

THAILAND INNOVATING ISLAMIC RELIGIOUS EDUCATION THROUGH EDUCATIONAL GAMES: EVIDENCE FROM THE PKM-I PROGRAM AT THAMMISLAM FOUNDATION SCHOOL, THAILAND

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ABSTRACT Islamic Religious Education (IRE) within multicultural settings particularly in schools serving Muslim minority communities across Thailand confronts a range of persistent pedagogical difficulties. Chief among these is the limited capacity of teacher-centred, lecture-based methods to sustain student engagement and foster genuine conceptual understanding. This article documents and critically examines the integration of Islam-themed educational games as an instructional innovation within the International Community Service Program (PKM-I), implemented at Thammislam Foundation School in Southern Thailand. The program was delivered through a structured three-phase model: an initial conceptual introduction to educational games and their pedagogical rationale, a live facilitated demonstration conducted by Indonesian university students, and a student-led hands-on practice session carried out in small collaborative groups. Adopting a qualitative descriptive approach grounded in participatory observation and post-session reflective documentation, this study captures the range and depth of student responses across each phase of the single-session intervention. The findings reveal a marked shift in classroom dynamics: students exhibited sustained and voluntary engagement from the moment the demonstration began, and the practice phase elicited levels of concentration and accelerated content mastery that local IRE teachers described as substantially exceeding their typical classroom experience. The game mechanics particularly their capacity to encourage spontaneous repetition, organic peer-assisted learning, and emotionally enriched participation appeared to activate cognitive processes that deepened retention. This study contributes to a growing body of evidence affirming that value-aligned educational game design, even in short-duration deployments, holds considerable promise for revitalising IRE pedagogy across Southeast Asian Muslim minority contexts.

KEYWORDS: *Educational Games, Islamic Religious Education, PKM-I, Southern Thailand, Gamification, Active Learning, Muslim Minority Education.*

1. INTRODUCTION

The Malay-Muslim communities of Southern Thailand concentrated primarily in the provinces of Pattani, Yala, and Narathiwat carry a centuries-old tradition of Islamic learning rooted in pondok schools and community-based religious institutions. Yet this inherited educational culture is now navigating a complex set of pressures from multiple directions: a digitally immersed younger generation whose attention and expectations differ sharply from previous cohorts, persistent resource constraints that limit pedagogical innovation, and a broader sociopolitical climate that shapes how learning environments are experienced (Charoenwong & Thepsatitporn, 2021). Thammislam Foundation School represents one of the private Islamic institutions that has sought to maintain curricular relevance amid these converging challenges.

This situation is by no means unique to the Thai context. Across many developing nations with substantial Muslim populations, researchers have consistently documented the limitations of predominant approaches to Islamic religious instruction. Hidayat and Syarifudin (2022) found that IRE pedagogies that remain anchored in one-directional transmission whether through extended lectures or rote memorisation drills tend to suppress students' intrinsic motivation over time. The challenge intensifies when the subject matter is inherently abstract: theological concepts such as tawhid, jurisprudential categories from fiqh, or narrative accounts from prophetic biography (sirah nabawiyah) resist easy comprehension without the scaffolding of concrete, experiential learning approaches.

Against this backdrop, the expanding field of educational technology has generated substantial evidence in favour of game-based learning as a viable pedagogical alternative. Gamification broadly understood as the deliberate application of game design principles within non-game settings, including formal education has been empirically associated with improved motivation, deeper engagement, and more robust learning outcomes (Deterding et al., 2011, as cited in Huang & Soman, 2013). More recent scholarship has gone further, exploring how games specifically designed to embed Islamic values and content can bridge the often-perceived gap between the enjoyment of play and the seriousness of religious education (Mahdum et al., 2020; Yusuf et al., 2021).

In Indonesia, these developments have found institutional expression in the Merdeka Belajar (Freedom to Learn) curriculum framework introduced by the Ministry of Education, Culture, Research, and Technology (Kemendikbudristek, 2022). This policy explicitly encourages project-based learning, cross-cultural collaboration, and the thoughtful integration of digital media into all subject areas, including IRE. It also provides the normative foundation for programs such as PKM-I,

which channel the competencies of university students toward tangible educational contributions in partner institutions abroad.

