RECONSTRUCTION OF A DESIGN THINKING-BASED MORAL EDUCATION LEARNING MODEL FOR GENERATION Z: A LITERATURE REVIEW STUDY

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ABSTRACT

This integrative literature review aims to reconstruct a Design Thinking (DT)-based learning model for moral education (akhlak) tailored to Generation Z in the digital age. The study systematically analyses 25 primary sources (scientific journals, proceedings, dissertations) published between 2016 and 2025. The findings reveal a significant gap between conventional normative teaching methods and the characteristics of Gen Z as digital natives, requiring a contextual and participatory learning paradigm. The analysis identifies Design Thinking as a powerful and philosophically aligned solution. DT's human-centered, iterative stages (Empathize, Define, Ideate, Prototype, Test) show deep convergence with Islamic moral concepts, such as at-ta'āthuf (compassion) and at-tajribah (experimentation). The synthesis results in a proposed conceptual model that integrates the DT mindset, Gen Z's digital-native traits, and the objectives of Islamic moral education. The reconstructed model shifts learning from passive transmission to an active, experiential process where students explore real-world moral dilemmas, collaboratively prototype behavioral solutions, and engage in continuous reflection. This study provides a theoretical foundation and operational framework for educators and curriculum developers to design more relevant, impactful, and adaptive moral education for the 21st century.

Keywords: Moral Education; Design Thinking; Generation Z; Integrative Literature Review.

A. INTRODUCTION

Moral education, as the core of human character building, is being tested in the digital age. The development of information technology and complex social changes pose real challenges. Generation Z, who are the main students today, were born and raised in a fast-paced, instant, and interactive digital environment (Hanif, 2025; Rivai et al., 2025). They are digital natives who think visually, multitask, and are connected to the global world. These characteristics necessitate a completely different, contextualised approach to learning that aligns with their lived experiences. However, in reality, moral education is often still stuck in old, normative, one-way methods that lack real-world relevance, resulting in a gap between theoretical moral knowledge and everyday behaviour in the digital space (Akbar et al., 2024; Khan & Ahmed, 2025)

Reconstruction Of A Design Thinking-Based Moral Education Learning Model For Generation Z: A Literature Review Study

On the other hand, contemporary demands require individuals who are not only morally upright but also skilled in critical thinking, creativity, collaboration, and adaptation to solve complex problems Khan & Ahmed, 2025; Satria & Muntaha, 2022). For this reason, a holistic and habit-oriented approach to moral education, as emphasised in Al-Ghazali's thinking, needs to be revitalised and integrated with contemporary learning strategies to be relevant to Generation Z (Mashuda, 2024; Faizin et al., 2022). Therefore, a learning model that empowers students to actively explore and solve moral problems contextually needs to be reconstructed. In this case, Design Thinking (DT) offers an appropriate paradigm, as it is a reflective, iterative, and human-centred mindset (Irbīte & Strode, 2016; Nurazis, 2025). Its systematic stages (empathise, define, ideate, prototype, test) provide a framework for exploring moral values and developing real behavioural solutions (Kiptyah, 2025; Novawan et al., 2024).

Several studies have begun to explore the intersection between DT and Islamic education. The results show that DT is effective in creating a synergistic learning environment and increasing students' interest and skills in Islamic-based STEM learning (Elbashir et al., 2024). More specifically, Kiptyah (2025) even found philosophical harmony between the DT stages and spiritual values in the Qur'an, such as empathy (at-taáthuf), cooperation (at-ta'awun), and choosing the best solution (al-ikhtiyár). These findings indicate that DT can be integrated with moral-religious dimensions, so that the problem-solving process also becomes a medium for character internalisation, in line with the principle of habit formation which is the foundation of classical ethical thinking, such as that of Al-Ghazali and Ibn Miskawaih (Mashuda, 2024; Sabililhaq et al., 2025).

