International Journal of Islamic Education, Research and Multiculturalism
IJIERM
Published by: The Islamic Education and Multicultural Fondation
P-ISSN :2656-3630 | E-ISSN: 2722-7049

Vol. 8 No.2, May – August 2026
Page: 627 – 647

DOI: https://doi.org/10.47006/ijierm.v8i2.677

**Journal Homepage**
https://journal.yaspim.org/index.php/IJIERM/index

# THE IMPACT OF FLIPPED CLASSROOM INSTRUCTION ON STUDENT MOTIVATION IN ISLAMIC MORAL EDUCATION: A QUASI-EXPERIMENTAL STUDY

**Zulfizar[1], Wawan Arbeni[2]**
[1.2] Sheikh Abdul Halim Hasan Institute Binjai, Indonesia
[1.2] Email: zfijar2@gmail.com, wawanarbeni@insan.ac.id

Received: 11, February 2026 Accepted: 24 April 2026 Published: 3 May 2026

**Abstrak**

Pendidikan *Aqidah Akhlak* di Madrasah Tsanawiyah memiliki peran penting dalam membentuk karakter moral peserta didik, tetapi efektivitasnya sering terhambat oleh rendahnya motivasi belajar akibat dominasi metode pembelajaran konvensional yang bersifat satu arah dan monoton. Kondisi ini menjadi semakin problematis di tengah disrupsi digital yang menuntut model pembelajaran yang lebih partisipatif, adaptif, dan bermakna bagi generasi muda. Penelitian ini bertujuan untuk menguji efektivitas model *Flipped Classroom* dalam meningkatkan motivasi belajar siswa pada mata pelajaran *Aqidah Akhlak* di MTs Nurul Iman Berngam Binjai. Penelitian ini menggunakan pendekatan kuantitatif dengan desain kuasi-eksperimen *Non-equivalent Pretest-Posttest Control Group Design* yang melibatkan 92 siswa kelas VIII, terdiri atas kelompok eksperimen dan kelompok kontrol. Instrumen penelitian berupa angket motivasi belajar berbasis model ARCS yang mencakup perhatian, relevansi, kepercayaan diri, dan kepuasan. Analisis data dilakukan melalui statistik deskriptif, uji prasyarat, *Independent Samples T-Test*, dan perhitungan *N-Gain Score*. Hasil penelitian menunjukkan bahwa kelompok eksperimen mengalami peningkatan motivasi belajar yang jauh lebih tinggi dibandingkan kelompok kontrol, dengan nilai rata-rata *N-Gain* 0,78 pada kategori tinggi, sedangkan kelompok kontrol hanya mencapai 0,22. Temuan ini menegaskan bahwa model *Flipped Classroom* efektif sebagai strategi pedagogis transformasional untuk meningkatkan motivasi intrinsik dan keterlibatan aktif siswa dalam pembelajaran *Aqidah Akhlak*.

Kata Kunci: *Flipped Classroom, Motivasi Belajar, Aqidah Akhlak, Kuasi-Eksperimen, Model ARCS*

**Abstract**

*Aqidah Akhlak* education in *Madrasah Tsanawiyah* plays a vital role in shaping students' moral character, yet its effectiveness is often constrained by low learning motivation resulting from the dominance of conventional, one-way, and monotonous instructional methods. This condition has become increasingly problematic amid digital disruption, which requires learning models that are more participatory, adaptive, and meaningful for contemporary students. This study aims to examine the effectiveness of the *Flipped Classroom* model in increasing students' learning motivation in *Aqidah Akhlak* at MTs Nurul Iman Berngam Binjai. The study employed a quantitative approach using a quasi-experimental *Non-equivalent Pretest-Posttest Control Group Design* involving 92 eighth-grade students divided into an experimental group and a control group. The research instrument was a learning motivation questionnaire based on the ARCS model, covering attention, relevance, confidence, and satisfaction. Data were analyzed using descriptive statistics, prerequisite testing, an *Independent Samples T-Test*, and *N-Gain Score* calculation. The findings revealed that the experimental group experienced a substantially higher increase in learning motivation than the control group, with an average *N-Gain* score of 0.78 in the high category, while the control group reached only 0.22. These results confirm that the *Flipped Classroom* model is effective as a transformative pedagogical strategy for strengthening students' intrinsic motivation and active engagement in *Aqidah Akhlak* learning.

**Keywords**: Flipped Classroom, learning motivation, Aqidah Akhlak, quasi-experiment, ARCS model

## INTRODUCTION

Islamic Moral Education, especially *Aqidah Akhlak* at the *Madrasah Tsanawiyah* level, occupies a strategic position in shaping students' moral identity and religious character in Indonesia. However, this educational mission is increasingly challenged by the realities of digital disruption, changing youth culture, and the persistence of conventional teaching practices that do not adequately engage today's learners. In many madrasahs, students still experience one-way, teacher-centered instruction that places them as passive recipients of doctrinal content rather than active participants in reflective moral learning. As a result, *Aqidah Akhlak* is often perceived as abstract, monotonous, and disconnected from the ethical dilemmas students face in everyday digital and social life. This condition is academically important because it reveals a gap between the normative goals of Islamic moral education and the pedagogical strategies used to achieve them. It is also practically significant because low learning motivation directly weakens the

process of internalizing moral and spiritual values, thereby reducing the transformative function of Islamic education in responding to ethical degradation, identity confusion, and declining student engagement in the contemporary era.

