



**TOWARD A DIGITAL RELIGIOUS PEDAGOGY FOR GENERATION ALPHA:
EXPLORING THE INTERSECTION OF ARTIFICIAL INTELLIGENCE, MOBILE
LEARNING, AND RELIGIOUS MODERATION**

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ABSTRAK

Perubahan lanskap pendidikan pada era digital menghadirkan perjumpaan yang semakin intens antara teknologi, proses pembelajaran, dan pembentukan karakter peserta didik. Dalam konteks Pendidikan Agama Islam (PAI), kemunculan *Artificial Intelligence* (AI) dan *mobile learning* membuka peluang baru untuk memperluas pengalaman belajar Generasi Alpha yang sejak awal kehidupannya telah berinteraksi dengan berbagai perangkat digital. Di sisi lain, kebutuhan untuk menanamkan nilai-nilai moderasi beragama menjadi semakin penting seiring meningkatnya kompleksitas informasi yang diakses peserta didik melalui ruang digital. Meskipun berbagai penelitian mengenai AI, *mobile learning*, moderasi beragama, dan pendidikan Islam terus berkembang, keterhubungan antarkajian tersebut masih belum tergambar secara utuh dalam satu kerangka konseptual. Kajian ini disusun melalui penelaahan terhadap 25 artikel yang dipilih dari 76 publikasi yang diperoleh melalui basis data Scopus, Google Scholar, SINTA, dan GARUDA. Literatur yang terpilih kemudian dianalisis melalui pengelompokan tema, perbandingan temuan, dan sintesis konseptual untuk memperoleh gambaran yang lebih komprehensif mengenai arah perkembangan penelitian. Hasil kajian memperlihatkan bahwa AI lebih banyak dibahas dalam kaitannya dengan personalisasi pembelajaran, efisiensi proses pendidikan, dan inovasi instruksional. Sementara itu, *mobile learning* cenderung diposisikan sebagai sarana peningkatan akses belajar, sedangkan moderasi beragama lebih sering dikaji dalam perspektif penguatan karakter, toleransi, dan nilai inklusivitas. Keterhubungan antara ketiga bidang tersebut masih relatif terbatas, sehingga diperlukan pengembangan pedagogi keagamaan digital yang mampu mempertemukan inovasi teknologi dengan pembentukan karakter moderat sebagai kebutuhan pendidikan Generasi Alpha pada masa mendatang.

Kata Kunci: *Artificial Intelligence, Mobile Learning, Pendidikan Agama Islam, Moderasi Beragama, Generasi Alpha*

ABSTRACT

The changing landscape of education in the digital era has intensified the interaction between technology, learning processes, and character development. Within the context of Islamic Religious Education (IRE), the emergence of *Artificial Intelligence* (AI) and *mobile learning* has created new opportunities to enrich the learning experiences of Generation Alpha, a cohort that has grown up surrounded by digital technologies from an early age. At the same time, fostering religious moderation has become increasingly important as students are exposed to more complex and diverse information through digital environments. Although studies on AI, *mobile learning*, religious moderation, and Islamic education have expanded considerably, the connections among these areas remain fragmented and have yet to be integrated into a coherent conceptual framework. This review was developed through an examination of 25 articles



selected from 76 publications retrieved from Scopus, Google Scholar, SINTA, and GARUDA databases. The selected literature was analyzed through thematic classification, comparative examination of findings, and conceptual synthesis to obtain a comprehensive understanding of current research developments. The results indicate that AI-related studies primarily focus on personalized learning, educational efficiency, and instructional innovation. Meanwhile, *mobile learning* is generally positioned as a means of expanding learning access, whereas religious moderation is predominantly discussed in relation to character development, tolerance, and inclusive values. The limited integration among these three domains highlights the need for the development of a digital religious pedagogy capable of connecting technological innovation with the cultivation of moderate character as a response to the educational needs of Generation Alpha in the future.

Keywords: *Artificial Intelligence, Mobile Learning, Islamic Religious Education, Religious Moderation, Generation Alpha*

PENDAHULUAN

Educational debates concerning digital transformation have gradually shifted from questions of access toward questions of direction. The widespread presence of intelligent technologies in schools no longer raises concerns about whether digital tools should be incorporated into learning environments, but rather about the kinds of educational values that accompany their integration. This issue becomes particularly relevant within Islamic Religious Education (IRE), where technological innovation intersects with efforts to cultivate ethical, spiritual, and social dispositions among learners. Contemporary discussions on technology-enhanced Islamic education increasingly portray digital platforms not merely as instructional media but as spaces where religious understanding is negotiated and reconstructed in new ways (Zahrah et al., 2025).