The application of DT has also been tested in the development of Islamic curriculum and education management, and the results show an increase in innovation and responsiveness to the needs of the times (Mauliya et al., 2021; Nurazis, 2025). Apart from DT, various innovative learning models such as Project-Based Learning (Satria & Muntaha, 2022), VAK (Agustiana & Asshidiqi, 2022), and Inside-Outside Circle (Wahyudi & Marwiyanti, 2017) have been applied to moral learning with positive results, although they have not been explicitly integrated with the DT framework. Despite its great potential, a literature gap is still evident. Specific and comprehensive studies on reconstructing moral education learning models by combining the core principles of Design Thinking, the characteristics of Generation Z, and the context of the digital era into a single comprehensive framework are still limited. Most studies are still partial, focusing on the application of DT in STEM or management fields, or only testing active learning models without a clear DT framework. Therefore, a literature review that integrates all these aspects is crucial.

Reconstruction Of A Design Thinking-Based Moral Education Learning Model For Generation Z: A Literature Review Study

learning model for Generation Z in the digital age through a systematic and integrative literature review. By synthesising key findings from various previous studies, this review seeks to formulate a conceptual model that combines the human-centred and iterative DT paradigms with moral education materials and objectives, as well as learning strategies that are in line with the digital world of Generation Z and based on the principles of habit formation and value integration (Mashuda, 2024; Sabililhaq et al., 2025). The results are expected to provide a strong theoretical foundation and an innovative operational framework for educators and Islamic Religious Education curriculum developers to design moral education that is more relevant, participatory, and impactful in shaping akhlakul karimah in the 21st century.

B. METHOD

This study utilises a systematic literature review method with an integrative approach to reconstruct a Design Thinking (DT)-based moral education learning model for Generation Z in the digital age. An integrative approach was chosen because it is capable of synthesising and analysing empirical and conceptual evidence from various types of previous research (qualitative, quantitative, and literature studies) to construct a new coherent model framework (Snyder, 2019; Torraco, 2016). This method is considered appropriate to achieve the research objective, which is to formulate a model reconstruction based on a synthesis of key findings from existing literature.

This study follows a systematic stage adapted from a simplified PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) model, including identification, screening, eligibility, and inclusion (Moher et al., 2009). The first stage was literature identification, in which the researchers conducted an extensive search of primary sources in May 2024. The search focused on accessible scientific databases, particularly Google Scholar and Garuda Portal (Garba Rujukan Digital), as well as the official websites of education and Islamic journals from various universities. To obtain relevant literature, a combination of keywords in Indonesian and English was used, such as 'design thinking', 'moral education', 'Generation Z', and 'learning model'. Although the initial search did not limit the year of publication, priority was given to publications within the last 5 years (2019-2024) so that the analysis could capture the most current discourse and challenges.

After obtaining the search results, the screening and selection stage is carried out. At this stage, each piece of literature is evaluated based on predetermined inclusion and exclusion criteria. Researchers only consider scientific journal articles, theses, dissertations, or seminar proceedings that have undergone peer review. The content must discuss at least two of the three main pillars of this study, namely Design Thinking, Islamic moral education, and the characteristics of Generation Z. Popular articles, news, or writings that do not

Reconstruction Of A Design Thinking-Based Moral Education Learning Model For Generation Z: A Literature Review Study

include clear research methods are excluded. Screening is carried out by evaluating the title, abstract, and keywords.

From this rigorous screening process, 17 primary literature sources were obtained and then analysed in depth. This collection of literature was dominated by SINTA-indexed journal articles, which were selected for their contextual relevance to the education system in Indonesia, as well as several dissertations and proceedings articles that provided specific perspectives. Data from the selected literature was analysed thematically and integratively. The process involved coding and grouping data fragments in the form of quotations, findings, concepts related to DT concepts, characteristics of Generation Z, challenges in moral education, and innovative learning models.

The final stage was synthesis, in which the identified themes were then linked, compared, and critically synthesised. This process not only summarised but also sought patterns of relationships, contradictions, and gaps between findings from various literature. The synthesis was aimed at answering research questions and formulating propositions for reconstructed learning model..

C. RESULTS AND DISCUSSION

1. Overview of Literature

This integrative literature review analyses 25 primary sources consisting of scientific journals, conference proceedings, dissertations, and theses published between 2016 and 2025. This time period was deliberately chosen to capture the development of the Design Thinking (DT) concept and responses to the educational challenges of Generation Z in an increasingly intensive digital era. The distribution of publications by year shows an increase in focus on this topic, especially after 2020.

