berbasis Digital dan Peningkatan Self Efficacy Resiliensi Guru SD. *Dinamisia : Jurnal Pengabdian Kepada Masyarakat*, 7(5), 1248–1255. <https://doi.org/10.31849/dinamisia.v7i5.14431>
- Siregar, H. L., Hakam, K. A., & Komalasari, K. (2020). Application of project based learning (PJBL) inislamic religious education courses (an alternative solution to the problem of learning PAI at PTU). *Journal of Critical Reviews*, 7(1), 21–28. <https://doi.org/10.22159/jcr.07.01.05>
- Sugiarto, A., & Dewantara, J. A. (2021). Persepsi Guru IPS Kota Singkawang Terhadap Literasi Digital Dalam Mendukung Kegiatan Pembelajaran Di Era Revolusi Industri 4.0. *Jurnal Basicedu*, 5(3), 1639–1651. <https://doi.org/10.31004/basicedu.v5i3.982>
- Suryati, L., Giatman, Maksum, H., & Rahmadhani, S. (2023). Manajemen Kepemimpinan Kepala Sekolah dalam Upaya Meningkatkan Kompetensi Guru Menghadapi Era Revolusi 4.0. *Jurnal Ilmiah Pendidikan Dan Pembelajaran*, 6(3), 632–642. <https://doi.org/10.23887/jipp.v6i3.56703>
- Suryati, L., Simatupang, W., Irfan, D., & Muskhir, M. (2023). OPTIMASI IMPLEMENTASI SOFT SKILL BERBASIS TEKNOLOGI INFORMASI BAGI GURU KEJURUAN PADA PENDIDIKAN VOKASI. *ZONAsi: Jurnal Sistem Informasi*, 90–99. <https://doi.org/10.31849/zn.v4i.12705>
- Taufik, M. (2020). STRATEGIC ROLE OF ISLAMIC RELIGIOUS EDUCATION IN STRENGTHENING CHARACTER EDUCATION IN THE ERA OF INDUSTRIAL



- REVOLUTION 4.0. *Jurnal Ilmiah Islam Futura*, 20(1), 86–104.
<https://doi.org/10.22373/jiif.v20i1.5797>
- Verdeflor, R. N., Tenedero, E. Q., Bordios, A. G., Panit, N. M., & Espinosa, C. G. (2024). Instructional management strategies for addressing low student engagement in mathematics. *Environment and Social Psychology*, 9(12).
<https://doi.org/10.59429/esp.v9i12.3229>
- Wahyugi, R., & Fatmariza, F. (2021). Pengembangan Multimedia Interaktif Menggunakan Software Macromedia Flash 8 Sebagai Upaya Meningkatkan Motivasi Belajar Siswa Sekolah Dasar. *EDUKATIF: JURNAL ILMU PENDIDIKAN*, 3(3), 785–793. <https://doi.org/10.31004/edukatif.v3i3.439>
- Wardani, R., & Budiono, H. (2023). Strategi Guru Dalam Menerapkan Kegiatan Literasi Digital di Sekolah Dasar Negeri 47/IV Kota Jambi. *Jurnal Tonggak Pendidikan Dasar : Jurnal Kajian Teori Dan Hasil Pendidikan Dasar*, 2(1), 90–98. <https://doi.org/10.22437/jtpd.v2i1.27834>
- Widaningsih, R., Irianto, D. M., & Yuniarti, Y. (2023). PEMBELAJARAN BERBASIS TPACK UNTUK MENINGKATKAN KEMAMPUAN NUMERASI DAN HASIL BELAJAR PESERTA DIDIK. *Jurnal Review Pendidikan Dasar : Jurnal Kajian Pendidikan Dan Hasil Penelitian*, 9(1), 9–16.
<https://doi.org/10.26740/jrpd.v9n1.p9-16>
- Zakiyyah, I. (2024). Learning Management of Islamic Religious Education Based on Digital Technology. *2024 12th International Conference on Cyber and IT Service Management, CITSM 2024*.
<https://doi.org/10.1109/CITSM64103.2024.10775708>