Amid these transformations, a generation of learners has emerged whose everyday experiences are inseparable from digital ecosystems. Generation Alpha encounters information, communication, and knowledge production through screens long before entering formal schooling. Such conditions reshape expectations toward learning and challenge educational models designed for previous generations. Observations within Indonesian educational settings suggest that digital learning resources have become integral to students' engagement with curricular content, including religious subjects (Arfika et al., 2023). Responding to these shifts, adaptive educational models supported by artificial intelligence have been proposed as mechanisms capable of aligning instructional experiences with individual learner characteristics and developmental trajectories (Hamdun et al., 2025).

The increasing visibility of Artificial Intelligence in education introduces possibilities that extend beyond efficiency and automation. Rather than functioning solely as a technical instrument, AI is beginning to influence how learning pathways are structured, how feedback is delivered, and how educational decisions are made. In elementary education, its application has been associated with enhanced instructional productivity and more responsive learning environments (Yulianti et al., 2024). Parallel developments can be observed in mobile learning initiatives, where the portability of digital devices enables continuous interaction with educational content across different contexts and times. Within Islamic Religious Education, mobile-based applications have opened alternative pathways for accessing religious materials beyond classroom boundaries (Antoni, 2023).

Yet the expansion of digital learning environments introduces questions that cannot be addressed through technological perspectives alone. Educational success is rarely measured



exclusively by cognitive achievement, particularly within religious education where attitudes, values, and character formation remain central concerns. Indonesia's social diversity places additional emphasis on the cultivation of religious moderation as a civic and educational priority. Efforts undertaken at the elementary school level demonstrate that moderate religious attitudes are not spontaneously acquired but require deliberate educational intervention from an early stage of development (Lessy et al., 2022). Similar observations appear in studies emphasizing the strategic contribution of Islamic Religious Education to nurturing inclusive perspectives and reducing tendencies toward exclusivism among students (Agustina et al., 2025).

What complicates this landscape is the fact that the same technologies capable of expanding educational opportunities may simultaneously facilitate exposure to problematic content. Digital environments are characterized by algorithmic filtering, information abundance, and varying levels of content credibility. Under such conditions, students require more than technical competence; they need the capacity to evaluate information critically and responsibly. Discussions surrounding digital religious literacy increasingly connect these competencies with the development of balanced religious perspectives in online spaces (Agusta, 2024). Meanwhile, concerns regarding digital security have intensified as educators confront the possibility that online platforms may inadvertently expose young users to intolerant or radical narratives if appropriate safeguards are absent (Azzahra et al., 2025).

The emergence of AI further amplifies these concerns. While intelligent systems offer opportunities for personalization and educational innovation, they also introduce new forms of dependency, bias, and vulnerability. For Generation Alpha, whose interaction with digital technologies begins at an exceptionally early age, these issues possess long-term implications extending beyond academic performance. Recent analyses of AI adoption within Indonesian education have drawn attention to unintended consequences that may influence learners' critical thinking processes, social behavior, and engagement with knowledge (Sugihyono, 2025). Consequently, discussions regarding technological integration in education increasingly require ethical and developmental considerations alongside pedagogical ones.

Although scholarly interest in these themes continues to expand, the resulting body of knowledge remains fragmented. Investigations of AI in Islamic education predominantly concentrate on technological support systems and educational services (Musolin et al., 2024). Research addressing religious moderation generally focuses on instructional approaches, policy implementation, or value transmission within educational institutions (Hanif et al., 2025). Mobile learning studies, on the other hand, commonly examine accessibility and learning effectiveness, including its contribution to moderation-oriented education (Yulianti & Sultoni, 2022). Viewed collectively, these streams of research reveal a pattern of parallel development rather than genuine conceptual convergence. The relationship among AI, mobile learning, Islamic Religious Education, moderation values, and Generation Alpha therefore remains insufficiently theorized and empirically mapped, even though integrating these elements is essential for preparing digitally native learners to use technology responsibly while developing inclusive religious perspectives.

