

Flipped Classroom in Islamic Education: A Systematic Review of Pedagogical Impact at Junior and Senior High School Levels

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Informasi Artikel	Abstract
E-ISSN : 3026-6874 Vol: 3 No: 8 August 2025 Page : 20-26	The flipped classroom model has increasingly been implemented as an alternative instructional approach in the digital era, including in Islamic Religious Education (IRE) at junior and senior high school levels. This article aims to systematically examine eight empirical publications from 2021 to 2025 that explore the application of this model within IRE contexts. The review focuses on instructional design, pedagogical outcomes, and implementation challenges. Findings from the analyzed studies suggest that applying the flipped classroom model in IRE can enhance students' cognitive understanding, foster learning motivation, and develop critical and collaborative thinking skills. However, the effectiveness of this model depends heavily on the quality of digital learning design, the teacher's readiness to facilitate active learning, and the ability to meaningfully integrate Islamic values into the learning process. In addition, this model faces several challenges, including limitations in technological infrastructure, lack of professional teacher training, and the need for curriculum adaptation. This study highlights the importance of systemic support and digital competency development among educators to ensure that flipped classroom implementation is not merely a technical strategy, but a means of strengthening the spiritual dimension and core values of Islamic education in the digital age.
Keywords: flipped classroom, Islamic Religious Education, digital learning, systematic review	

Abstract

Model kelas terbalik semakin banyak diterapkan sebagai pendekatan pembelajaran alternatif di era digital, termasuk dalam Pendidikan Agama Islam (PAI) pada jenjang sekolah menengah pertama dan atas. Artikel ini bertujuan untuk secara sistematis mengkaji delapan publikasi empiris dari tahun 2021 hingga 2025 yang mengeksplorasi penerapan model ini dalam konteks PAI. Tinjauan ini fokus pada desain instruksional, hasil pedagogis, dan tantangan pelaksanaan. Temuan dari studi yang dianalisis menunjukkan bahwa penerapan model kelas terbalik dalam PAI dapat meningkatkan pemahaman kognitif siswa, mendorong motivasi belajar, serta mengembangkan keterampilan berpikir kritis dan kolaboratif. Namun, efektivitas model ini sangat bergantung pada kualitas desain pembelajaran digital, kesiapan guru dalam memfasilitasi pembelajaran aktif, dan kemampuan mengintegrasikan nilai-nilai Islami secara bermakna dalam proses pembelajaran. Selain itu, model ini menghadapi beberapa tantangan, termasuk keterbatasan infrastruktur teknologi, kurangnya pelatihan profesional bagi guru, serta kebutuhan adaptasi kurikulum. Studi ini menyoroti pentingnya dukungan sistemik dan pengembangan kompetensi digital di kalangan pendidik agar pelaksanaan kelas terbalik tidak sekadar menjadi strategi teknis, melainkan sebagai sarana memperkuat dimensi spiritual dan nilai-nilai inti pendidikan Islam di era digital.

Kata Kunci: kelas terbalik, Pendidikan Agama Islam, pembelajaran digital, tinjauan sistematis

INTRODUCTION

In recent years, Islamic education at the secondary level (junior and senior high school) has faced increasing pressure to transform in response to the evolving needs of the digital generation. One approach gaining popularity is the flipped classroom model, in which students are introduced to lesson content prior to class typically through videos or online modules while in-person classroom sessions are dedicated to discussion, concept application, and value deepening (Zierock, 2024). In the field of Islamic Religious Education (IRE), this model presents considerable potential to enhance student engagement and to strengthen both spiritual and academic understanding.

Several recent empirical studies have investigated the impact of flipped classrooms in IRE contexts. For instance, a study by Ikbal (2025) found that integrating flipped classrooms with a Problem-Based Learning approach at SMA Negeri 1 Koto Baru significantly improved students' cognitive and spiritual learning outcomes compared to traditional methods. The NGain score of 0.19 indicated substantial performance gains and high engagement levels. These findings are consistent with other research reporting increased motivation, active participation, and critical thinking among students learning IRE through flipped classroom models (Meliani et al., 2022).

In secondary education, the flipped classroom has proven effective in promoting higher-order thinking skills (HOTS) and fostering social collaboration. A meta-analysis conducted by Harun et al. (2024) concluded that implementing the flipped classroom model yields a large effect size ($d = 0.72$) on students' critical thinking and active learning, particularly in religious and humanities subjects. Other findings highlight how this model allows educators to adopt the role of reflective facilitators rather than mere transmitters of information a pedagogical shift that aligns closely with the value-oriented approach of Islamic education.

Nonetheless, implementing the flipped classroom model in junior and senior high schools presents notable challenges (Chang & Hwang, 2018). Chief among these is the readiness of both digital infrastructure and teachers. The availability of devices and internet access directly influences the effectiveness of flipped classroom implementation, while a lack of teacher preparedness in developing digital learning materials can reduce the model's pedagogical impact curriculum adaptation and teacher training are essential strategies (Chen et al., 2014; Robandi, Setiawardani, & Apriyanto, 2025; Setiasih, Nandi, et al., 2023b).

