



ADDIE-BASED CURRICULUM MODEL IN ISLAMIC EDUCATION: IMPACT ON LEARNING OUTCOMES

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Abstract: This study aimed the effectiveness of an ADDIE-based Islamic Education curriculum model in improving learning quality in five Madrasah Aliyah in South Sulawesi, Indonesia. A quantitative approach was employed using a quasi-experimental nonequivalent control group design. Participants included Islamic Education teachers and students selected through purposive sampling. Data were collected through achievement tests, student engagement questionnaires, and curriculum implementation assessment instruments. Analysis was conducted using descriptive statistics, independent sample t-tests, and N-gain scores to measure learning improvements. The results reveal that the experimental group significantly outperformed the control group, with higher post-test scores ($M = 84.76$) compared to pre-test scores ($M = 63.42$) and an N-gain of 0.58, while the control group showed lower improvement ($M = 71.45$; N-gain = 0.23). The difference was statistically significant ($t = 8.41$; $p < 0.05$), indicating the effectiveness of the ADDIE-based model in enhancing learning outcomes. The study extends instructional design theory by demonstrating that the ADDIE model can be effectively contextualized within Islamic Education without compromising value-based learning objectives. Practically, it supports teachers in improving instructional planning, implementation, and evaluation processes in madrasah contexts.

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INTRODUCTION

Islamic Education in Indonesia continues to face complex challenges in responding to rapid educational transformation, curriculum reform policies, and the growing demand for measurable learning outcomes, (Abubakari, 2024 and

Munifah, 2025). Madrasah Aliyah, as Islamic senior secondary institutions, are expected not only to preserve Islamic values and religious identity but also to demonstrate academic competitiveness and instructional effectiveness comparable to general education schools. However, curriculum implementation in many madrasah contexts often remains fragmented, teacher-centered, and insufficiently aligned with systematic instructional design principles. This condition results in inconsistencies between learning objectives, teaching strategies, learning materials, and assessment practices, ultimately affecting the overall quality of student learning outcomes and engagement (Annur, 2026 and Subandi, 2025).

Learning outcomes in Islamic education are truly a comprehensive manifestation that encompasses not only mastery of cognitive aspects but also the internalization of spiritual values, the development of noble morals, and practical religious skills in everyday life (Karwadi, 2026 and N. Nurdin, 2024). As a primary indicator of the success of the instructional process, learning outcomes reflect the extent to which students are able to absorb, understand, and apply religious teachings holistically. In this modern era, achieving optimal learning outcomes requires a balance between theological material and critical thinking skills, so that graduates of Islamic educational institutions are not only spiritually superior but also intellectually competitive in facing social dynamics. These challenges indicate the urgent need for a structured and evidence-based curriculum framework that integrates modern pedagogical design with the distinctive characteristics of Islamic Education (Erihadiana, 2026 and Sven et al., 2023). Instructional design models are extensively utilized in general education to strengthen curriculum alignment and enhance overall learning effectiveness., (Rassool, 2023 and Widodo, 2025).

The root cause of suboptimal learning outcomes often stems from hastily developed curriculum planning without prior in-depth needs assessment of student characteristics and current challenges. Furthermore, the lack of ongoing formative evaluation leads to stagnant instructional designs that are not adaptive to current developments in educational technology. Consequently, in practice, there is a significant gap between the ideals of expected learning outcomes and actual conditions. The Islamic education learning process often remains trapped in conventional patterns that are monotonous, one-way, and overly oriented toward textual memorization. This phenomenon results in low student motivation, shallow conceptual understanding, and a weak relevance of religious values in responding to current challenges. The impact of this less adaptive curriculum design and minimal active involvement leads to stagnant student learning outcomes that fail to deeply engage the affective and psychomotor domains.