Previous studies have widely examined the role of innovative learning models in improving students' academic achievement, engagement, and classroom participation, including the growing use of the Flipped Classroom model in various educational settings. A substantial body of literature shows that Flipped Classroom instruction can enhance student-centered learning, promote self-regulation, and create more interactive classroom environments (Fung et al., 2021; Mazlan et al., 2025). Nevertheless, much of this research has focused primarily on cognitive outcomes in general subjects such as science, language, or mathematics, while fewer studies have explored its relevance in Islamic Religious Education, particularly in *Aqidah Akhlak*. Even when research on Islamic education and digital pedagogy is available, it often emphasizes technical implementation rather than affective and motivational dimensions. Another limitation is that few studies have employed a comprehensive motivational framework such as Keller's ARCS Model to analyze how flipped instruction shapes attention, relevance, confidence, and satisfaction among students in madrasah contexts (Cho et al., 2021; Fung et al., 2021). This gap becomes more visible in suburban or semi-rural Islamic schools such as MTs Nurul Iman Berngam Binjai, where pedagogical innovation must address not only technological adaptation but also the internalization of moral values. These limitations provide the main rationale for conducting the present study.

This study is intended to respond to those limitations by examining the effectiveness of the Flipped Classroom model in increasing students' learning motivation in the subject of *Aqidah Akhlak* at MTs Nurul Iman Berngam Binjai through a quasi-experimental approach. Rather than merely describing the use of digital learning media, this research specifically investigates whether Flipped Classroom instruction can generate measurable motivational differences when compared with conventional teaching methods (Erbil, 2020; Mazlan et al., 2025). To achieve this objective, the study compares the learning motivation of students in an experimental group and a control group using pre-test and post-test measures, calculates the normalized increase through N-Gain analysis, and examines how the intervention affects each dimension of the ARCS motivational framework. In this sense, the study does not only ask whether the Flipped Classroom model works, but also how far it strengthens students' motivational structure in Islamic moral education (Hew & Lo, 2018; Lu et al., 2023). The specific focus of the article is therefore on the relationship between pedagogical innovation and student motivation, with particular attention to whether a digitally supported, student-centered

model can make *Aqidah Akhlak* learning more meaningful, engaging, and relevant to the lives of contemporary *madrasah* students.

This study is based on the argument that the Flipped Classroom model has a significant positive effect on students' learning motivation because it restructures the learning process in ways that are more participatory, autonomous, and contextually engaging (Ma, 2023; Zhang et al., 2024). The causal relationship examined in this article places Flipped Classroom instruction as the independent variable and students' motivation in learning *Aqidah Akhlak* as the dependent variable (Anggun Safitri, 2022; Huda, 2022). The working hypothesis is that students who are taught through the Flipped Classroom model will demonstrate higher levels of motivation than those who are taught through conventional lecture-based instruction (Baig & Yadegaridehkordi, 2023; Nja et al., 2022). More specifically, the study assumes that pre-class exposure to digital materials and in-class discussion-based activities can strengthen students' attention, perceived relevance, self-confidence, and satisfaction, as conceptualized in the ARCS framework. This hypothesis is grounded in the view that motivation in Islamic education cannot be sustained through passive reception alone; rather, it develops when students are given space to explore content independently, reflect critically on moral issues, and actively participate in classroom interaction. Therefore, the study tests whether flipped pedagogy can serve as an effective transformative strategy for strengthening intrinsic motivation and deeper engagement in Islamic moral education.

## LITERATURE REVIEW

The relationship between instructional innovation and student motivation has been widely discussed in contemporary educational research, including in studies on digital pedagogy, active learning, and Islamic education. Existing literature shows that the Flipped Classroom model has attracted significant scholarly attention because it is considered capable of transforming passive learning into more participatory and student-centered engagement (Erbil, 2020; Mazlan et al., 2025). At a general level, previous studies have responded to this issue through at least four main tendencies. First, many studies examine the relationship between Flipped Classroom instruction and cognitive achievement, particularly in science, language, and mathematics education (Erbil, 2020; Fung et al., 2021; Ma, 2023; Nja et al., 2022). Second, another group of studies focuses on student engagement, interaction, and self-regulated learning as outcomes of flipped instruction. Third, some researchers investigate the use of Flipped Classroom in religious or humanities subjects, emphasizing critical thinking and reflective discussion. Fourth, a smaller but important body of literature analyzes the motivational effects of flipped pedagogy through structured frameworks such as ARCS, especially in relation to

attention, relevance, confidence, and satisfaction. Although these tendencies show that the phenomenon has been substantially explored, the literature remains uneven in terms of context, variable emphasis, and methodological focus, particularly in Islamic moral education at the madrasah level.