Core Islamic values such as tawhid (monotheism) and adab (ethics) must be systematically embedded into digital content and classroom activities. Without the integration of these values, the learning process risks becoming overly technical and detached from its spiritual essence (Umbrello, 2023). This highlights the necessity of a digital pedagogical design that explicitly incorporates Islamic principles within the flipped classroom framework (Santos et al., 2024).

Based on this background, the present article aims to conduct a systematic review of eight empirical studies published between 2021 and 2025 that examine the pedagogical impact of the flipped classroom model in Islamic Religious Education at junior and senior high school levels. The review focuses on evaluating cognitive, affective, and spiritual learning outcomes, as well as supporting factors such as the quality of digital materials, teacher roles, technological readiness, and religious value integration. This study seeks to offer practical recommendations for educators and curriculum developers aiming to implement the flipped classroom effectively and in alignment with the values of Islamic education.

METHOD

This article employs a Systematic Literature Review (SLR) approach to collect, analyze, and synthesize empirical findings related to the implementation of the flipped classroom model in Islamic Religious Education (IRE) at the junior and senior high school levels. This method was chosen because it enables a comprehensive analysis of diverse, relevant studies while ensuring that the conclusions drawn are grounded in credible scientific evidence (Snyder, 2019).

The SLR process involved several systematic stages, beginning with the identification of literature using the following keywords: flipped classroom, Islamic education, Pendidikan Agama Islam, secondary school, and student outcomes. The selection was limited to articles published between 2021 and 2025

to ensure that the review reflects the most recent pedagogical developments within the digital education landscape.

The inclusion criteria were as follows: Articles based on empirical research (quantitative, qualitative, or mixed-methods); Studies focused on the implementation of the flipped classroom model within the context of Islamic education or IRE; Research involving junior or senior high school students as the study population; Articles available in either Indonesian or English. Conceptual papers or those that did not report data on learning outcomes were excluded. After the screening and initial review, eight articles were found to meet the criteria and were selected for in-depth analysis.

From each study, relevant data were extracted and coded into several categories, including: research objectives, methodological approaches, flipped classroom models employed, learning outcomes (cognitive, affective, or spiritual), and implementation challenges. Thematic and narrative analyses were conducted to identify recurring patterns, unique contributions, and potential research gaps.

Internal validity was strengthened by assessing the methodological quality of each article using the pedagogical transparency framework (Clements et al., 2015), which is widely applied in systematic literature reviews in the field of education. External validity was supported through triangulation of findings from multiple sources and varied educational contexts.

This methodological approach not only provides a clear map of the pedagogical impact of flipped classrooms in Islamic education but also yields actionable recommendations for curriculum developers, IRE teachers, and education policymakers who seek to adopt adaptive, contextual, and values-based pedagogical innovations (Bozalek et al., 2013).

RESULTS AND DISCUSSION

The flipped classroom model represents a fundamental shift in teaching paradigms, moving from a teacher-centered approach to a learning model that encourages active student participation. In the context of Islamic Religious Education (PAI) at junior and senior high school levels, this model has proven to have significant pedagogical impacts, especially in enhancing students' motivation, understanding, and depth of thinking (Ikbal, 2025; Setiasih, Nandi, et al., 2023a; Setiasih, Rusman, et al., 2023).

From eight studies reviewed in this systematic study, the majority indicate that the flipped classroom positively contributes to students' cognitive learning outcomes. Research by Harun et al. (2024) shows that students learning with the flipped classroom model achieved higher scores in religious understanding tests compared to the control group using conventional methods. This aligns with earlier findings by Steen-Utheim & Foldnes (2018), which stated that the flipped classroom improves material retention quality because the learning process occurs in two phases: independent exploration and collaborative interaction.

The improvement in learning outcomes is not limited to cognitive aspects. A study by (Meliani et al., 2022) found that the flipped classroom helps foster a sense of learning responsibility because students are required to prepare before class meetings. In the context of PAI, this habituation is important since the material taught is not only informative but also morally and spiritually educative. Therefore, this learning model opens deeper reflection spaces that were previously difficult to achieve in traditional lecture models.

Furthermore, the flipped classroom also has a significant impact on strengthening higher-order thinking skills (HOTS). This model enables students to discuss complex religious topics in class, including contemporary issues such as social media ethics in Islam or religious tolerance (Ibrahim et al., 2024). These discussions reinforce students' affective and social dimensions while encouraging critical reasoning about Islamic values in daily life (Setiawardani et al., 2021).

In implementation, the success of this model strongly depends on quality learning design. The importance of selecting appropriate learning media, including videos with Islamic narratives that not only convey material factually but also touch on the emotional and spiritual sides of students (Mushaiqri & Sulistio, 2024; Setiawardani, 2013). Good design involves interactive elements such as digital quizzes, worship simulations, and case studies contextualized to students' lives.