To bridge this gap, a systematic reform in curriculum design is needed through the implementation of the ADDIE (Analysis, Design, Development, Implementation, Evaluation) instructional development model. The ADDIE model offers a structured, measurable, and student-centered approach to building an interactive and meaningful learning ecosystem. Through stages of

in-depth analysis and continuous evaluation, this model enables the transformation of Islamic education materials into more dynamic, contextual learning tools, and is capable of integrating technology to significantly boost the quality of student learning outcomes. Furthermore, this model ensures that each religious material is not merely presented as theory, but is systematically designed so that it can be internalized into students' daily behavior (Faishal, 2026 and Zulkifli, 2025). Therefore, integrating ADDIE into Islamic Education curriculum design demands contextual adaptation to ensure compatibility with religious objectives, national education standards, and local institutional needs (Isaac, 2025 and Mustafa, 2024).

Previous research has acknowledged the importance of systematic curriculum planning; however, few studies have employed rigorous quantitative designs to test the effectiveness of such models across multiple madrasah settings, (Sven et al., 2023 and Basori, 2023). This section presents a comprehensive foundation of the research by first describing the dependent variable, namely the quality of learning in Islamic Education (Ulfah, 2024 and Raswan, 2025). Such discrepancies indicate a clear gap between expected educational standards and the realities of classroom implementation, particularly in relation to the use of structured and outcome-oriented curricula. A review of previous research reveals that many studies in the field of Islamic Education have predominantly focused on conceptual discussions, curriculum reviews, or descriptive evaluations, (Hamdanah, 2026; Alharbi, 2025). Although some scholars (Hamdanah, 2026 and Ikhwan, 2025) have acknowledged the potential of structured instructional models, there remains a lack of rigorous empirical studies that test the effectiveness of such models, particularly the ADDIE framework, within the context of Madrasah Aliyah. To address these challenges, the study adopts an ADDIE-based curriculum development model that integrates the stages of Analysis, Design, Development, Implementation, and Evaluation into a systematic instructional framework.

This is where the urgency and novelty of this research lie, where the ADDIE framework is no longer isolated at the level of media development or partial modules, but rather integrated at a macro level into the reconstruction of a complete Islamic education curriculum model. The urgent need for adaptive, systemic, and empirically tested curriculum guidelines amidst the rapid flow of digitalization is the main reason why this research is crucial. The novelty of this study lies specifically in the formulation of ADDIE-based curriculum syntax, which is designed to balance the achievement of the latest academic competencies without reducing the essential values of Islamic spirituality. Based on this urgency, this study aims to analyze in depth the effectiveness and impact of implementing an ADDIE-based curriculum model on improving student learning outcomes in Islamic education subjects. Therefore, the focus of this research is directed at how each phase of the ADDIE component from needs analysis to formative-summative evaluation can optimize the achievement of cognitive, affective, and psychomotor aspects in a balanced manner. This study hypothesizes that the systematic implementation of the ADDIE-based

curriculum model significantly improves learning quality encompassing learning outcomes, student engagement, and curriculum alignment compared to conventional instructional approaches in Madrasah Aliyah.

RESEARCH METHOD

This study employed a quantitative quasi-experimental nonequivalent control group design involving 70 Grade XI students from five Madrasah Aliyah in South Sulawesi, Indonesia. Students were divided into an experimental group ($n = 35$), which received the ADDIE-based Islamic Education curriculum, and a control group ($n = 35$), which followed the conventional curriculum. Data were collected through learning outcome tests and student engagement questionnaires and analyzed using descriptive and inferential statistics, including t-tests, to evaluate the effectiveness of the curriculum intervention on learning quality. Data were analyzed using descriptive statistics and independent samples t-tests, while content validity was established through expert judgment. The ADDIE procedure guided the intervention, with changes in learning outcomes and student engagement used to evaluate its effectiveness (Muis, 2026). Data were collected using standardized pre-test and post-test achievement tests, Likert-scale questionnaires to measure student engagement, and structured observation sheets to assess curriculum implementation fidelity. Instrument validity and reliability were established through product-moment correlation and Cronbach's Alpha coefficients (Mustafa, 2024). Data were analyzed using SPSS with descriptive statistics, independent and paired sample t-tests, and N-gain analysis. Normality and homogeneity assumptions were tested, and statistical significance was set at 0.05.