An additional limitation concerns the absence of a comprehensive understanding of how this interdisciplinary field is evolving at the global level. Existing bibliometric investigations within Islamic education have primarily documented publication trends associated with digital learning practices without examining the broader intellectual configuration emerging around artificial intelligence and moderation-related themes (Suyatno et al., 2025). At the same time, studies conducted within the wider domain of educational technology demonstrate that



bibliometric approaches are capable of uncovering thematic trajectories, conceptual shifts, and future research opportunities that are often invisible in conventional literature reviews (Chang et al., 2023). Against this backdrop, the present study employs Bibliometrix and VOSviewer to conduct a predictive bibliometric analysis of AI-based mobile learning research in Islamic Religious Education, because identifying the connections among these themes is important for developing balanced digital religious education for Generation Alpha. By tracing thematic evolution, intellectual structures, and emerging research directions, this study seeks to illuminate how discussions concerning technology, religious learning, moderation, and Generation Alpha are converging within contemporary scholarship. Such an approach offers a foundation for developing future educational frameworks that integrate technological innovation with the cultivation of inclusive religious values.

METODE PENELITIAN

The study was conducted through a sequence of interconnected stages designed to ensure a systematic and transparent bibliometric investigation. The process began with data retrieval from selected academic databases, followed by data cleaning and duplicate removal. Subsequently, the remaining records underwent screening and eligibility assessment based on predefined inclusion criteria. The final stages consisted of bibliometric processing, thematic mapping, interpretation of intellectual structures, and the identification of emerging research directions related to Artificial Intelligence, Mobile Learning, Islamic Religious Education, religious moderation, and Generation Alpha.

The collection stage generated 76 publications originating from different databases, including Scopus, Google Scholar, SINTA, and GARUDA. Following the retrieval process, all records were carefully examined to identify duplicated entries and inconsistencies across databases. This procedure resulted in the exclusion of 15 overlapping publications, thereby producing a cleaner dataset for subsequent analysis. Establishing a refined dataset at this stage was essential to improve the accuracy and reliability of the bibliometric mapping process.

After the cleaning process, the remaining publications were subjected to a screening and eligibility assessment. Titles, abstracts, and keywords were reviewed to determine their relevance to the central themes of this study. Publications that focused on unrelated educational topics or lacked a clear connection with the investigated concepts were excluded from further consideration. As a result, the dataset was reduced from 61 to 37 articles, which were then examined through a full-text review to evaluate their methodological and conceptual suitability.

The final analytical stage focused on bibliometric processing and thematic interpretation. Bibliometrix was employed to organize publication metadata and identify publication trends, while VOSviewer was utilized to visualize conceptual relationships, thematic clusters, and intellectual structures within the field. The findings obtained from these analyses were subsequently interpreted to reveal research trajectories, emerging themes, and underexplored areas. Through this sequential procedure, the study aimed to provide a comprehensive understanding of how AI, mobile learning, Islamic Religious Education, religious moderation, and Generation Alpha are connected within contemporary educational scholarship.

HASIL DAN PEMBAHASAN

Result

1. Characteristics of the Reviewed Studies

The initial stage of analysis was conducted to identify the general characteristics of the literature included in this review. From the selection process, 25 articles fulfilled all predetermined inclusion criteria and were subsequently examined in greater depth. The reviewed publications represented diverse perspectives regarding Artificial Intelligence (AI), Mobile Learning, Islamic Religious Education, religious moderation, and Generation Alpha. Variations were also observed in the thematic orientation of the studies, indicating that the relationship among these topics has been explored from multiple educational viewpoints. The distribution of reviewed studies according to their primary thematic focus is presented in Table 1.

Table 1. Distribution of Reviewed Studies by Research Theme (n = 25)

Research Theme	Number of Studies	Percentage (%)
Artificial Intelligence in Education	7	28
Mobile Learning and Digital Learning	5	20
Religious Moderation in Education	7	28
Generation Alpha and Digital Literacy	4	16
Bibliometric and Trend Studies	2	8
Total	25	100

Table 1 indicates that the reviewed literature was distributed across five major thematic areas. Studies discussing Artificial Intelligence in Education and Religious Moderation in Education constituted the largest proportion of the dataset, each representing 28% of the reviewed publications. Research concerning Mobile Learning and Digital Learning accounted for 20% of the articles, while Generation Alpha and Digital Literacy represented 16%. The smallest category consisted of bibliometric and trend-related investigations. The distribution reported in Table 1 demonstrates that technological innovation and value-oriented educational issues have both received considerable scholarly attention within the selected literature.

