



Generative AI and Da'wah Management Integration: Strengthening SEL and Global Citizenship Education for SDG 4 in Indonesia

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KEYWORDS

Generative AI, Da'wah Management, Social Emotional Learning, Global Citizenship Education, SDG 4, Indonesia

ABSTRACT Strengthening Social Emotional Learning (SEL) and Global Citizenship Education (GCED) has become a crucial global mandate to shape 21st-century student competencies and support the achievement of SDG 4 (Quality Education) in Indonesia. Although social media platforms offer authentic spaces for emotional resonance and identity formation, interactions within them are often shallow and lack sustained critical reflection. This gap challenges ethical and moral education efforts, including religious-based ones such as Da'wah Management. This position paper aims to propose and verify a conceptual model for integrating Generative Artificial Intelligence (GenAI) with Da'wah Management principles to improve the quality and effectiveness of SEL and GCED delivery in the Indonesian educational context. The approach used is a conceptual position paper involving a comprehensive literature review, analysis of national education policies, and construction of a theoretical framework linking transformative technology with character education. The main argument of this research is that GenAI functions as a reflective and adaptive layer that can transform the implementation of Da'wah Management and character education. GenAI overcomes the limitations of social media by providing personalized feedback, presenting in-depth ethical scenario simulations, and facilitating critical dialogue, thereby fostering empathetic and responsible digital citizenship. This proposed integration framework for GenAI and Da'wah Management has significant implications for curriculum developers and educators, offering a robust technology-based strategy to prepare Indonesian youth as ethical, socially conscious global citizens, while simultaneously accelerating the realization of Target 4.7 of SDG 4: Quality Education.

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INTRODUCTION

Education in the global digital era faces increasingly complex demands, going beyond the mere transfer of cognitive knowledge to the development of character and robust citizenship competencies. In this expanding context, Sustainable Development Goal 4 (SDG 4) (Wangenge-Ouma, 2024), specifically Target 4.7, which focuses on Global Citizenship Education (GCED) (Pashby, 2020a; Wall, 2024), serves as an essential framework requiring every country, including

Indonesia, to ensure that all students acquire the knowledge, skills, and values necessary to promote sustainable development. This effort requires a deep focus on Social Emotional Learning (SEL) (Yang, 2020, 2021)(Kurniawati, Wardani, Asikin, & ..., 2023; Robinson et al., 2022), which is a crucial foundation for empathy, self-reflection, and responsible interaction all of which are essential for becoming ethical and productive global citizens.

Despite its importance, the implementation of SEL and GCED in Indonesia faces significant challenges in today's digital landscape (Gimbert, 2023). Social media platforms (such as YouTube and Instagram) have become authentic spaces for identity formation, emotional resonance, and civil dialogue. However, interactions on social media are often superficial, reactive, and prone to misinformation or polarization, effectively inhibiting sustained reflection and critical engagement. The lack of effective pedagogical mechanisms to mediate these digital experiences exacerbates the situation, often leaving GCED and SEL practices disconnected from the realities of students' digital lives (Huang, 2023; Murano, 2020; Sandilos, 2023). This challenge is even more pressing given the need to integrate fundamental Islamic moral and ethical values, which in the Indonesian context are often articulated through the framework of Da'wah Management (Hasan, 2021).

Research on these key issues has been fragmented and presents implementation shortcomings. Research related to GenAI in education has been conducted by Karp et al. (2024), which focuses on GenAI's potential for personalized learning, and Holmes et al. (2024), which explores GenAI's efficiency for administrative tasks. However, these studies tend to emphasize the technical or cognitive academic aspects of GenAI, overlooking its potential as a targeted catalyst for socio-emotional and ethical development. Meanwhile, research related to SEL and GCED in Indonesia generally focuses on traditional curriculum models, thus failing to offer scalable and adaptive solutions to address the dynamics of social media. Furthermore, research related to technology-based Da'wah Management (García-Peñalvo, 2023) often limits itself to the use of passive conventional or digital media, thus failing to explore GenAI as an interactive tool capable of simulating and managing complex moral dialogue scenarios. Clearly, the existing literature indicates that these three important domains GenAI, SEL/GCED, and Da'wah Management operate independently (Briandana, 2020; Mundzir, 2023).