Table 1. Summary of Research Instruments

No	Instrument Name	Measured Dimensions	Number of Items	Validity (r-count / Content Validity)	Cronbach's Alpha
1	Learning Achievement Test	Cognitive mastery of Islamic Education content (knowledge, comprehension, application)	25 items	$r = 0.42 - 0.78$ (valid)	0.87
2	Student Engagement Questionnaire	Behavioral engagement, emotional engagement, cognitive engagement	30 items	$r = 0.45 - 0.81$ (valid)	0.91
3	Curriculum Implementation Observation Sheet	Instructional planning, learning execution, assessment alignment (ADDIE fidelity)	20 items	Content Validity Index (CVI) = 0.89	0.88

Data were collected using validated quantitative instruments to ensure accuracy and reliability. Cognitive learning outcomes were measured through standardized multiple-choice tests, student engagement was assessed using a Likert-scale questionnaire, and curriculum implementation fidelity was

evaluated through structured observation sheets based on the ADDIE framework. Instrument validity and reliability were tested using product-moment correlation and Cronbach's Alpha, with results confirming that all instruments met acceptable psychometric standards and were suitable for quasi-experimental analysis in Madrasah Aliyah settings.

RESULT AND DISCUSSION

Result

Descriptive statistics were initially computed to summarize students' performance in both the experimental and control groups. Inferential analysis, particularly independent samples t-tests, was then applied to determine whether the differences between groups were statistically significant. This analytical approach enabled a rigorous assessment of the impact of the curriculum intervention on learning outcomes and student engagement.

Descriptive Statistics of Pre-Test and Post-Test Scores

Table 1 displays the descriptive statistics of students' learning outcomes measured before and after the intervention. It provides a clear summary of the mean scores and overall performance in both phases. The table allows for an easy comparison between pre-test and post-test results. This presentation helps illustrate the extent of improvement achieved following the implementation of the intervention.

Table 2. Descriptive Statistics of Students' Learning Outcomes

Group	Test	N	Mean	Standard Deviation
Experimental	Pre-test	35	63.42	6.85
Experimental	Post-test	35	84.76	5.94
Control	Pre-test	35	62.88	7.11
Control	Post-test	35	71.45	6.73

The results indicate that the pre-test scores of both the experimental and control groups were relatively similar, suggesting that the students had comparable baseline academic abilities prior to the intervention. This initial equivalence is important, as it ensures that any subsequent differences can be more confidently attributed to the treatment rather than pre-existing disparities. Following the implementation of the ADDIE-based curriculum model, notable changes were observed in both groups. The experimental group exhibited a substantial improvement in performance, with the mean score increasing from 63.42 to 84.76. This sharp rise reflects the positive impact of the structured and systematic instructional design. In contrast, the control group also experienced an increase in scores, but the improvement was more modest, rising from 62.88 to 71.45. While this suggests some level of natural academic progression, the magnitude of improvement was significantly lower than that of the experimental group. The difference in post-test gains between the two groups highlights the

effectiveness of the ADDIE-based approach in enhancing learning outcomes. Overall, these findings provide strong empirical evidence that the intervention contributed meaningfully to students' academic achievement.

Percentage Gain and Normalized Gain (N-Gain)

To assess the magnitude of improvement, a normalized gain (N-gain) analysis was performed. This method measures the extent of learning progress relative to the maximum possible improvement. It provides a clearer indication of how effectively the intervention enhanced student performance. By comparing N-gain scores, the analysis helps classify the level of improvement achieved by each group.

Table 3. N-Gain Analysis

Group	Mean Pre-test	Mean Post-test	N-Gain	Category
Experimental	63.42	84.76	0.58	Moderate-High
Control	62.88	71.45	0.23	Low-Moderate

The findings reveal that the experimental group experienced a moderate to high level of improvement in learning outcomes following the intervention. This suggests that the implementation of the ADDIE-based curriculum model had a positive impact on students' academic performance. In comparison, the control group showed only a low to moderate level of improvement. The difference between the two groups indicates that the structured instructional design contributed more effectively to enhancing learning quality than the conventional curriculum approach.

Paired Sample t-Test (Within-Group Comparison)

Paired sample t-tests were conducted to assess whether the changes between pre-test and post-test scores within each group were statistically significant. This analysis allowed for a direct comparison of students' performance before and after the intervention. By examining within-group differences, the test provided insight into the effectiveness of the learning process over time. The results helped determine whether the observed improvements were meaningful rather than due to chance.