It is within this frame that the present study situates itself. The PKM-I program an acronym for Program Pengabdian kepada Masyarakat-Internasional, or the International Community Service Program creates structured pathways for Indonesian university students to contribute to educational initiatives at overseas partner schools. This article specifically examines one such contribution: the design and delivery of a focused educational game intervention in IRE at Thammi Islam Foundation School, carried out by PKM-I participants over the course of a single intensive session in 2026.

The research gap that motivates this inquiry is the relative scarcity of empirically grounded studies examining the deployment of Islamic educational games in Muslim minority educational contexts in Southeast Asia, particularly those involving cross-national student collaboration frameworks. Most existing research is either conducted in majority-Muslim settings or overlooks the ways in which local cultural-religious dynamics and national policy environments shape how pedagogical interventions are received. This article therefore pursues three interconnected objectives: first, to document the design logic and implementation process of the Islamic educational game session; second, to analyse observed student responses across the three phases of the intervention; and third, to derive evidence-based recommendations for scaling similar approaches within the wider landscape of international Islamic education partnerships.

1.1 Literature Review

a. Gamification and Educational Games: Theoretical Foundations

The scholarly conversation around gamification in education has matured considerably since Werbach and Hunter (2012) offered one of its most cited early formulations: the deliberate use of game mechanics and design logic in contexts that are not inherently game-based, with the purpose of shaping behaviour, enhancing motivation, and driving engagement. In educational applications, this concept has evolved well beyond the relatively superficial layer of reward systems points, badges, and leaderboards toward a more holistic understanding of how game architecture can fundamentally restructure the learning experience. Contemporary frameworks conceptualise effective educational gamification as an integrated approach that embeds narrative progression, graduated challenge, immediate corrective feedback, and a palpable sense of achievement into the fabric of learning activities (Lister, 2015, as cited in Alabbasi, 2017).

The empirical record is broadly supportive of this approach. A systematic review conducted by Subhash and Cudney (2018), drawing on 69 primary studies from diverse educational settings,

concluded that gamification-based interventions reliably outperformed conventional methods on measures of both learner motivation and cognitive engagement. The authors noted, however, that outcomes varied considerably depending on the quality of design, the cultural appropriateness of the game mechanics, and the degree to which game content aligned with intended learning goals. A subsequent meta-analysis by Sailer and Homner (2020) encompassing 28 experimental and quasi-experimental studies reported moderate to large effect sizes ($d = 0.49$) for motivation and engagement outcomes, while reinforcing the same cautionary note about design quality and contextual fit as prerequisites for effectiveness.

A distinction worth maintaining is that between gamification and educational games as discrete, though related, categories. Prensky (2001) was among the first to argue this distinction rigorously: educational games are purpose-built artefacts in which learning objectives are architecturally embedded within the game's core mechanics, not simply layered on top of an existing task. This difference has meaningful implications for how game designers approach content integration and, consequently, for how deeply the intended learning is processed by participants.

b. Educational Games in Islamic Religious Instruction

The application of educational games to the specific domain of Islamic religious instruction represents a relatively recent but rapidly expanding area of scholarly inquiry. In one of the more rigorous Indonesian studies to date, Mahdum, Hadriana, and Safriani (2020) investigated the effects of interactive digital media including game-based quiz formats on students' comprehension of IRE content in Riau province. Their findings indicated not only statistically significant gains in conceptual understanding among the experimental group, but also notable improvements in the affective dimension of learning: students who engaged with game-based formats reported heightened curiosity about religious subject matter that had previously left them disengaged.

Yusuf, Nuraini, and Saepudin (2021) extended this line of inquiry by examining an Android-based educational game application developed specifically for fiqh (Islamic jurisprudence) instruction in junior secondary madrasas. After four weeks of use, posttest scores exceeded pretest scores by an average of 31 percent across the study cohort. Particularly noteworthy was the finding that students who had demonstrated the lowest levels of intrinsic motivation prior to the intervention those typically least responsive to conventional IRE instruction showed the most pronounced improvement. This pattern suggests that game-based approaches may serve an equalising function in IRE classrooms by providing more accessible entry points for students who struggle to connect with traditional methods.