Based on this critique of previous research, the fundamental novelty of this position paper is the proposition and argumentation of a three-dimensional integrative model. This research is the first to explicitly link Generative AI as an adaptive pedagogical layer to bridge Da'wah Management practices with the goals of Social Emotional Learning (Yang, 2020) and Global Citizenship Education within a single, cohesive framework (Estellés, 2021; Ferrara, 2024; Yang, 2021). The focus on GenAI as a tool for creating personalized ethical dilemma simulations and continuous reflective feedback is a significant innovation compared to previous studies that only viewed AI as a substitute for or assist in cognitive tasks.

The research gap addressed by this paper is clear: no conceptual study has yet positioned GenAI as a mediating mechanism to address the socio-emotional weaknesses (superficiality) in social media interactions while simultaneously reinforcing the values conveyed through the Dakwah Management framework (Hasbullah, 2022; Thaib, 2020)(Darmayanti, In, Afifah, Verliana, & Nurmalasari, 2023; Randazzo, Priefer, & Khamis-Dakwar, 2021). The essential difference lies in the proposed function for GenAI: while previous studies view AI as a deliverer or tool, this paper views it as a facilitator of critical reflection that ensures that character education (SEL/GCED) inspired by Dakwah Management can remain relevant, in-depth, and measurable in the digital age (Ramirez, 2021)(Azizan & Abu Shamsi, 2022; Torisu & Boruchovitch, 2023; Yates & Hirsh, 2022).

To build a solid argument, this research relies on two main theoretical frameworks. First, Albert Bandura's Social Cognitive Theory emphasizes learning through observation, imitation, and reciprocal interactions between the environment (social media and GenAI) (Kohnke, 2024), behavior (civic engagement), and cognitive factors (self-reflection, empathy) (Raković et al., 2022). Second, the Strategic Da'wah Management framework provides a normative and ethical foundation, ensuring that the content and interactions facilitated by GenAI are directed toward the formation of moral character in accordance with Islamic values (Q. W. Zhang, Lin, & Ye, 2018), ensuring that the technology integration is not only efficient but also has a clear ethical direction.

This research utilizes four core concepts. Generative AI is understood as a system capable of generating new, relevant, and adaptive content (text, scenarios, simulations) that encourages higher-order thinking (Lenawati, 2022). Social Emotional Learning (SEL) is defined as the process by which individuals develop understanding, emotional management (Ferrara, 2024), positive goal setting, empathy, and responsible decision-making. Global Citizenship Education (GCED) is defined as an effort to instill knowledge, skills, values, and attitudes that empower learners to contribute to a more inclusive, peaceful, and sustainable world. Finally, Da'wah Management is interpreted as a planned and systematic process for disseminating ethical and moral values, which, in this context, are mediated and enhanced by GenAI.

The main attraction of this research lies in its high relevance (timeliness) and potential for transformative impact. Amidst the global ethical debate regarding the role of GenAI, this paper offers a positive normative pedagogical perspective by using it for a noble purpose: character and ethics formation (K. Wang, 2024). For Indonesia, the country with the largest Muslim population and a massive social media adoption rate (Prabowo, 2024; Zahid, 2023), the integration of Da'wah Management into technological innovation is not only academically relevant but also socioculturally crucial to ensure that digital

progress aligns with the development of national morality.

Based on the global context, digital issues, and theoretical gaps that have been identified, the main objective of this position paper is to propose a conceptual model (position paper) that theoretically justifies the integration of Generative AI and Da'wah Management as an innovative strategy to effectively strengthen Social Emotional Learning and Global Citizenship Education among students in Indonesia, as a tangible contribution to the achievement of SDG 4: Quality Education.

METHOD

The research method used in this paper is Conceptual Analysis, presented in a Position Paper format. This approach was chosen because the primary focus of the research is to construct and justify a new theoretical framework or model, rather than to test hypotheses through empirical primary data collection (Spencer, 1991). This research is inherently qualitative-argumentative and normative-contextual, where validity is primarily based on the robustness of the logical construction and the coherence of the theoretical argument.

2.1 Research Design and Data Sources

This paper uses a Position Paper design with three primary methodological objectives (Hellegers, 2021)(Nixon, 2024; Yong, 2024): (1) Diagnosing the problem and theoretical gaps (Research Gap) in the literature related to the integration of technology, character education, and religious values. (2) Developing and articulating an integrated theoretical solution (GenAI Integrative Model and Da'wah Management). (3) Justifying the proposed solution through a robust theoretical synthesis and in-depth relevance to the Indonesian context (SDG 4, specifically Target 4.7).