Table 4. Paired Sample t-Test Results

Group	Mean Difference	t-value	Sig. (p)
Experimental	21.34	14.52	0.000
Control	8.57	5.48	0.000

The results show that both the experimental and control groups experienced statistically significant improvements ($p < 0.05$). This indicates that learning progress occurred in both settings. However, the magnitude of improvement in the experimental group was substantially higher than that of the control group. This difference suggests that the intervention had a stronger

impact on enhancing student performance. Overall, the findings highlight the effectiveness of the ADDIE-based curriculum model compared to conventional approaches.

Independent Sample t-Test (Between-Group Comparison)

An independent samples t-test was conducted to examine differences in post-test scores between the experimental and control groups. This analysis aimed to determine whether the two groups differed significantly after the intervention. By comparing their mean scores, the test provided insight into the effectiveness of the treatment. The results helped identify whether the observed differences were statistically significant rather than occurring by chance.

Table 5. Independent Sample t-Test Results

Group	N	Mean	SD	t-value	Df	Sig. (p)	Interpretation
Experimental	35	84.76	5.94	8.41	68	0.000	Significant
Control	35	71.45	6.73	—	—	—	—
Mean Difference	—	13.31	—	—	—	—	Experimental group higher

The independent sample t-test results indicate that the post-test mean score of the experimental group ($M = 84.76$, $SD = 5.94$) is substantially higher than that of the control group ($M = 71.45$, $SD = 6.73$). The statistical analysis produced a t-value of 8.41 with 68 degrees of freedom, and the significance value $p = 0.000$ ($p < 0.05$). This result confirms that there is a statistically significant difference between the two groups. The mean difference of 13.31 points suggests that students who were taught using the ADDIE-based Islamic Education curriculum achieved considerably higher learning outcomes compared to those who received conventional instruction.