Table 1: Distribution of Literature by Year of Publication (2016-2025)

Year of Publication	Number of Literature	Percentage (%)
2016	1	4%
2017	1	4%
2018	1	4%
2020	1	4%
2021	3	12%
2022	2	8%
2023	1	4%
2024	7	28%
2025	8	32%
Total	**25**	**100%**

Reconstruction Of A Design Thinking-Based Moral Education Learning Model For Generation Z: A Literature Review Study

From the table above, it can be seen that 60% (15 out of 25) of the literature was published in the last two years (2024-2025). This shows that the issue of integrating Design Thinking into education, particularly moral education for Generation Z, is a highly topical and rapidly developing field of study.

Based on the focus of the study, the literature is grouped into five main thematic clusters that collectively map the research basis related to this topic. The first cluster confirms that Design Thinking (DT) has established itself as a paradigm, not just a technical method. The second cluster consistently reveals the unique characteristics and learning challenges of Generation Z in the digital age. The third cluster, which is the core of this study, provides empirical and conceptual evidence regarding the integration of DT in Islamic education. The fourth cluster identifies various other innovative learning models that have been applied to moral education, such as the VAK and Inside-Outside Circle models. Finally, the fifth cluster connects contemporary discourse with the philosophical roots of classical moral education.

Table 2: Clusters of Focus in the Literature Review

Focus Cluster	Percentage (%)	Number of Sources
Education & Character of Generation Z	32%	8
Integration of Digital Technology in Islamic Education	32%	8
DT as a Paradigm	16%	4
Other Learning Models	16%	4
Classical Moral Philosophy	12%	3

Based on the type of publication and distribution, the literature used as a source of analysis in this study consists of several categories of scientific works. The following composition outlines the variety and proportion of the 25 primary sources reviewed, reflecting the breadth of the literature review conducted.

Table 3: Distribution Based on Type of Publication

Type of Publication	Number
National & International Journals	19
Master's Theses	2
Doctoral Dissertations	1
Higher Education Repository	3

Reconstruction Of A Design Thinking-Based Moral Education Learning Model For Generation Z: A Literature Review Study

The table above shows that most sources come from reputable scientific journals, which demonstrates the academic strength of this research, supported by in-depth empirical evidence from theses and dissertations.

2. Synthesis of Findings

The synthesis of findings from the reviewed literature converges on three major interrelated themes: (1) Challenges and Characteristics of the Learning Context, (2) Design Thinking as a Solution Paradigm, and (3) The Convergence of DT with Islamic Moral Education.

2.1. Challenges and Characteristics of the Learning Context (Generation Z & the Digital Age)

Literature analysis shows that education is undergoing dynamic changes. Generation Z, as the main learners, are digital natives whose mindsets and behaviours are greatly influenced by the digital environment. Their distinctive characteristics include a tendency towards visual thinking, the ability to multitask, global networking, and a need for interactivity and fast access to information (Hanif, 2025; Rivai et al., 2025). On the other hand, Islamic moral education practices often remain stuck in conventional learning methods that are normative, one-way, and do not touch on the realities of students' daily lives. This condition has the potential to create a gap between religious knowledge and the actualisation of behaviour in daily life (Akbar et al., 2024).

The challenges faced are multidimensional. At the individual level, Generation Z and Millennials experience moral issues such as the fading of ethics in social media interactions, normalised behaviour that contradicts values, and a tendency to neglect religious routines (Faizin et al., 2022). At the institutional level, the Islamic education system faces internal problems such as radicalisation of understanding, the challenges of a multicultural society, gaps in science and technology mastery, and low levels of critical literacy (Rivaldy et al., 2023). Meanwhile, at the global level, the demands of the 21st century require the creation of individuals who are not only morally superior but also master critical thinking, creativity, collaboration, communication, and adaptability skills (Khan & Ahmed, 2025). Therefore, a transformation of the learning paradigm is needed, one that is contextual, adaptive, technology-based, and involves active student participation (Hanif, 2025; Rivai et al., 2025).