The primary data source is comprehensive secondary data, including the latest scientific literature, international policy reports (UNESCO, UN), and Indonesian national education framework documents. The literature review focused on publications from 2020 to 2025 to ensure timeliness and technological novelty. The focus of the literature sources covers four interdependent domains: studies on Generative AI in education, Social Emotional Learning (SEL), Global Citizenship Education (GCED), Strategic Da'wah Management, and reference documents on Sustainable Development Goal 4 (SDG 4).

2.2 Analysis Procedure

This research procedure involves three main analytical steps carried out systematically and in stages:

- a. **Critical Literature Review and Gap Analysis:** This stage involves a systematic critique of previous research findings. The analysis not only identifies what

has been researched but also specifically targets implementation weaknesses and scope limitations of existing models (Foung, 2024). These weaknesses include GenAI's tendency to focus solely on cognitive aspects, the traditional SEL/GCED approach, and the passive implementation of digital Da'wah. This research gap determination serves as the basis for scientific justification for the proposed novelty.

- b. **Theoretical Synthesis and Normative Framework Construction:** Conducting an in-depth synthesis of two primary theoretical frameworks. Social Cognitive Theory (Albert Bandura) is used to provide a pedagogical and psychological foundation for how GenAI can facilitate interactive learning for SEL and GCED (Fu, 2024). Meanwhile, the principles of Strategic Da'wah Management are used as a normative framework and ethical filter to guide GenAI's output, ensuring that the resulting content has moral integrity and aligns with the values of the Indonesian context.
- c. **Formulation and Justification of an Integrative Conceptual Model:** This is the primary output of the research. Based on the critique (Literature Review) and the foundation established (Theoretical Synthesis), a conceptual model is proposed as the GenAI-Da'wah Management Integration Model for SEL/GCED (Anthony, 2020; Mortimore, 2023). This model outlines the interaction mechanisms and positions GenAI as a reflective and adaptive layer capable of overcoming the superficial nature of social media. This formulation process is presented through a logical demonstration (justification) that demonstrates how this model directly supports the achievement of Target 4.7 of SDG 4.

RESULT AND DISCUSSION

RESULT

This section presents the main findings of the conceptual research, namely the Integrative Model of Generative AI and Da'wah Management, and discusses how this model addresses the theoretical gap (research gap) and contributes to strengthening Social Emotional Learning (SEL) and Global Citizenship Education (GCED) in supporting SDG 4 in Indonesia.

3.1. Gap Analysis and Model Justification

The results of the critical literature review and comparative analysis indicate significant fragmentation and implementation limitations across three main domains: technology (GenAI) (Luo, 2024), character education (SEL/GCED), and normative values (Da'wah Management). As summarized in Table 1, previous research tends to separate the role of GenAI from ethical and socio-emotional needs, or limit SEL/GCED (McLaren, 2022; Torres, 2020) and Da'wah practices to traditional or passive digital frameworks.

Table 1: Research Gap Analysis and Novelty Contribution

Previous Focus Domain	Previous Research Examples (2020-2025)	Limitations (Gap)	Novelty Contribution of This Research
Generative AI in Education	(Nikolic, 2024)(Kohnke, 2025; Spencer, 1991; Zulfikar, 2017)	Focus on cognitive aspects, technical efficiency, and administration; Ignoring the potential for <i>Social Emotional Learning</i> and Ethics.	Positioning GenAI as an Adaptive Reflective Layer to mediate emotional and ethical interactions.
SEL and GCED	(Chen, 2024; Edgar, 2020; Franch, 2020; Shen, 2024)	Centered on traditional curriculum models, it does not offer scalable adaptive solutions to digital challenges (social media superficiality). Limited to passive use of digital media; Has not explored GenAI as an interactive tool capable of managing complex moral dialogue.	Integrating GenAI to create Personalized Ethics Simulation Scenarios and <i>Sustained Reflection</i> .
Da'wah Management & Technology	(Ahmad, 2020; Bulfin, 2013; Choung, 2023)		Using Da'wah Management as a Normative and Ethical Filter to train the GenAI model.

The primary research gap identified is the need for an adaptive and value-oriented mediation agent to address the superficial and polarizing nature of digital interactions. Therefore, the novelty of this research is the argument that GenAI is a mediation agent capable of filling this gap (Li, 2025; Luo, 2025), provided it is integrated with a robust value framework, namely Da'wah Management.