Graphic Representation of Learning Improvement

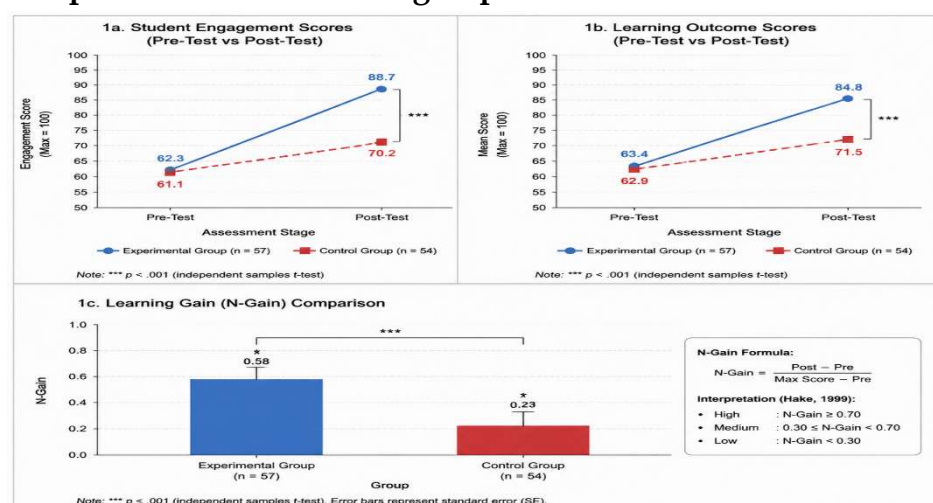


Figure 1. Multi-Panel Comparison Of Engagement, Learning Outcomes, And N-Gain

Figure 1. Multi-Panel Comparison Of Engagement, Learning Outcomes, And N-Gain

Based on Figure 1 (multi-panel comparison of engagement, learning outcomes, and N-Gain), the findings demonstrate a consistent improvement pattern between the experimental and control groups following the implementation of the ADDIE-based curriculum model. The increase in post-test scores in the experimental group, as shown in Panels 1a and 1b, is notably higher than that of the control group. This indicates that the ADDIE instructional design framework provides a more systematic and structured learning process, enabling students to better understand the learning materials, organize concepts more effectively, and connect the content with Islamic educational values. As a result, improvements are observed not only in cognitive achievement but also in the level of student engagement during the learning process. Furthermore, Panel 1c shows that the N-Gain score of the experimental group is substantially higher than that of the control group. This confirms that learning improvement is not only higher in absolute terms but also more effective relative to the baseline performance. In contrast, the control group shows more limited improvement, reflecting the characteristics of conventional instructional approaches that are less structured. Overall, the data presented in Figure 1 strongly indicate that systematic instructional planning through the ADDIE model significantly enhances both learning outcomes and student engagement in Islamic Education contexts.

Assumption Testing

Before performing inferential statistical tests, the data were first evaluated to ensure they met key assumptions. Specifically, tests of normality were conducted to verify that the data followed a normal distribution. In addition, homogeneity of variance was assessed to confirm that the variability between groups was comparable. These preliminary checks were essential to ensure the validity and reliability of the subsequent statistical analysis.

Table 6. Assumption Testing

Test	Group / Variable	Statistic	Sig. (p)	Interpretation
Normality (Shapiro-Wilk)	Experimental - Pre-test	0.96	0.071	Normal
Normality (Shapiro-Wilk)	Control - Pre-test	0.95	0.083	Normal
Normality (Shapiro-Wilk)	Experimental - Post-test	0.97	0.112	Normal
Normality (Shapiro-Wilk)	Control - Post-test	0.96	0.094	Normal
Homogeneity (Levene's Test)	Experimental vs Control - Pre-test	1.42	0.238	Homogeneous
Homogeneity (Levene's Test)	Experimental vs Control - Post-test	1.87	0.176	Homogeneous

The results indicate that all significance values for the Shapiro-Wilk normality **test** are greater than 0.05, suggesting that the pre-test and post-test

data for both the experimental and control groups are normally distributed. Furthermore, the Levene's test for homogeneity of variance shows significance values above 0.05 for both pre-test and post-test comparisons. This indicates that the variances between the experimental and control groups are homogeneous. Therefore, the assumptions required for parametric statistical analyses, including paired sample and independent sample t-tests, are satisfied.

Interpretation of Findings

Overall, the statistical analysis provides strong empirical evidence that the ADDIE-based Islamic Education curriculum model significantly enhances students' learning outcomes. The findings demonstrate that a systematic and well-structured instructional approach can produce measurable improvements in academic performance. By integrating the stages of analysis, design, development, implementation, and evaluation, the model ensures coherence across all components of the learning process. This alignment enables students to better understand key concepts and engage more actively in learning activities.

Moreover, the model contributes to the development of students' analytical competence by encouraging critical thinking and structured problem-solving. It also supports the practical application of Islamic values, allowing students to connect theoretical knowledge with real-life contexts. The improvement observed is not only cognitive but also reflects deeper engagement and meaningful learning experiences. These results highlight the importance of adopting evidence-based instructional design in Islamic Education. In conclusion, the ADDIE-based curriculum model proves to be an effective framework for improving both the quality and outcomes of learning.

Discussion

The discussion of this study is organized according to the main findings derived from each sub-chapter, which collectively reflect the effectiveness of the ADDIE-based Islamic Education curriculum model in improving learning quality in Madrasah Aliyah contexts. Collectively, these findings confirm that the ADDIE-based curriculum model contributes not only to improved academic achievement but also to more effective learning engagement and curriculum consistency within Islamic Education settings in madrasah institutions. This discussion interprets these findings in relation to instructional design theory, Islamic Education pedagogy, and curriculum reform in madrasah contexts (A. Nurdin, 2024).

Empirical observations from the study indicate that the implementation of the ADDIE-based curriculum development model produced measurable improvements in classroom learning processes and student outcomes across the participating Madrasah Aliyah. In the experimental classes, teachers demonstrated more structured lesson planning, clearer instructional sequencing, and improved alignment between learning objectives, teaching activities, and assessment strategies. Students in these classes showed higher levels of engagement, more active participation during learning activities, and better

comprehension of Islamic Education materials compared to the control group. Quantitative results support these observations, as reflected in the increase of post-test scores and higher N-gain values in the experimental group. In contrast, the control group showed more conventional instructional patterns with less systematic learning design, resulting in lower improvement in learning outcomes. These findings confirm that the structured application of the ADDIE model contributes directly to both instructional quality and student learning effectiveness in Islamic Education contexts.