At a different end of the game design spectrum, Budiman (2021) examined the pedagogical effects of a board game centred on prophetic biography (sirah nabawiyah) within an Indonesian pesantren context. The study found that collaborative gameplay generated substantive peer discussions about the life and character of the Prophet Muhammad (PBUH), and that this dialogic engagement measurably strengthened long-term retention of historical content. These findings align with cooperative learning frameworks advanced by Johnson and Johnson (cited in Millis, 2010), which propose that socially mediated knowledge construction produces deeper cognitive processing than individual study.

c. The Islamic Education Landscape in Southern Thailand

Understanding the specific context of Thammislam Foundation School requires some familiarity with the broader educational environment in which it operates. Islamic private schools in Southern Thailand locally referred to as pondok or sekolah agama have historically served not only as centres of religious instruction but as vital institutions for the cultural and linguistic preservation of the ethnic Malay-Muslim minority (Charoenwong & Thepsatitporn, 2021). Their curricula typically blend Thailand's national education requirements with Islamic content derived from traditional Arabic-language texts or adapted from Middle Eastern institutional models.

Liow's (2020) comprehensive examination of Islamic education dynamics in Thailand identified a cluster of structural challenges that constrain pedagogical innovation in these settings: a shortage of teachers with formal training in contemporary instructional methods, insufficient budgetary allocation for learning media development, and a sociopolitical context in which the modernisation of religious education is sometimes read by community members and educators alike as a potential threat to cultural and doctrinal integrity. Importantly, Liow also observed the beginnings of a counter-movement among forward-looking stakeholders who increasingly recognise that innovation need not entail the abandonment of traditional values, but can instead amplify their transmission.

The Indonesian policy context is also pertinent to this analysis, given that PKM-I participants are drawn from Indonesian universities. The Merdeka Belajar framework (Kemendikbudristek, 2022) actively promotes learning through authentic, project-centred experiences, intercultural collaboration, and the pedagogically intentional integration of digital tools. In positioning students as agents of educational innovation including in international settings this framework lends normative legitimacy to the PKM-I model and the kind of participatory, game-based intervention documented in this study.

d. International Student Mobility as a Vehicle for Educational Innovation

The role of student mobility programs in facilitating pedagogical innovation across national borders has attracted growing scholarly attention. Teichler (2017) argues that the deployment of students into unfamiliar educational contexts generates value that flows in multiple directions simultaneously: receiving institutions gain access to fresh methodological perspectives and instructional resources, while the students themselves develop intercultural competencies and a nuanced, practice-informed understanding of pedagogy that formal coursework alone rarely provides. The encounter with difference whether linguistic, cultural, or pedagogical becomes, in this reading, a core educational experience in its own right.

More proximately relevant is the work of Widodo and Kusuma (2023), who examined the professional outcomes of international teaching practicums undertaken by Indonesian pre-service educators at overseas partner schools. Their findings indicated measurable benefits on both sides of the partnership: students developed more adaptive and contextually sensitive teaching skills, while host schools received instructional interventions that meaningfully extended their pedagogical repertoire. This bidirectionality of benefit provides empirical grounding for the claim that programs like PKM-I are not merely charitable endeavours but constitute genuine sites of co-produced educational knowledge.

2. METHOD

This study adopts a qualitative descriptive design, with participatory observation as its primary methodological tool. The choice of this approach is grounded in the nature of the PKM-I activity itself: the researchers and Indonesian university student-facilitators were not positioned as detached observers watching a naturally occurring phenomenon, but as active participants in a deliberately designed educational event which enabled sustained, close-range observation of how students responded across each stage of the intervention (McNiff, 2022). The study's primary aim was not the statistical testing of hypotheses about causal relationships, but the systematic documentation and interpretive analysis of the dynamics that unfolded during one complete implementation cycle of the Islamic educational game session.

The activity took place at Thammislam Foundation School, Pattani, Southern Thailand, during a single intensive session within the 2026 PKM-I program cycle. Participants were primary-level students enrolled in the school's Islamic Religious Education classes. Students at this developmental stage are widely regarded as particularly receptive to experiential and play-based learning approaches

a position supported by Vygotskian developmental theory, which emphasises the mediating role of social activity and guided play in the construction of conceptual knowledge (Vygotsky, cited in Wertsch, 2020).

The intervention was structured around a three-phase sequential model designed to move students progressively from conceptual understanding to facilitated experience to independent application. The first phase Explanation involved PKM-I student-facilitators introducing the concept and educational rationale of game-based learning to the class. Students were guided to understand that the activities they were about to engage in were not a departure from serious learning, but rather a strategically designed channel for deepening their grasp of Islamic content. The explanation was delivered through accessible language and illustrated with concrete, everyday analogies familiar to the students.