3.2. Proposed Integrative Conceptual Model

The primary outcome of this conceptual research is the formulation of an integrative model of GenAI and Da'wah Management for strengthening SEL and GCED. This model is visually illustrated in Figure 1 and is a functional structure consisting of five interconnected functional components (Ferrara, 2024):

- a. Normative Input (Da'wah Management): This is identified as the ethical and value foundation, where Da'wah Management principles (e.g., *uswah hasanah*, *hikmah*, *mau'idzah hasanah*) should be used to train and refine GenAI's output (Y. Wang, 2025). The result is a guarantee that the content, simulations, and feedback generated by AI have moral integrity that aligns with Indonesia's socio-religious context.
- b. Mediation Agent (Generative AI): GenAI is identified as a reflective processing engine. Its function is to take

digital interaction data (from social media), analyze the emotional and ethical nuances within it, and then generate adaptive responses or scenarios that encourage critical thinking, which is the core of GenAI's output.

- c. Environmental Activity (Social Media): Recognized as an authentic space where learners interact. In this model, GenAI is positioned to address the superficial nature of interactions and the frequent polarization, transforming social media platforms from mere places of expression into structured and guided learning spaces.
- d. Educational Output (SEL and GCED Enhancement): Through GenAI's guided mediation by Da'wah Management, the resulting output is students' ability to engage in sustained reflection, develop digital empathy, and practice responsible digital citizenship, which are core SEL and GCED competencies.
- e. Macro Impact (SDG 4): All of these models aim to contribute directly to the achievement of SDG 4, specifically Target 4.7, which is to ensure that all learners acquire the knowledge and skills necessary to promote sustainable development and global citizenship (Ferguson, 2020; Pashby, 2020b).

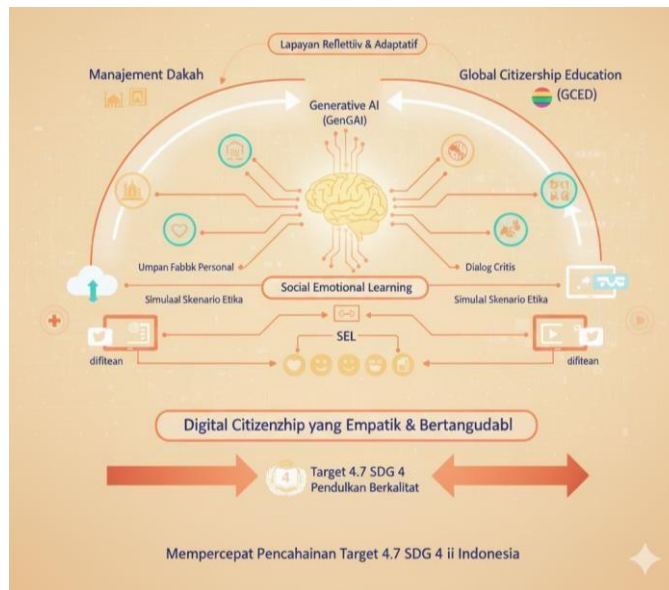


Figure 1: Integrative Conceptual Model of GenAI and Da'wah Management for Strengthening SEL and GCED

DISCUSSION

4.1 GenAI as an Adaptive Reflective Layer

This proposed model significantly expands our understanding of the role of technology in character education, in line with Albert Bandura's Social Cognitive Theory (Citra & Rosy, 2020; Kecojevic, Basch, Sullivan, & Davi, 2020; T. Zhang, 2022)(Fisch, 2017; Izzati, 2021). This theory emphasizes that learning occurs through the reciprocal interaction between the environment, behavior, and cognitive factors.

GenAI, in this context, becomes an ethically controlled artificial environment. Rather than simply observing modeled behavior on social media (an unstructured environment), GenAI allows learners to interact with personalized simulations of ethical dilemmas (Nikolic, 2024)(Lein, 2020; Pohan, Asmin, & Menanti, 2020). For example, GenAI can simulate social media conversations (that challenge students' biases on global issues, or provide immediate feedback (a cognitive factor) that forces students to reflect on their emotional and ethical positions.