2.2. Design Thinking as a Solution Paradigm

Conceptually, literature places Design Thinking (DT) as more than just a technique or method, but rather as a distinctive paradigm or mindset. DT is defined as a reflective, iterative, and human-centred way of thinking, specifically designed to understand and solve complex problems that are ambiguous and poorly structured (Irbīte & Strode, 2016; Nurazis, 2025). The main characteristics of this paradigm are its non-linear nature, combining divergent (generating many ideas) and convergent (selecting and refining ideas) thinking processes, and always being oriented towards creating solutions that can be tested in the form of prototypes.

Reconstruction Of A Design Thinking-Based Moral Education Learning Model For Generation Z: A Literature Review Study

The effectiveness of this paradigm is supported by various empirical evidence from research. In the context of general learning, the application of DT has been proven to be significantly more effective in improving students' empathy and collaboration skills compared to conventional learning methods (Yudi, 2024). In the field of product and technology development, the DT approach has succeeded in producing more responsive learning applications because they are designed based on a deep understanding of user needs (Nasution & Nusa, 2021). In the realm of educational management, DT provides a framework for leaders to formulate more appropriate and innovative policies, based on an empathetic understanding of real conditions in the field (Mauliya et al., 2021).

More broadly, DT has also been proven to encourage innovation in curriculum development and learning practices to be more adaptive (Nurazis, 2025), as well as creating a synergistic and engaging learning environment in STEM-based learning (Elbashir et al., 2024).

2.3. Convergence of DT with Moral Education

A synthesis of the literature reveals an important finding, namely that there is significant convergence or similarity between the Design Thinking (DT) paradigm and Islamic moral education, both at the philosophical and operational levels.

First, this study found a deep philosophical alignment between DT principles and Islamic spiritual values. Kiptyah's (2025) research specifically maps this correlation, showing that the empathy stage is in line with the value of at-ta'āthuf (compassion), while the ideation and collaboration stages reflect the spirit of *at-ta'āwun* (cooperation). Meanwhile, the prototyping and solution testing processes correspond to the concepts of at-tajribah (experimentation) and *al-ikhtiyār* (choosing the best). These findings change the perception that DT is a secular approach and instead show that this framework can be integrated with divine values.

Second, this convergence is supported by empirical evidence. Miftakhuddin (2020) research, which explicitly developed and tested a DT-based Islamic Religious Education learning model for Generation Z, proved the effectiveness of this model in significantly shaping empathetic character. The developed model is also comprehensive, covering aspects of material, methods, media, and life practices designed according to contextual needs.

Thirdly, DT is not intended to replace all existing learning models, but rather to serve as an umbrella framework that reinforces other approaches. The human-centred principle and iterative process in DT can accommodate and enrich the application of models such as Project-Based Learning for higher-order thinking skills (Satria & Muntaha, 2022), personalisation of learning styles in the VAK model (Agustiana & Asshidiqi, 2022), and active interaction in the Inside-Outside Circle strategy (Agustin, 2018).

Fourth, DT offers an appropriate response to educational challenges in the digital age. The DT framework enables the development of moral education materials relevant to contemporary issues such as digital ethics and information

security (Akbar et al., 2024). Its user-centred and iterative principles are also in line with the development of innovative learning media such as moral gamification, which suits the preferences of Generation Z (Harun & Supratama, 2025).

Fifth, the DT approach finds its relevance and reinforcement in classical Islamic educational philosophy. The iterative cycle of DT (prototype-test) reflects the concepts of habit formation ('adah) and practice (riyāḍah), which are the pillars of character formation according to thinkers such as Al-Ghazali and Ibn Miskawaih (Mashuda, 2024; Sabililhaq et al., 2025). Similarly, the initial empathise stage is in line with the emphasis on affective education and the deep instilling of values (Wartinah & Maemonah, 2025).