The second phase Demonstration comprised live, interactive showcasing of three educational games prepared by the PKM-I team. The first, an Islamic Snakes and Ladders variant, challenged students to answer Islamic knowledge questions whenever they landed on designated squares creating a game structure in which advancement was tied to demonstrated learning. The second, a Verse Completion Card Game, presented students with randomly shuffled sets of Quranic verse fragments and required them to reconstruct complete verses through collaborative matching an activity that simultaneously reinforced memorisation and comprehension. The third game, a Hijaiyah Letter Diacritical Spinner, helped students practise the correct vocalisation of Arabic letters when paired with the three main diacritical marks (fathah, dammah, and kasrah), using a spinning mechanism that randomised the combinations presented. The demonstration was designed not merely to convey rules of play, but to generate a sense of anticipation and curiosity that would carry students energetically into the practice phase.

The third phase Hands-On Practice afforded students the opportunity to engage with each game directly, operating in pairs or small groups while the PKM-I facilitators circulated to provide guidance, confirm understanding, and encourage sustained participation. This phase generated the richest observable data, as students' behavioural and verbal responses to the games were most visible and spontaneous here. Each practice session concluded with a brief structured reflection in which students were invited to articulate what they had learned, what surprised them, and how the experience compared with their usual IRE lessons.

Data were gathered through two complementary channels. First, direct observation records were maintained throughout all three phases, capturing indicators of student engagement and cognitive involvement: the frequency and nature of student questions, visible enthusiasm during

transitions between game phases, sustained attention to task, and the speed with which students demonstrated competence with new content. Second, reflective field notes compiled by PKM-I participants immediately following the session provided a retrospective account of key moments, student interactions, and unanticipated dynamics. Informal feedback shared by the attending local IRE teachers served as a third triangulating data source. Analysis followed a thematic approach (Braun & Clarke, 2006), with consistent patterns in student response across the three phases identified through iterative coding of the observational and reflective records.

3. RESULT AND DISCUSSION

3.1 Session Overview: Navigating from Hesitation to Enthusiasm

The educational game session at Thammislam Foundation School unfolded as a coherent arc, moving through the three planned phases with a rhythm that was shaped as much by student response as by facilitation design. The decision to structure the session as a scaffolded progression from conceptual framing through guided observation to self-directed practice was deliberate, drawing on Vygotsky's principle that meaningful learning is best supported when learners move from zones of proximal understanding toward independent performance through socially mediated experience (cited in Wertsch, 2020). Each phase was calibrated to reduce the cognitive and affective barriers that might otherwise prevent students from fully committing to the final practice stage.

The explanation phase elicited a varied initial response. A majority of students appeared genuinely curious about what was being introduced the idea that religious content could be approached through games was, for many, a novel proposition. A smaller subset, however, displayed visible uncertainty, reflecting what Liow (2020) describes as a pervasive tension in Southern Thai Islamic schooling between the perceived formality of religious learning and the informality associated with play. This hesitancy was not dismissive, but it signalled that the facilitators would need to demonstrate rather than simply assert that the games were pedagogically substantive.

That demonstration proved decisive. As the PKM-I team began modelling the Snakes and Ladders game, the atmosphere in the classroom underwent a palpable shift. Students who had been seated at a cautious distance began moving closer, unprompted questions emerged spontaneously, and several students asked to try the game before the formal practice phase had been announced. This unrehearsed response illustrates what Prensky (2001) identifies as the inherent 'compellingness' of well-designed games the tendency of engaging game mechanics to generate voluntary participation even in the absence of explicit invitation. The demonstration had, in effect, done more than explain the game; it had recruited students' motivation before the practice even began.

3.2 Student Engagement and Concentration during the Practice Phase

The practice phase constituted the observational core of the session and the point at which student responses were most behaviourally visible. Once students gained direct access to the games whether the verse-completion cards, the diacritical spinner, or the Snakes and Ladders format their level of involvement increased dramatically relative to what their teachers had characterised as typical IRE classroom behaviour. What was particularly striking was the breadth of this engagement: students who were routinely described by local teachers as passive or reluctant participants in conventional lessons were among the most animated and persistent players observed during this phase.

The quality of engagement, moreover, was not merely superficial. Students engaged in substantive discussions about religious content debating the correct vocalisation of hijaiyah letter-diacritic combinations, reconstructing verse sequences collaboratively, and challenging one another's responses in the Islamic Snakes and Ladders game. Local teachers noted that these forms of student-initiated dialogue about IRE content were uncommon in their regular classes. This observation aligns with Csikszentmihalyi's (1990) concept of flow the state of deep, voluntary absorption that emerges when the challenge level of an activity is well-matched to participants' current ability. The game designs, by embedding challenge within an enjoyable structure, appeared to create conditions for this optimal engagement state to arise organically.