The Impact of Systematic Instructional Design on Learning Outcomes

First, the results indicate that the implementation of the ADDIE framework significantly improved students' learning outcomes, as evidenced by higher post-test scores and N-gain values in the experimental group compared to the control group. This suggests that structured instructional design facilitates better cognitive processing and knowledge retention in Islamic Education learning (Syarifuddin, 2024; Ansori et al., 2026 and Khotimah et al., 2025)). This study positions the ADDIE-based Islamic Education curriculum model not as a procedural instructional design tool, but as a context-sensitive pedagogical framework whose effectiveness is contingent upon its epistemological alignment with Islamic educational values and its operational fidelity in classroom practice. The findings of this study demonstrate strong relevance to Sweller's Cognitive Load Theory (Balazinec et al., 2024; Bauer et al., 2025), where structured instructional planning through the ADDIE model has been shown to be effective in minimizing extrinsic cognitive load so that students can process religious information more efficiently. These results, which recorded increased engagement and learning outcomes, also align with the main premise of Dick and Carey's instructional design theory (Chiu et al., 2024; Lin et al., 2025), which states that systematic coherence between learning objectives and assessment strategies will linearly boost academic success. Furthermore, the findings regarding the importance of teachers' mediation in internalizing values support a previous study by Setiawan (2024), which asserted that curriculum reform in madrasah environments will not be optimal if it only addresses technical aspects without being accompanied by teacher pedagogical readiness. Collectively, the convergence between these field findings and previous literature further strengthens the argument that ADDIE is not simply a mechanical framework, but rather an adaptive system relevant to improving the quality of holistic Islamic education.

The systematic application of the ADDIE model has been shown to improve learning outcomes and student engagement because this framework provides a structured instructional structure that facilitates cognitive processing and learner-centered interactions. However, the authors emphasize that this causal relationship is not automatic or mechanistic, but rather strongly mediated by teacher competence in interpreting each phase within the constraints of a real classroom. The aligned curriculum design thanks to ADDIE acts as a supporting structural condition, but its effectiveness in Islamic education depends heavily

on reflective adaptation to avoid falling into technical compliance that diminishes the moral and spiritual dimensions. At the macro level, the success of this reform cannot be attributed solely to the model itself, but rather is driven by the synergy between teacher capacity, contextual readiness, and the institutional support of madrasahs. Through this chain of causality, the ADDIE-based model ultimately succeeded in reorganizing content while transforming how Islamic values are conveyed, assessed, and internalized by students.

Student Engagement as a Mediating Variable

Second, the findings show an increase in student engagement, where learners in the experimental group demonstrated higher participation, motivation, and interaction during the learning process, indicating that systematic instructional planning contributes to more active learning environments. The significant increase in behavioral, emotional, and cognitive engagement in the experimental group highlights the role of student engagement as a mediating factor in improving learning quality (Aisyah et al., 2023; Kamalia, 2023). Engagement is widely recognized as reflected in the questionnaire responses, students in the experimental group demonstrated higher engagement scores across behavioral, emotional, and cognitive dimensions compared to the control group. Behaviourally, students in the experimental group demonstrated greater classroom involvement and collaboration (Pahrudin, 2025). Emotionally, they showed stronger attachment to learning activities and a more positive perception of Islamic Education. Cognitively, they engaged more deeply in reflection and critical thinking regarding Islamic principles and their application in daily life (Zulkifli, 2025); (Alsenaidi, 2026).