Table 4: Synthesis of the Convergence of Design Thinking and Moral Education

Design Thinking Stages/Principles	The Concept of Equality in Islamic Moral Education	Benefits for Gen Z Character Education
Empathise (Understand user experiences and feelings)	*At-Ta'āthuf* (belas kasih), Pendidikan Afektif (Al-Ghazali/Wartinah), Observasi Kontekstual.	Linking moral values to real moral issues faced by students in the digital/real world.
Define (Formulate the core problem)	*Al-Fikr* (deep thinking), Identification of the Roots of Moral Deviance.	Training critical thinking to analyse the causes of moral issues, not just the symptoms.
Ideate (Come up with various creative solutions)	*At-Ta'āwun* (cooperation), Deliberation, Creativity in Doing Good.	Developing collaboration and creativity skills to produce alternatives for noble behaviour.
Prototype (Create a prototype of the solution)	*At-Tajribah* (experimentation), Habituation (*I'tiyad*/*Al-'Ada*), Living Practice.	Enabling students to "try out" and "design" good behaviour on a small and safe scale before it becomes a habit.
Test (Test, obtain feedback, iterate)	*Muhasabah* (self-evaluation), Correction, Moral Improvement (*Tahalli*).	Building a culture of reflection, feedback, and continuous improvement of character.
Human-Centered	Humanising education, considering *Al-Fithrah* (nature).	Personalised, relevant learning that empowers students as active

Reconstruction Of A Design Thinking-Based Moral Education Learning Model For Generation Z: A Literature Review Study

		participants.
Iterative & Non-Linear	The process of *Takhalli* (emptying oneself of evil), *Tahalli* (adornment with goodness), *Tajalli* (enlightenment) that is ongoing.	Recognising that character development is a long, dynamic process full of evaluation.

Despite the gaps, the potential for integrating Design Thinking into moral education is considered to be enormous, although literature reviews acknowledge that its application is still in its early stages. Most existing research is still conceptual or limited to implementation in STEM and educational management. Comprehensive research that reconstructs moral education models by combining the core principles of Design Thinking, the psychological characteristics of Generation Z, and the context of the digital era into a complete operational framework is still very limited. Therefore, efforts to reconstruct the learning model are a critical step that needs to be taken immediately.

A synthesis of various literature shows that Design Thinking offers a strong, relevant, and philosophically aligned paradigm and methodological framework for reconstructing the moral education learning model for Generation Z in the digital era. This approach has the potential to bridge the gap between normative theory and contextual practice, while developing the 21st-century skills that are so badly needed in contemporary life.

Discussion

The findings synthesised from this literature review not only describe the current state of knowledge but, more importantly, reveal a coherent narrative about the urgency and feasibility of reconstructing the moral learning model. The synthesis of findings shows that the complexity of the multidimensional challenges of moral education for Generation Z in the digital age is balanced by the presence of a solution-oriented paradigm, namely Design Thinking (DT). Importantly, DT is not just a methodology, but has a deep philosophical and operational alignment with the goals of moral education itself. This marks an opportunity to overcome stagnation in learning through an approach that is in line with the character of the times and the essence of character building.

A comparison between studies shows different but complementary focuses. Research on Generation Z (Hanif, 2025; Rivai et al., 2025) consistently diagnoses the problem of the gap between conventional methods and the reality of students. Meanwhile, studies on DT (Irbīte & Strode, 2016; Novawan et al., 2024) offer a solution framework for complex, human-centred problems. Differences arise at the level of specificity of application. Studies such as Elbashir et al. (2024) and Satria & Muntaha (2022) have proven the effectiveness of DT in the context of STEM education and Project-Based Learning, but its application in the domain of moral education is still limited.

Reconstruction Of A Design Thinking-Based Moral Education Learning Model For Generation Z: A Literature Review Study

The shortcomings in the domain of ethics are addressed by studies such as those by Kiptyah (2025) and Miftakhuddin (2020). They successfully bridge the gap by proving the philosophical harmony between DT and the values of the Qur'an, as well as the empirical effectiveness of the DT-based learning model. The commonality among nearly all studies is the conclusion regarding the necessity of innovative, contextual, and participatory approaches. The main difference lies in the tools or lenses used; some offer active learning models such as VAK or Inside-Outside Circle, while others promote a more comprehensive DT paradigm. It can be concluded that these active learning models can function as techniques or strategies within the larger framework offered by Design Thinking.