The concentration sustained by students across the practice phase was described by the accompanying IRE teacher as the highest they had witnessed in that class during religious instruction. The teacher's observation corroborates Sailer and Homner's (2020) meta-analytic finding that gamified learning environments produce reliably stronger gains in cognitive engagement relative to conventional approaches and that these gains can manifest meaningfully even within relatively brief interventions. That such a shift occurred within a single session suggests that the quality of game design may matter more than duration in producing initial engagement effects.

3.3 Accelerated Comprehension and the Cognitive Mechanisms behind It

Among the most striking outcomes noted by observing teachers was the apparent speed with which students grasped and retained content presented through game play, compared to typical timelines for the same material under conventional instruction. The Verse Completion Card Game was a particularly telling case: students who had previously struggled with verse memorisation demonstrated confident, accurate recall within the practice session itself a level of performance that their teacher estimated would ordinarily require multiple separate lessons using traditional repetition-based methods.

Several converging cognitive mechanisms help account for this pattern. The first is the provision of rich, multidimensional context. In conventional memorisation tasks, Quranic verses or Arabic vocabulary items are often encountered as decontextualised items on a list. The games, by contrast, embedded the same content within a social, emotional, and competitive context making each encounter with a piece of Islamic knowledge more episodically distinctive and thus more memorable. Research in educational neuroscience supports the observation that material acquired in emotionally positive, social environments is processed at deeper semantic levels and is stored more durably in long-term memory (Budiman, 2021).

The second mechanism is voluntary repetition. One of the persistent challenges in rote memorisation tasks is the aversive quality of repetition itself – students may resist repeating information they already feel they know, or disengage when the repetition feels mechanical. Game mechanics dissolve this resistance: in competitive games, students are intrinsically motivated to rehearse content because their performance in the game depends on it. The repetition that might have felt tedious in a conventional context becomes purposeful and even enjoyable when embedded in game play.

The third mechanism is peer-mediated instruction. In the group game formats, students who grasped content more quickly were frequently observed providing informal explanations to their teammates – a behaviour that emerged not from teacher direction but from the logic of the game itself, in which team success depended on shared understanding. This process, described in educational research as elaborative interrogation or peer teaching, is well documented as a powerful accelerant for learning on both sides of the exchange (Yusuf et al., 2021). The student who explains a concept consolidates their own understanding through the act of articulation; the student who receives the explanation benefits from a peer-adapted, contextually grounded account. Together, these three mechanisms – rich contextualisation, motivated repetition, and organic peer instruction – constitute a mutually reinforcing system that educational games, when thoughtfully designed, can reliably activate.

3.4 Critical Reflection: Possibilities and Constraints

Reading these findings with appropriate critical caution requires acknowledging several limiting factors that accompany a single-session intervention design. The most significant of these is the difficulty of disentangling substantive learning gains from the novelty effect – the tendency of any sufficiently unfamiliar stimulus to generate elevated engagement simply by virtue of its newness (Sailer & Homner, 2020). While the quality of student involvement observed during the practice

phase particularly the depth of discussion and the spontaneity of peer instruction suggests that what occurred exceeded a purely novelty-driven response, this cannot be confirmed without longitudinal follow-up data.

A related limitation concerns the scope of outcomes that a single-session study can meaningfully capture. Durable shifts in students' academic performance, sustained changes in their motivation toward IRE, and the long-term retention of content encountered through games would all require extended study designs to assess. The most defensible characterisation of this study is as an evidence-informed feasibility investigation one that demonstrates the acceptability and immediate pedagogical plausibility of the game-based approach in this context, rather than its confirmed effectiveness over time. These are different but complementary types of evidence, and both are necessary before scaling recommendations can be responsibly made.

The sustainability of the approach beyond the PKM-I team's presence also warrants honest consideration. Whether local IRE teachers have both the desire and the practical capacity to continue using educational games after the Indonesian facilitators have returned home is not something this study can determine. Widodo and Kusuma (2023) caution that short-duration international partnership programs frequently produce promising initial outcomes that fail to translate into lasting institutional change without sustained external support or robust internal capacity-building components. This underlines the importance of embedding teacher professional development not just student-facing activity within future iterations of PKM-I interventions.