GenAI's function as an "adaptive reflective layer" addresses a fundamental weakness of social media—its lack of depth. On social media, feedback (e.g., a short like or comment) does not encourage sustained reflection. GenAI, instead, can (Amin, Wunas, Merina Anin Sekolah Tinggi Ilmu Farmasi Makassar Jalan Perintis Kemerdekaan Km, & -Makassar, 2022; Habibah & Indrakusuma, 2025; Sopyan, Rubini, & Laihad, 2019): (1) Present cascading scenarios that adapt to students' emotional responses; and (2) Providing reflective scaffolding, for example, asking students to analyze a case from different ethical perspectives (based on Da'wah Management and GCED), thus explicitly forming SEL competencies (responsible decision making).

4.2. Normative Filters and SDG 4 Contribution

The integration of Da'wah Management is not simply the addition of topics, but rather the installation of normative filters into the GenAI algorithm. Within this model framework, Da'wah Management provides essential ethical instructions, ensuring that GenAI:

1. Avoiding Polarization (Fernandes et al., 2020): GenAI output does not encourage tashub (fanaticism) but promotes wasatiyyah (moderation) and peaceful dialogue, in line with the spirit of GCED.
2. Building Universal Empathy: Da'wah principles are aimed at strengthening universal Islamic values (such as justice, tolerance, and rahmatan lil alamin) that are crucial for GCED competency.

By integrating these strong normative values into advanced technological tools, this research makes a clear contribution to SDG 4 (Chicksen, 2024; Kupe, 2024; Leite, 2022): Quality Education. Specifically, this model directly addresses Target 4.7, which requires all learners to acquire the knowledge and skills necessary to promote global citizenship and sustainable development (Jauhuek, 2024; Spencer, 1991). The GenAI-Da'wah Management Integrative Model offers a measurable, adaptive, and ethical pedagogical mechanism to achieve SDG 4 targets amidst Indonesia's digital challenges.

CONCLUSION AND RECOMENDATION

5.1. Conclusion

This research aims to propose and theoretically justify a Conceptual Model of the Integration of Generative AI (GenAI) and Da'wah Management as an innovative

strategy to strengthen Social Emotional Learning (SEL) and Global Citizenship Education (GCED) in supporting the achievement of SDG 4 (Quality Education) in Indonesia. The main conclusions of this position paper are:

The Integrative Model Addresses the Gap: There is a significant theoretical gap where GenAI technology, character education (SEL/GCED), and normative values (Da'wah Management) operate separately. The proposed Integrative Model successfully bridges this gap by positioning GenAI as an Adaptive Mediating Agent and Da'wah Management as a binding Normative Filter.

GenAI as a Reflective Layer: This model demonstrates that GenAI can go beyond its cognitive role to function as an essential Adaptive Reflective Layer. By generating personalized ethical dilemma simulations, GenAI is able to overcome the superficial and polarizing nature of interactions on social media, effectively fostering sustained reflection and responsible decision-making (the essence of SEL).

Da'wah Management as an Ethics Filter: The integration of Da'wah Management principles serves as a foundation for ethics and values, ensuring that all GenAI outputs are directed toward developing moderate character (wasatiyyah) and promoting universal values (such as justice and tolerance) that are crucial for GCED competencies and contributing to SDG 4 Target 4.7.

Overall, the GenAI Integrative Model and Da'wah Management offer a cohesive, adaptive, and values-oriented framework that is highly relevant for preparing Indonesian youth to face the ethical and socio-emotional challenges of the digital age.

5.2. Recommendations

Based on the results of this conceptual research, there are two main categories of recommendations addressed to stakeholders and the academic community:

a. Practical and Policy Implications

Values-Based Prototype Development: Educational technology developers and curriculum policymakers are advised to invest in the development of a GenAI prototype explicitly trained on Da'wah Management principles. This prototype should focus on creating simulation modules that test SEL (e.g., digital empathy) and GCED (e.g., global conflict resolution) competencies.

Curriculum Integration: Islamic educational institutions and governments are advised to integrate this GenAI-based learning model into character education curricula, ensuring that GenAI is used not only for academic efficiency but also to strengthen ethical and moral foundations.

b. Recommendations for Further Research

Empirical Testing of the Model: Further research should focus on empirical testing (quasi-experiments or case studies) of the proposed Integrative Model. This is necessary to quantitatively measure the effectiveness of

Da'wah Management-filtered GenAI in improving students' SEL scores and GCED competencies compared to conventional methods.

Cross-Cultural Comparative Analysis: It is recommended to conduct a comparative analysis of the GenAI integration model and normative values (e.g., comparing Da'wah Management in Indonesia with other ethical frameworks in non-Muslim countries) to understand how GenAI can be universally adapted for global character education purposes.

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