2. Cross-Thematic Synthesis of the Reviewed Literature

Following the identification of general characteristics, a thematic synthesis was conducted to examine the dominant focus and recurring patterns emerging from the reviewed studies. The synthesis process involved comparing research objectives, educational contexts, technological orientations, and principal findings reported in each publication. Through this procedure, several common tendencies and areas of concentration became apparent. The results of the cross-thematic synthesis are summarized in Table 2.

Table 2. Cross-Thematic Synthesis of Reviewed Literature

Theme	Representative References	Dominant Findings	Identified Limitation
Artificial Intelligence in Education	Tanjung & Suteki (2024); Musolin et al. (2024); Hamdun et al. (2025); Azwar et al. (2025); Faizudin et al. (2025); Fitri (2025); Wang (2026)	AI supports personalization, adaptive learning, and instructional innovation	Limited discussion of religious moderation outcomes

Mobile Learning and Digital Learning	Antoni (2023); Yulianti & Sultoni (2022); Authar et al. (2025); Zahrah et al. (2025); Hafizah (2023)	Mobile platforms expand learning accessibility and flexibility	AI integration remains inconsistent
Religious Moderation in Education	Lessy et al. (2022); Alwan et al. (2024); Agustina et al. (2025); Hanif et al. (2025); Putri et al. (2026); Agusta (2024); Mahmududdin et al. (2025)	Focus on tolerance, inclusivity, and anti-radicalism values	Technology utilization is relatively limited
Generation Alpha and Digital Literacy	Arfika et al. (2023); Mulyadi (2024); Swargiary (2024); Sugihyono (2025)	Emphasis on digital behavior and literacy competencies	Connections with Islamic education remain underexplored
Bibliometric and Trend Studies	Suyatno et al. (2025); Chang et al. (2023)	Mapping of research development and thematic evolution	Limited pedagogical implications

Table 2 reveals that each thematic area developed within a relatively distinct scholarly trajectory. Publications focusing on Artificial Intelligence generally concentrated on adaptive learning systems, instructional efficiency, and educational innovation. In contrast, studies addressing religious moderation predominantly discussed character formation, tolerance, inclusivity, and preventive efforts against radicalism. Mobile Learning studies largely emphasized accessibility and flexibility in learning environments, whereas investigations concerning Generation Alpha highlighted learner characteristics and digital literacy competencies. The synthesis further shows that only a limited number of studies simultaneously addressed technological innovation, Islamic education, and religious moderation within a unified conceptual framework.

3. Research Gaps and Emerging Directions

To identify potential directions for future inquiry, the reviewed studies were examined from the perspective of thematic integration. This stage focused on determining which relationships among AI, Mobile Learning, Islamic Religious Education, religious moderation, and Generation Alpha had received substantial scholarly attention and which areas remained insufficiently explored. The resulting research gap matrix is presented in Table 3.

Table 3. Research Gap Matrix Identified from the Reviewed Literature

Research Component	Extensively Investigated	Limited Investigation
Artificial Intelligence in Education	✓	
Mobile Learning in Education	✓	
Religious Moderation in Education	✓	
Generation Alpha and Digital Literacy	✓	
AI and Mobile Learning Integration	✓	

AI and Religious Moderation	✓
Mobile Learning and Religious Moderation	✓
AI, Mobile Learning, and Islamic Religious Education	✓
AI, Mobile Learning, Religious Moderation, and Generation Alpha	✓

Table 3 demonstrates that the existing literature has extensively examined individual components related to technological innovation and educational development. Research discussing Artificial Intelligence, Mobile Learning, religious moderation, and digital literacy has grown across different educational contexts. However, studies investigating the interaction among these components remain relatively scarce. In particular, publications that simultaneously address AI-supported Mobile Learning, Islamic Religious Education, religious moderation, and Generation Alpha were identified only in limited forms and often discussed these variables separately. This pattern indicates that opportunities remain open for developing more integrated conceptual and pedagogical frameworks that connect technological advancement with value-oriented religious education in contemporary digital learning environments.