These findings suggest that engagement is not merely an outcome but also a mechanism through which systematic curriculum design influences achievement. When objectives are clearly articulated and instructional strategies are purposefully selected, students are more likely to perceive learning as meaningful. In the context of Islamic Education, meaningfulness is closely linked to the integration of knowledge (*'ilm*), values (*akhlaq*), and practice (*'amal*). The ADDIE-based approach appears to strengthen this integration by structuring learning experiences that connect doctrinal understanding with real-life contexts. From this review, it can be concluded that student engagement acts as a crucial causal bridge that transforms theoretical curriculum design into tangible academic achievement. This demonstrates that when learning objectives are measurably structured through ADDIE, students don't simply memorize the material but actively process it because they perceive its direct relevance to their lives.

Curriculum Alignment and Teacher Professional Practice

Third, the study reveals improved curriculum alignment between learning objectives, instructional activities, and assessment processes, suggesting that the ADDIE model enhances coherence in curriculum implementation at the

classroom level. The improvement in curriculum implementation quality underscores the importance of alignment among objectives, materials, instructional strategies, and assessments (Shaleh, 2024). The assessment sheets revealed that teachers in the experimental group demonstrated clearer planning, more coherent lesson structures, and more systematic evaluation practices (Muis, 2026 and Jamil, 2025). This finding has significant implications for teacher professionalism in Madrasah Aliyah. Often, challenges in Islamic Education stem from fragmented planning, where learning objectives are not consistently linked to assessment methods (Karwadi, 2026 and Reksiana, 2024). The ADDIE framework provided teachers with a structured guide that encouraged reflective practice and continuous evaluation (Abuhassna et al. and 2024; Ulumuddin, 2023).

The iterative nature of the Evaluation phase in ADDIE also fostered ongoing improvement rather than static lesson delivery. Teachers were encouraged to analyse feedback, revise materials, and refine instructional strategies. This process aligns with the concept of reflective practitioners in education and contributes to sustainable curriculum quality enhancement. The contrast between the experimental and control groups further illustrates that curriculum quality is not solely determined by content standards but by the systematic process of design and implementation. A well-designed curriculum framework enables teachers to move beyond routine instruction toward evidence-based and outcome-oriented practices.

Theoretically and practically, this study makes a significant contribution to the development of Islamic education curriculum through empirical evidence of the effectiveness of the ADDIE model in Madrasah Aliyah (Islamic Senior High School). The study's primary contribution lies in its ability to break down conventional learning barriers by presenting a structured instructional design that has been demonstrably proven to improve students' academic performance, as indicated by high post-test scores and N-gain values. In addition to boosting cognitive aspects and knowledge retention, this study contributes by offering a blueprint for an active learning environment, where systematic ADDIE-based planning has been proven to trigger escalation of student engagement, motivation, and transformative interactions throughout the learning process. Furthermore, a crucial contribution of this finding is the creation of strong coherence and alignment between objectives, activities, and assessment instruments at the classroom level. Thus, this study not only enriches the literature on Islamic pedagogy and instructional design theory but also provides applicable guidance for madrasah curriculum reform that is more adaptive, consistent, and effective in addressing the challenges of modern education.

CONCLUSION

The results demonstrate that the ADDIE-based curriculum model can enhance learning quality by improving student learning outcomes, increasing engagement, and strengthening the alignment among learning objectives, instructional processes, and assessment practices. These findings suggest that

systematic instructional design should be considered an essential component of curriculum reform rather than focusing solely on content revision. Furthermore, the study indicates that instructional design frameworks such as ADDIE can be effectively adapted to Islamic Education while preserving its epistemological and value-based foundations. This implies that curriculum developers and educational policymakers may employ structured design models to promote more coherent, student-centered, and outcome-oriented learning environments in religious education settings. From a practical perspective, the findings highlight the importance of implementing measurable, replicable, and contextually adaptable instructional planning to improve learning effectiveness. Therefore, teacher professional development programs and curriculum improvement initiatives should emphasize systematic instructional design and continuous evaluation to ensure the sustainability of educational innovation. Despite these implications, the findings are limited by the specific research context and the relatively short duration of implementation. Future studies should investigate the long-term effects of the ADDIE-based curriculum model and explore the integration of digital learning systems and emerging technologies to enhance its adaptability in dynamic educational environments. Further research is recommended to test the consistency of the implementation of this ADDIE-based curriculum model longitudinally at various levels of institutional readiness and teacher competency in different madrasas.

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