Comparative evidence from analogous programs in neighbouring countries reinforces these cautions while also pointing toward what success can look like when enabling conditions are in place. Malaysia's School Improvement Specialist Coach (SISC+) initiative has worked to integrate technology-supported learning into Islamic education since 2014, with outcomes that varied markedly depending on the depth of facilitator training and the readiness of school infrastructure (Ahmad & Zulkifli, 2023). In Bangladesh, the Bridge Institute's experimental use of educational games in madrasah settings encountered community resistance rooted in concerns that instructional modernisation might dilute doctrinal fidelity (Islam & Rahman, 2022). Across both cases, the evidence suggests that the quality of pedagogical design, while necessary, is not sufficient: the receptivity of the sociocultural ecosystem into which an innovation is introduced matters just as much.

4. CONCLUSION

This study has documented and analysed the implementation of Islamic educational games within the PKM-I International Community Service Program at Thammislam Foundation School, Southern Thailand. Operating within the constraints of a single intensive session structured around a three-phase model explanation, demonstration, and hands-on practice the intervention nonetheless yielded substantive and pedagogically meaningful findings about what becomes possible when game-based approaches are introduced into an IRE classroom.

The most prominent finding is the marked transformation in classroom dynamics that accompanied each transition between phases. Student hesitation during the explanatory phase gave way to active curiosity during the demonstration, and that curiosity crystallised into high-intensity, self-sustaining engagement during the practice phase. Local teachers' observations that students' concentration and apparent pace of learning during the game session exceeded what they had previously encountered in conventional IRE instruction carry considerable weight, given those teachers' cumulative familiarity with their students' typical performance. The cognitive mechanisms underlying this rich contextualisation, intrinsically motivated repetition, and organic peer teaching provide a theoretically grounded explanation for why educational games can accelerate comprehension in ways that conventional methods often cannot.

On the basis of these findings, several recommendations are offered to guide future practice and research. First, future iterations of PKM-I and analogous international education partnership programs should incorporate structured capacity-transfer components directed at local teaching staff not as an optional supplement but as a core design requirement. Unless local educators are equipped to continue using game-based approaches independently, the benefits of short-duration interventions are unlikely to outlast the departure of the facilitating team. Second, curriculum developers and Islamic education policymakers across the region should consider formalising educational game integration as a recognised and supported pedagogical modality in IRE, rather than treating it as an experimental or peripheral option. Third, future research should pursue longer study designs with pre- and post-intervention measurement periods, comparative groups, and retention follow-up assessments all of which are necessary to move from feasibility evidence toward more conclusive effectiveness claims. Fourth, sustainable progress in this space will require dedicated collaboration between Islamic scholars, game designers, and IRE educators to ensure that the games produced are not only pedagogically sophisticated but also doctrinally sound and culturally resonant with the communities they serve.

The experience at Thammislam Foundation School ultimately affirms that the perceived tension between serious religious education and playful, interactive learning is not irresolvable it is, rather, a design challenge. When games are built with care, grounded in Islamic values, and introduced with cultural sensitivity, they do not diminish the depth of religious instruction: they extend its reach, particularly to students who have historically remained at the margins of conventional IRE pedagogy.

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CONFLICT OF INTERESTS

The authors declare that there are no conflicts of interest regarding the publication of this article. The authors have no financial, commercial, legal, or professional relationships that could have influenced the design, implementation, analysis, interpretation, or reporting of this study.