Discussion

The literature reviewed in this study illustrates that discussions surrounding digital transformation in Islamic education are no longer limited to questions of technological adoption. A broader shift appears to be taking place, where educational technology increasingly intersects with concerns related to values, identity formation, and learner development. This tendency suggests that contemporary educational discourse is gradually moving beyond the traditional assumption that technological innovation automatically leads to educational improvement. Studies by Tanjung and Suteki (2024), Yahya (2025), and Akhyar et al. (2025) similarly describe the growing presence of digital systems within Islamic educational settings. Nevertheless, the present synthesis indicates that the central issue is not merely the availability of technology, but how technological ecosystems can be aligned with the normative objectives of Islamic education in increasingly complex digital environments.

An interesting pattern emerging from the reviewed literature concerns the dominant position of artificial intelligence within recent educational discussions. The rapid expansion of AI-related studies reflects a growing expectation that learning systems should be capable of responding to individual differences, learning preferences, and educational needs. Musolin et al. (2024), Hamdun et al. (2025), Faizudin et al. (2025), and Wang (2026) emphasize the potential of intelligent systems to support adaptive learning processes and improve educational effectiveness. However, a closer examination reveals that most scholarly attention remains concentrated on instructional optimization rather than the broader formation of learners' moral and social dispositions. In this regard, the current findings differ from the dominant narrative in AI literature by suggesting that technological sophistication alone does not necessarily correspond with the cultivation of religious moderation or ethical awareness.

The same tendency can be observed in studies addressing the integration of artificial intelligence within Islamic educational contexts. Existing scholarship frequently highlights efficiency, personalization, and innovation as the primary contributions of AI to educational



practice. Such perspectives are visible in the works of Fitri (2025), Azwar et al. (2025), and Tanjung and Suteki (2024), which portray AI as a promising instrument for enriching learning experiences. Yet the reviewed literature provides limited discussion regarding how algorithm-driven learning environments influence students' perspectives toward diversity, inclusivity, and social cohesion. This gap becomes particularly significant when considering that Islamic education is not solely concerned with knowledge acquisition but also with the development of attitudes and values. Consequently, the challenge facing future educational innovation lies in connecting technological capability with the broader moral purposes of education.

Alongside the growing interest in artificial intelligence, mobile learning continues to occupy a strategic position within discussions of educational accessibility. The reviewed studies consistently describe mobile platforms as mechanisms that extend learning opportunities beyond conventional classroom boundaries. Antoni (2023), Authar et al. (2025), and Yulianti and Sultoni (2022) demonstrate how mobile technologies facilitate flexible access to educational resources and support continuity in learning activities. Nevertheless, the significance of mobile learning may extend beyond its technical function as a delivery medium. The present review suggests that mobile environments increasingly operate as social and cultural spaces where learners encounter diverse forms of information, interaction, and influence. As a result, the educational implications of mobile learning cannot be fully understood through accessibility indicators alone.

The discussion of religious moderation presents a contrasting orientation within the literature. Unlike technology-focused studies that prioritize innovation and efficiency, moderation-oriented research tends to focus on social harmony, inclusivity, and the prevention of intolerance. This perspective is evident in studies conducted by Lessy et al. (2022), Alwan et al. (2024), Agustina et al. (2025), Putri et al. (2026), and Mahmududdin et al. (2025), all of which emphasize the importance of strengthening tolerant attitudes through educational interventions. While these studies contribute substantially to understanding value formation, they often position technological developments as external factors rather than integral components of the educational process. Consequently, the literature reveals two parallel conversations: one concerned with technological advancement and another concerned with character development. The limited interaction between these conversations represents one of the most significant conceptual challenges identified in this review.

A related issue emerges from the growing attention given to Generation Alpha. The reviewed literature portrays this generation as learners whose experiences are shaped by continuous engagement with digital technologies from an early age. Hafizah (2023), Arfika et al. (2023), and Swargiary (2024) describe how digital environments influence cognitive, social, and behavioral development, while Mulyadi (2024) highlights the importance of digital literacy in supporting meaningful educational experiences. At the same time, these studies indicate that technological familiarity should not automatically be interpreted as educational readiness. The ability to access information rapidly does not necessarily guarantee the capacity to evaluate information critically or to navigate ideological diversity responsibly. This observation reinforces the argument that educational responses to Generation Alpha require approaches that address both technological competence and value-oriented development.