Based on this synthesis, the research questions posed in the introduction can be answered. First, the reconstruction of the DT-based moral learning model must be paradigmatic, adopting a human-centred and iterative mindset as its core. Operationally, the DT stages (Empathise, Define, Ideate, Prototype, Test) are transformed into a contextual moral learning cycle, for example by exploring real moral issues on social media in the Empathise phase. Second, this model directly addresses the characteristics of Generation Z as digital natives by offering active, visual, collaborative learning that is oriented towards real solutions (behavioural prototypes). The integration of technology such as moral gamification becomes a natural medium in the learning process, so that digital challenges are transformed into learning tools.

The theoretical implications of this study are significant for the development of moral pedagogy. First, this study strengthens the foundation for constructivism and student-centred learning approaches in religious education, while also conceptualising the DT paradigm by demonstrating its alignment with key Islamic concepts such as ta'āwun and tajribah. Second, this study provides an integrative framework that connects developmental psychology, educational technology, and religious pedagogy, thereby opening up opportunities for interdisciplinary research.

At a practical level, the implications of this study touch on various stakeholders. For PAI teachers, this research offers a roadmap for shifting from lecture methods to becoming facilitators in the DT cycle. For curriculum developers, these findings emphasise the importance of moral material in the form of contextual scenarios and case studies, rather than abstract lists of values. For policymakers, this study provides justification for supporting teacher training in DT methodology and the development of interactive digital teaching materials.

The relevance of the findings to the broader body of knowledge demonstrates both consistency and unique contributions. The discourse on the need for transformation in religious education is in line with global discussions on 21st-century skills, but this study provides specificity in the domain of morals. Its unique contribution is to demonstrate the bridge between DT and Islamic epistemology, addressing concerns about the incompatibility of values. On the other hand, these findings slightly shift the assumption that moral education must be transmissive and doctrinal, arguing that deeper internalisation of values is achieved through exploratory and experiential approaches such as DT. Thus, the reconstruction of this model is not merely a methodological alternative, but a

relevant and evidence-based response as well as a revitalisation of the objectives of Islamic moral education itself.

D. CONCLUSION

Based on findings from 25 literature reviews, it can be concluded that the main problem in moral education, namely the gap between normative knowledge and actual behaviour in the digital space of Generation Z, requires a paradigmatic solution. The reconstruction of a learning model that adopts a human-centred and iterative mindset from Design Thinking offers a solution to this problem. This model changes the learning approach from merely transmitting values to an active process in which students explore and solve contextual moral problems. The stages of empathise to test in Design Thinking provide a systematic framework for connecting moral values with the complex realities faced by Generation Z on a daily basis.

The findings of the study show that this reconstruction is not only relevant but also philosophically in line with Islamic education. The core principles of Design Thinking, such as deep empathy, collaboration, and learning through experimentation, are found to be equivalent to Islamic concepts such as at-ta'āthuf (compassion), at-ta'awun (cooperation), and at-tajribah (experimentation). This alignment transforms Design Thinking from a mere technical method into a powerful medium for internalising values, where the problem-solving process also becomes a character-building process.

This reconstructed model specifically addresses the characteristics of Generation Z as digital natives. By offering visual, participatory learning that is oriented towards real solutions (prototypes) and utilises digital media as an integral part of the process, this model transforms the challenges of the digital age into a learning arena. Design Thinking-based reconstruction has the potential to bridge existing gaps, while equipping students with 21st-century skills such as critical, creative, and collaborative thinking.

Recommendations and Suggestions

To implement these findings, strategic recommendations are needed at the policy and institutional levels. First, the Ministry of Religious Affairs and the Ministry of Education need to design tiered training programmes for Islamic Education teachers to master the framework and techniques of Design Thinking-based learning. Second, higher education institutions that offer teacher training programmes must integrate material on Generation Z psychology, educational technology, and Design Thinking methods into the core curriculum for prospective Islamic Education teachers. Third, the government, through relevant agencies, needs to support the development and dissemination of open digital learning resources containing modules, contextual case studies, and guidelines for applying this model in the classroom.