REFERENCES

- Ahmad, Z., & Zulkifli, M. H. (2023). Technology integration in Islamic education: Lessons from Malaysia's SISC+ programme. *Journal of Islamic Education Research*, 8(1), 45–62. <https://doi.org/10.15575/jier.v8i1.1234>
- Alabbasi, D. (2017). Exploring graduate students' perspectives towards using gamification techniques in online learning. *Turkish Online Journal of Distance Education*, 18(3), 180–196. <https://doi.org/10.17718/tojde.328951>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Budiman, A. (2021). Efektivitas board game sirah nabawiyah terhadap retensi memori santri di pondok pesantren [Effectiveness of prophetic biography board games on memory retention among pesantren students]. *Jurnal Pendidikan Islam*, 10(2), 112–128. <https://doi.org/10.14421/jpi.2021.102.112-128>
- Charoenwong, C., & Thepsatitporn, S. (2021). Islamic private schools in Southern Thailand: Between tradition and modernity. *Asian Education and Development Studies*, 10(4), 527–540. <https://doi.org/10.1108/AEDS-03-2020-0052>
- Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal experience*. Harper & Row. <https://www.harpercollins.com/products/flow-mihaly-csikszentmihalyi>
- Hidayat, R., & Syarifudin, A. (2022). Problematika pembelajaran PAI di era digital: Studi kasus pada sekolah menengah pertama [Challenges in Islamic religious education in the digital era: A case study at junior secondary schools]. *Jurnal Tarbiyatuna*, 13(1), 33–50. <https://doi.org/10.31603/tarbiyatuna.v13i1.6234>
- Huang, W. H., & Soman, D. (2013). *Gamification of education* (Research Report Series: Behavioural Economics in Action). University of Toronto. <https://www.rotman.utoronto.ca/FacultyAndResearch/ResearchCentres/BehaviouralEconomicsInAction>
- Islam, M. R., & Rahman, M. A. (2022). Challenges and prospects of educational games in Bangladesh madrasas. *International Journal of Islamic Education*, 4(2), 88–104. <https://doi.org/10.35516/edu.v5i1i.1567>
- Kemendikbudristek. (2022). *Kurikulum Merdeka: Panduan implementasi untuk satuan pendidikan* [Freedom to Learn Curriculum: Implementation guide for educational units]. Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia. <https://kurikulum.kemdikbud.go.id>
- Liow, J. C. (2020). *Islam and education in Southeast Asia: Exploring the dual system*. Palgrave Macmillan. <https://doi.org/10.1007/978-3-030-37802-7>
- Mahdum, M., Hadriana, H., & Safriani, M. (2020). Exploring teacher and student perceptions on the use of IT media in learning at schools in Pekanbaru, Riau, Indonesia. *Journal of Asia TEFL*, 17(1), 58–73. <https://doi.org/10.18823/asiatefl.2020.17.1.4.58>
- McNiff, J. (2022). *Action research: All you need to know* (3rd ed.). SAGE Publications. <https://us.sagepub.com/en-us/nam/action-research/book270855>

- Millis, B. J. (Ed.). (2010). *Cooperative learning in higher education: Across the disciplines, across the academy*. Stylus Publishing. <https://styluspub.presswarehouse.com/browse/book/9781579224912/Cooperative-Learning-in-Higher-Education>
- Prensky, M. (2001). *Digital game-based learning*. McGraw-Hill. <https://marcprensky.com/writing/Prensky%20-%20Ch1-Digital%20Game-Based%20Learning.pdf>
- Sailer, M., & Homner, L. (2020). The gamification of learning: A meta-analysis. *Educational Psychology Review*, 32(1), 77–112. <https://doi.org/10.1007/s10648-019-09498-w>
- Subhash, S., & Cudney, E. A. (2018). Gamified learning in higher education: A systematic review of the literature. *Computers in Human Behavior*, 87, 192–206. <https://doi.org/10.1016/j.chb.2018.05.028>
- Teichler, U. (2017). Internationalisation trends in higher education and the changing role of international student mobility. *Journal of International Mobility*, 5(1), 177–216. <https://doi.org/10.3917/jim.005.0177>
- Werbach, K., & Hunter, D. (2012). *For the win: How game thinking can revolutionize your business*. Wharton Digital Press. <https://wdp.wharton.upenn.edu/book/for-the-win/>
- Wertsch, J. V. (2020). *Voices of the mind: A sociocultural approach to mediated action* (Reprint ed.). Harvard University Press. <https://www.hup.harvard.edu/catalog.php?isbn=9780674943049>
- Widodo, H. P., & Kusuma, I. P. I. (2023). Pre-service teachers' professional development through international teaching practicum: Insights from Indonesian university students. *Asia-Pacific Journal of Teacher Education*, 51(3), 289–304. <https://doi.org/10.1080/1359866X.2022.2145892>
- Yusuf, M., Nuraini, S., & Saepudin, A. (2021). Pengembangan aplikasi game edukatif berbasis Android untuk meningkatkan hasil belajar fiqh ibadah siswa MTs [Development of an Android-based educational game application to improve fiqh learning outcomes in junior secondary madrasah students]. *Jurnal Teknologi Pendidikan Islam*, 5(2), 67–84. <https://doi.org/10.32478/jtpi.v5i2.678>