Another noteworthy finding concerns the emergence of critical perspectives toward educational technology. Although many publications emphasize the benefits associated with digital learning environments, several studies draw attention to potential risks accompanying intensive technological exposure. Sugihyono (2025), for example, raises concerns regarding the unintended consequences of AI implementation, particularly in relation to learner behavior and



value formation. Similar concerns can be inferred from discussions on digital literacy and anti-radicalism education, which recognize that access to digital information may also increase exposure to misinformation and ideological extremism. This perspective differs from more optimistic accounts that primarily highlight technological opportunities. The coexistence of these contrasting viewpoints suggests that future educational policies should balance innovation with critical awareness rather than treating technology as an inherently positive force.

Taken together, the reviewed literature points toward a conceptual space that remains insufficiently explored within current scholarship. Artificial intelligence, mobile learning, religious moderation, and the characteristics of Generation Alpha have each received growing scholarly attention, yet they are rarely examined as interconnected components of a single educational framework. This observation differs from previous mapping studies such as those conducted by Hasan and Juhannis (2024) and Azwar et al. (2025), which primarily document publication trends and thematic growth. The present review instead highlights the fragmentation that persists across these themes and suggests the need for stronger conceptual integration. From this perspective, the future development of Islamic education may depend not only on technological advancement or value transmission independently, but on the ability to design learning ecosystems in which both dimensions operate in a mutually reinforcing manner.

KESIMPULAN

This study examined the development of research at the intersection of Artificial Intelligence, Mobile Learning, Islamic Religious Education, religious moderation, and Generation Alpha. The findings reveal that these themes have experienced significant growth but continue to evolve largely within separate research streams. Studies on Artificial Intelligence predominantly emphasize personalization and learning optimization, whereas research on religious moderation focuses on character development, tolerance, and social cohesion. Meanwhile, Mobile Learning is mainly discussed as a tool for improving learning accessibility, with limited attention given to its role in fostering moderation values within Islamic educational contexts. These findings indicate that the integration of technological innovation and value-oriented religious education remains an underexplored area in contemporary scholarship.

The results imply the need for a more holistic educational framework capable of connecting digital technologies with the development of inclusive religious attitudes among Generation Alpha learners. In this regard, Digital Religious Pedagogy emerges as a promising conceptual direction for aligning technological advancement with the broader educational goals of Islamic Religious Education. Future studies are encouraged to move beyond conceptual discussions by conducting empirical, experimental, and design-based investigations that evaluate the effectiveness of AI-supported mobile learning environments in promoting religious moderation, ethical digital engagement, and character formation. Such efforts may contribute to the development of educational models that are both technologically responsive and socially meaningful in the digital era.