For future researchers, it is recommended to conduct action research or development research to test the effectiveness and refine this conceptual model in various real educational contexts. Further exploration is also needed to examine

the mechanisms of value internalisation at each stage of Design Thinking, as well as the development of evaluation instruments capable of measuring the impact of learning not only on cognitive aspects but especially on changes in the behaviour and character of students in their digital lives.

E. REFERENCE

Agustiana, I., & Asshidiqi, G. H. (2022). Penguatan Pendidikan Karakter Siswa Melalui Pembelajaran Akidah Akhlak Dengan Model Pembelajaran VAK. *Islamadina: Jurnal Pemikiran Islam*, *23*(2), 255–270. doi.org/10.30595/islamadina.v23i2.11874

Agustin, N. (2018). Upaya meningkatkan hasil belajar siswa mata pelajaran akidah akhlak dengan menggunakan model pembelajaran berbasis naturalistik eksistensial spiritual. *Al-Tadzkiyyah: Jurnal Pendidikan Islam*, *9*(1), 37–59. doi.org/10.24042/atjpi.v9i1.2605

Akbar, A., Mas'adah, M., Agustiawan, M. P., Sukino, S., & Supriyatno, T. (2024). Pengembangan Materi Akhlak untuk Generasi Z di MAN 1 Ketapang. *Equilibrium: Jurnal Pendidikan*, *12*(3), 408–421. https://doi.org/10.26618/equilibrium.v12i3.16586

Elbashir, A. M., Alkhair, S., & Al-Thani, N. J. (2024). Fostering STEM learning: exploring the integration of design thinking in Islamic STEM education. *QiST: Journal of Quran and Tafseer Studies*, *3*(3), 411–432. doi.org/10.23917/qist.v3i3.6138

Faizin, M., Sari, W. P., Pramita, N. W., & Faruq, S. (2022). Tantangan dan Metode dalam Menerapkan Konsep Pendidikan Akhlak Perspektif Al-Ghazali di Era Modernisaasi Terhadap Generasi Milenial. *Jurnal Ilmiah Wahana Pendidikan*, *8*(24), 263–270. doi.org/10.5281/zenodo.7486411

Hanif, M. (2025). Islamic Education Design for Generation Z. *Asian Journal of Natural Sciences*, *4*(2), 77–92. doi.org/10.55927/ajns.v4i2.31

Irbīte, A., & Strode, A. (2016). Design thinking models in design research and education. Society. Integration. Education. *Proceedings of the International Scientific Conference*, *4*, 488–500. doi.org/10.17770/sie2016vol4.1584

Khan, S. A., & Ahmed, S. Z. (2025). Cultivating Minds, Inspiring Change: Transformative Paradigms in Islamic Education. *The Critical Review of Social Sciences Studies*, *3*(1), 3204–3214. doi.org/10.59075/gqgnj655

Kiptyah, N. M. (2025). *Design Thinking pembentukan Karakter Dalam Pelatihan Dasar Calon Pegawai Negeri Sipil Perspektif Al-Qur'an*. Universitas PTIQ Jakarta. https://repository.ptiq.ac.id/id/eprint/1783

Mashuda, M. (2024). *Relevansi Pemikiran Al-Ghazali Tentang Pendidikan Akhlak Bagi Generasi Z: Studi Empiris Di Mts Ma'arif Kaliwiro Wonosobo Jawa Tengah*. Universitas Islam Sultan Agung Semarang. https://repository.unissula.ac.id/id/eprint/38142

Mauliya, A., Wulandari, S., & Padang, S. A. (2021). Empathy dan design thinking dalam inovasi manajemen pendidikan islam di era disruptif. *Paedagogia: Jurnal Pendidikan*, *10*(1).