The teacher's role in this model also undergoes repositioning. The teacher is no longer the sole source of knowledge but rather a facilitator, mentor, and discussion guide who helps students internalize Islamic values. A study by Bozalek et al. (2013) shows that effective flipped classroom teachers are those who can develop reflective and empathetic skills, which are highly relevant to the role of PAI teachers as moral guides.

However, despite its great potential, the implementation of flipped classroom faces various challenges. One major obstacle is technological access disparity, especially in Islamic schools based in pesantrens or remote areas. This issue is also highlighted in Louhab et al. (2018) study, which notes that the success of flipped classroom is highly influenced by the availability of adequate devices and internet networks. When infrastructure is lacking, flipped classroom may widen the digital divide among students.

Another challenge is teacher readiness. Some PAI teachers have not fully mastered blended or digital pedagogy approaches. Research points out that teachers' technological and digital pedagogical competencies remain an issue that needs systematic improvement, both through regular training and professional learning communities development (Robandi, Setiawardani, Nuryani, et al., 2025).

From the curriculum perspective, flipped classroom requires flexibility in learning structure but must still maintain the integrity of Islamic values. Therefore, curriculum adaptation is an important element to ensure this model is not only innovative but also meaningful. A study by Al-Manaf (2021) asserts that technology integration in Islamic education must be accompanied by a strong spiritual value foundation so that the learning process does not lose its Islamic essence.

Several studies also recommend a blended learning approach as a solution to infrastructure limitations and pedagogical demands of flipped classroom. This approach allows alignment between online and offline learning while maintaining meaningful in-class interactions. This is confirmed by Mariana et al. (2024), who states that spiritual value-based blended learning tends to be more successful in maintaining students' learning interest and spiritual depth.

Another important dimension emerging from the review is how flipped classroom can serve as a means to strengthen the internalization of Islamic values if designed with high pedagogical and spiritual awareness. Using learning media that present stories of the Prophet, interactive simulations of worship procedures, and digital reflections on selected hadiths can enliven a more impactful and contextual learning atmosphere (Ahmad et al., 2025; Setiasih et al., 2024).

Finally, flipped classroom enables Islamic education to be more responsive to the learning styles of the digital generation. Students growing up in the social media era require a communicative, flexible, and experiential approach. Flipped classroom provides them space to learn at their own pace while maintaining collective values through discussion and class interaction (Brewer & Movahedazarhouli, 2018). This model indirectly promotes digital spirituality, namely the awareness to use technology wisely and responsibly within the framework of Islamic values (Juwairiyah & Fanani, 2025).

Thus, flipped classroom in Islamic education is not only a methodological strategy but also a new pedagogical paradigm that addresses contemporary challenges. Proper implementation will produce a more active, reflective, and spiritual learning experience for students at the junior and senior high school levels.

CONCLUSION

The flipped classroom model in the context of Islamic Religious Education (PAI) at the junior and senior high school levels has proven to be an effective pedagogical innovation in improving students' cognitive learning outcomes, motivation, and higher-order thinking skills. This approach not only shifts the teacher's role from content deliverer to learning facilitator but also empowers students to take an active role in the learning process through independent preparation before class meetings. The findings of this study confirm that the use of the flipped classroom can build a more interactive and collaborative learning environment while maintaining the integrity of Islamic values, which are the essence of Islamic education.

However, the effectiveness of this model's implementation depends heavily on several key factors, such as the quality of digital learning design that integrates cognitive, affective, and spiritual aspects; teachers' readiness to adopt new technologies and pedagogies; and adequate technological

infrastructure support. Infrastructure challenges and digital access disparities remain major obstacles, especially in pesantren-based schools and areas with limited facilities. Therefore, continuous teacher training and strengthening of technology support systems are prerequisites for the flipped classroom to function optimally and equitably.

Furthermore, the flipped classroom model in Islamic education must be designed holistically with attention to the values of tawhid (monotheism), Islamic ethics, and manners. The curriculum and learning media used must be capable of internalizing spiritual values so that learning is not merely knowledge transfer but also character and moral development of the students. This demands the development of content that is not only informative but also reflective and contextual, in accordance with Islamic guidance.

More broadly, the implementation of the flipped classroom also marks a transformation of the pedagogical paradigm that emphasizes digital spirituality—the students' ability to live meaningfully in the technological era without losing their Islamic identity and value orientation. This model opens space for Islamic education to adapt to changing times without sacrificing fundamental religious principles.

Thus, the flipped classroom is not merely an alternative learning method but a strategic approach that can significantly improve the quality of Islamic education. Future recommendations include developing teacher training programs oriented toward integrating digital pedagogy and Islamic values, enhancing technological facilities, and revising curricula to be responsive to 21st-century learning needs. This approach is expected to produce Muslim generations who are not only academically intelligent but also spiritually strong and of noble character.

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