DAFTAR PUSTAKA

- Agusta, E. S. (2024). Pemanfaatan literasi digital keagamaan dalam menumbuhkan sikap moderasi beragama siswa. *Jurnal Lingkar Mutu Pendidikan*, 21(1), 1–9. <https://doi.org/10.54124/jlmp.v21i1.125>
- Agustina, N., Zaini, R., Hotimah, F., & Gajah, N. B. (2025). Penguatan moderasi beragama melalui pembelajaran Pendidikan Agama Islam di sekolah dasar. *Ahdāf: Jurnal Pendidikan Agama Islam*, 3(1), 36–48. <https://doi.org/10.47766/ahdf.v3i1.5071>
- Akhyar, M., Deliani, N., & Khadijah, K. (2025). The importance of religious education in the digital era. *International Journal of Islamic Educational Research*, 2(1), 15–30. <https://doi.org/10.61132/ijier.v2i1.146>
- Alwan, M., Husairi, H., & Munir, M. (2024). Strategi penguatan moderasi beragama pada sekolah dasar. *Alifbata: Jurnal Pendidikan Dasar*, 4(1), 32–43. <https://doi.org/10.51700/alifbata.v4i1.652>
- Antoni, A. (2023). Konsep aplikasi mobile pembelajaran dan media sosial pada pembelajaran Pendidikan Agama Islam. *Jurnal Cendekia: Media Komunikasi Penelitian dan Pengembangan Pendidikan Islam*, 15(2), 374–384. <https://doi.org/10.37850/cendekia.v15i02.470>
- Arfika, N., Adillah, R., Purba, F. P. Y., & Yus, A. (2023). Analisis media belajar digital di Generasi Alpha era Society 5.0 mendukung Kurikulum Merdeka. *Jurnal Generasi Ceria Indonesia*, 1(2), 84–88. <https://doi.org/10.47709/geci.v1i2.3177>
- Authar, T., Rahmati, R., & Jannah, M. (2025). Konsep mobile learning dan contoh aplikasi-aplikasi dalam pembelajaran PAI: Analisis systematic literature review. *Jurnal Mudarrisuna: Media Kajian Pendidikan Agama Islam*, 15(3), 658–675. <https://jurnal.ar-raniry.ac.id/index.php/mudarrisuna/article/view/28086>
- Azzahra, Z., Larasati, H., Pramudina, A., & Hudi, I. (2025). Literasi keamanan digital menangkal infiltrasi radikalisme pada siswa SMP dan SMA Panti Asuhan As Salaam Nur Hidayah. *Bridge: Jurnal Pengabdian Kepada Masyarakat*, 1(1), 27–32. <https://www.elyquests.com/index.php/Bjpkm/article/view/29>
- Azwar, A., Usman, A. H., & Abdullah, M. F. R. (2025). Integrasi artificial intelligence dalam pendidikan Islam: Tren dan arah penelitian dalam perspektif bibliometrik. *Wawasan: Jurnal Kediklatan Balai Diklat Keagamaan Jakarta*, 6(2), 164–185. <https://doi.org/10.53800/n3wtx409>
- Chang, C. C., Hwang, G. J., & Tu, Y. F. (2023). Roles, applications, and trends of concept map-supported learning: A systematic review and bibliometric analysis of publications from 1992 to 2020 in selected educational technology journals. *Interactive Learning Environments*, 31(9), 5995–6016. <https://doi.org/10.1080/10494820.2022.2027457>
- Faizudin, F., Khairat, A., Anshori, I., Munji, A., Wasehudin, W., Alfurqan, A., & Fuaddin, I. (2025). Development of artificial intelligence in building creativity and innovation values of Islamic education. *Ta'dib*, 28(1), 43–56. <https://doi.org/10.31958/jt.v28i1.14734>
- Fitri, A. T. (2025). Tinjauan literatur: Integrasi kecerdasan buatan (AI) dalam pembelajaran bahasa Arab. *Jurnal Ilmiah Pendidikan Scholastic*, 9(1), 16–26. <https://doi.org/10.36057/jips.v9i1.718>
- Hafizah, N. (2023). Media pembelajaran digital Generasi Alpha era Society 5.0 pada Kurikulum Merdeka. *Al-Madrasah: Jurnal Ilmiah Pendidikan Madrasah Ibtidaiyah*, 7(4), 1675–1688. <http://dx.doi.org/10.35931/am.v7i4.2699>