Miftakhuddin, M. (2020). Pengembangan model pendidikan agama Islam dalam membentuk karakter empati pada generasi Z. *Jurnal Pendidikan Agama Islam*, *17*(1), 1–16. doi.org/10.14421/jpai.2020.171-01

Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G. (2009). Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *Bmj*, *339*. doi.org/10.1136/bmj.b2535

Nasution, W. S. L., & Nusa, P. (2021). UI/UX design web-based learning application using design thinking method. *ARRUS Journal of Engineering and Technology*, *1*(1), 18–27. doi.org/10.35877/jetech532

Novawan, A., Ismailia, T., Zuhro, C., Utami, L. D., Pratama, M. R., Karimah, K., & Haq, R. N. (2024). Design thinking approach to powerful material development in educational contexts: From theory to practice. *International Journal of Studies in Social Sciences and Humanities (IJOSSH)*, *1*(2), 125–145. doi.org/10.25047/ijossh.v1i2.5571

Nurazis, T. (2025). Inovasi Pendidikan Islam melalui Penerapan Design Thinking. *Al-Qiyadi Jurnal Manajmen Pendidikan Islam*, *3*(2), 108–117. doi.org/10.62274/al-qiyadi.v3i2.260

Rivai, M., Amanda, M. D., Batubara, P. M., & Yumna, S. (2025). Kurikulum PAI untuk Generasi Z: Menanamkan Akhlak Mulia di Dunia yang Serba Cepat. *Mesada: Journal of Innovative Research*, *2*(1), 301–310. https://ziaresearch.or.id/index.php/mesada/article/view/73

Rivaldy, N., Ma'mur, I., Gunawan, A., & Syam, A. B. (2023). Resolusi Problematika Internal Pendidikan Islam: Pendekatan Design Thinking. *Tadbir Muwahhid*, *7*(1), 61–83. doi.org/10.30997/jtm.v7i1.7525

Sabililhaq, I., Awaluddin, R. Z. S., & Nida, S. (2025). Dialektika Pendidikan Akhlak Era 5.0: Studi Analisis Pemikiran Ibnu Miskawaih. *DIMAR: Jurnal Pendidikan Islam*, *6*(2), 228–245. doi.org/10.58577/dimar.v6i2.305

Satria, A. B. A., & Muntaha, A. A. (2022). Inovasi pendidikan abad 21: penerapan design thinking dan pembelajaran berbasis proyek dalam pendidikan Indonesia. *Jurnal Pendidikan Dasar*, *9*(2). doi.org/10.20961/jpd.v9i2.59940

Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, *104*, 333–339. doi.org/10.1016/j.jbusres.2019.07.039

Supratama, R. (2025). Gamifikasi Akhlak: Media Digital Interaktif Berbasis Game untuk Penguatan Karakter Islami Generasi Z. *Sujud: Jurnal Agama, Sosial Dan Budaya*, *1*(4), 656–663. doi.org/10.63822/1wsc3g28

Torraco, R. J. (2016). Writing integrative literature reviews: Using the past and present to explore the future. *Human Resource Development Review*, *15*(4), 404–428. doi.org/10.1177/1534484316671606

Wahyudi, D., & Marwiyanti, L. (2017). Penerapan Model Pembelajaran Inside Outside Circle Dalam Mata Pelajaran Akidah Akhlak. *Jurnal MUDARRISUNA: Media Kajian Pendidikan Agama Islam*, *7*(2), 267–292. doi.org/10.22373/jm.v7i2.2369

Wartinah, W., & Maemonah, M. (2025). Pendekatan Afektif Dalam Pendidikan Islam: Internalisasi Nilai-Nilai Al-Qur'an Untuk Mengatasi Krisis Moral

Generasi Z. *Tajdid: Jurnal Pemikiran Keislaman Dan Kemanusiaan*, 9(2), 327–345. doi.org/10.52266/tadjid.v9i2.4506

Yudi, Y. (2024). *Pengaruh penerapan metode design thinking terhadap kemampuan empati dan kolaborasi peserta didik pada mata pelajaran fikih materi penyembelihan, kurban, dan akikah: Penelitian quasi-eksperimen di kelas IX MTS Al-Muhajirin Pacet, Bandung*. UIN Sunan Gunung Djati Bandung. https://digilib.uinsgd.ac.id/id/eprint/93700