- Hamdun, K., Mafrukha, W. N., Firmansyah, M., & Najmi, A. (2025). Model konseptual pembelajaran adaptif berbasis kecerdasan buatan sebagai inovasi kontekstualisasi kurikulum pendidikan menuju Indonesia Emas 2045. *Raudhah Proud To Be Professionals: Jurnal Tarbiyah Islamiyah*, 10(2).
<https://ejournal.iainurru.ac.id/index.php/raudhah/article/view/987>
- Hanif, A., Syarifudin, E., & Muhtarom, A. (2025). Integration of religious moderation in Islamic education: Challenges and opportunities in the digital era. *Edukasi Islami: Jurnal Pendidikan Islam*, 14(1), 49–66. <https://doi.org/10.30868/ei.v14i01.7767>
- Hasan, K., & Juhannis, H. (2024). Religious education and moderation: A bibliometric analysis. *Cogent Education*, 11(1), Article 2292885.
<https://doi.org/10.1080/2331186X.2023.2292885>
- Lessy, Z., Widiawati, A., Himawan, D. A. U., Alfiyaturrahmah, F., & Salsabila, K. (2022). Implementasi moderasi beragama di lingkungan sekolah dasar. *Paedagogie: Jurnal Pendidikan dan Studi Islam*, 3(2), 137–148. <https://doi.org/10.52593/pgd.03.2.03>
- Mahmuluddin, M., Husni, V., Wahyudin, Y. A., Negara, L. G. S., & Aththar, M. F. (2025). Edukasi literasi anti-radikalisme dan ekstremisme bagi remaja di MA-UF-NW, Lombok Timur. *Prosiding PEPADU*, 7(1), 167–174.
<https://proceeding.unram.ac.id/index.php/pepadu/article/view/3640>
- Mulyadi, V. I. (2024). Implementasi literasi digital dalam peningkatan pemahaman karakter keagamaan siswa. *Journal of Islamic Education and Learning*, 4(1), 24–34.
<https://doi.org/10.63761/jiel.v4i1.126>
- Musolin, M. H., Ismail, M. H., Farhan, M., Rois, N., Ismail, A., Huda, M., & Rohim, M. A. (2024). Understanding of artificial intelligence for Islamic education support and service: Insights from empirical literature review. In *International Congress on Information and Communication Technology* (pp. 27–43). Springer Nature Singapore.
https://link.springer.com/chapter/10.1007/978-981-97-5035-1_3
- Putri, I. M., Nuraisyah, S., & Nazib, F. M. (2026). Penerapan nilai-nilai moderasi beragama pada peserta didik berbasis media pembelajaran Pendidikan Agama Islam. *Al-Ilmiya: Jurnal Pendidikan Islam*, 1(4), 1424–1435. <https://journal.al-afif.org/index.php/al-ilmiya/article/view/743>
- Sugihyono, S. (2025). The dark side of AI in Indonesian education: Understanding its impact on the Alpha generation in the era of technological development. *LITERACY: International Scientific Journals of Social, Education, Humanities*, 4(1), 218–255.
<https://doi.org/10.56910/literacy.v4i1.2096>
- Suyatno, H. R., Rego, D., & Kustati, M. (2025). Analisis bibliometrik: Penelitian pembelajaran berbasis digital dalam Pendidikan Agama Islam (PAI). *Jurnal Pendidikan dan Keguruan*, 3(10), 1340–1347.
<https://jutepe-joln.net/index.php/JURPERU/article/view/1071>
- Swargiary, K. (2024). *The impact of digital learning environments on cognitive, social, and emotional development in Generation Alpha children: A comparative analysis*. SSRN.
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4904338
- Tanjung, D. F., & Suteki, M. M. (2024). Peran kecerdasan buatan (artificial intelligence) dalam Pendidikan Agama Islam. *Jurnal Abshar: Jurnal Hukum Keluarga Islam, Pendidikan, Kajian Islam dan Humaniora*, 4, 21–26.
<https://ojs.staisamora.ac.id/index.php/samora/article/view/67>





- Wang, Y. (2026). The relationship between teachers' character strengths and students' motivation and well-being in AI-supported classrooms. *European Journal of Education*, 61(2), e70611. <https://doi.org/10.1111/ejed.70611>
- Yahya, S. (2025). Transformasi digital dalam manajemen pendidikan Islam: Studi kasus pada madrasah berbasis teknologi di era Society 5.0. *Al-Ilmiya: Jurnal Pendidikan Islam*, 1(3), 400–409. <https://journal.al-afif.org/index.php/al-ilmiya/article/view/312>
- Yulianti, E., Pratiwi, I. P., Saluza, I., Marcelina, D., & Permatasari, I. (2024). Penerapan artificial intelligence dalam meningkatkan produktivitas Guru Sekolah Dasar 13 Palembang. *Jurnal Abdimas Mandiri*, 8(2), 111–121. <https://doi.org/10.36982/jam.v8i2.4271>
- Yulianti, Y., & Sultoni, A. (2022). Development mobile learning of Islam religious education to improve religious moderation. In *International Seminar on Language, Education, and Culture (ISoLEC)*, 6(1), 337–342. <https://conference.um.ac.id/index.php/isolec/article/view/7912>
- Zahrah, A., Hanifah, A. S., Adiyas, A., & Azis, A. (2025). Inovasi pembelajaran PAI berbasis teknologi informasi: Transformasi digital dalam pendidikan Islam. *Akhlak: Jurnal Pendidikan Agama Islam dan Filsafat*, 2(3), 119–131. https://www.researchgate.net/publication/392093538_Inovasi_Pembelajaran_PAI_Berbasis_Teknologi_Informasi_Transformasi_Digital_dalam_Pendidikan_Islam