The first major tendency in previous research is the thematic focus on the effectiveness of the Flipped Classroom model in improving academic achievement and learning outcomes (Baig & Yadegaridehkordi, 2023; Nja et al., 2022; Zhang et al., 2024). Studies in this category generally conceptualize flipped instruction as a pedagogical innovation that shifts direct instruction outside the classroom and reserves face-to-face time for higher-order learning activities. The main focus is usually on the effect of this model on test scores, conceptual understanding, and cognitive mastery. In terms of approach, these studies commonly employ quantitative or quasi-experimental designs, comparing experimental and control groups using pre-test and post-test measures. Methodologically, they rely on statistical analyses such as t-tests, effect size calculations, and gain scores to demonstrate the superiority of flipped instruction over conventional methods. This line of research has been highly influential in establishing the pedagogical credibility of the Flipped Classroom model (Hew & Lo, 2018; Lu et al., 2023; Ma, 2023). However, its primary concern tends to remain within the domain of cognitive performance, often treating motivation as a secondary or supporting variable rather than as a central construct. As a result, while these studies effectively show that flipped pedagogy can improve learning outcomes, they provide less insight into how and why the model influences students' internal motivational processes, especially in value-based subjects such as *Aqidah Akhlak* (Rahmawati & Hang, 2025; Shafa, R., Lubis, L., & Wijaya, 2021; Zahroh et al., 2023).

The second tendency in the literature emphasizes student engagement, self-regulated learning, and classroom participation as central outcomes of the Flipped Classroom model (Fung et al., 2021; Mazlan et al., 2025). Thematically, these studies focus on how flipped instruction gives learners greater autonomy in managing pre-class preparation and encourages them to participate more actively in collaborative problem-solving during class sessions. The core concept in this line of research is that learning becomes more meaningful when students are not merely receiving information but are actively organizing, discussing, and applying it. This research tendency frequently adopts mixed or qualitative-supportive quantitative approaches, often combining surveys, classroom observation, and reflective feedback from students. The methods used typically include engagement questionnaires, participation rubrics, and analyses of learner interaction patterns during classroom activities. Such studies have demonstrated

that the Flipped Classroom model can increase learner agency, responsibility, and active participation, especially when supported by appropriate digital materials. (Cho et al., 2021; Erbil, 2020; Lu et al., 2023) Nevertheless, the dominant concern of this trend is still behavioral engagement and autonomous learning, not the deeper motivational architecture that shapes students' willingness to learn. In religious education contexts, this creates a limitation because participation alone does not necessarily indicate meaningful internalization of values, nor does it fully explain the affective processes that support motivation in moral and spiritual learning.

The third tendency can be found in studies that investigate the implementation of Flipped Classroom pedagogy in religious education, humanities, or morally oriented subjects. These studies are thematically concerned with how flipped instruction can open more classroom space for reflection, discussion, and ethical reasoning rather than merely transmitting doctrinal content. Their focus lies in the assumption that subjects involving values, morality, and identity require dialogic and interpretive learning processes that traditional lecturing often fails to support. Conceptually, this trend connects flipped pedagogy with reflective learning, critical discussion, and contextual engagement with moral dilemmas. In methodological terms, such studies often use quasi-experimental designs, systematic reviews, or classroom-based intervention studies to observe whether flipped learning enhances critical thinking, active discussion, and reflective participation (Azhima, 2022; Syamsu Nahar, 2022). Some research cited in the manuscript also suggests that flipped instruction is particularly useful for creating opportunities for deeper spiritual and moral reflection in religious education settings. However, this tendency still has an important limitation: while it demonstrates that flipped pedagogy may fit morally oriented subjects, it often does not examine student motivation using a specific and comprehensive theoretical framework. Consequently, the motivational dynamics of students in *Aqidah Akhlak* remain underexplored, especially in madrasah environments outside large urban academic settings (Hartati, 2024; Uswatun Hidayah, 2021; Vu & Peters, 2022).

Despite the richness of previous studies, the existing tendencies still leave important gaps that justify the present research. Studies on academic achievement tend to prioritize test performance and measurable learning outcomes, thereby overlooking motivation as a central variable in the learning process. Research on engagement and self-regulation pays greater attention to learner participation and autonomy, yet often fails to explain how these behaviors are linked to structured motivational dimensions such as attention, relevance, confidence, and satisfaction (Aini Safitri, 2021; Fahmi, 2022). Meanwhile, studies on flipped pedagogy in religious or humanities subjects have indeed

broadened the field, but they frequently "forget" to examine how technological and pedagogical innovation affects the affective core of Islamic moral education. In other words, these studies have not sufficiently addressed the problem of motivation as an essential prerequisite for value internalization (Anwar et al., 2024; Mokodompit et al., 2024; Yasmin et al., 2025). Another overlooked aspect is contextual specificity. Much of the literature is centered on general education or higher education environments, while fewer studies investigate suburban or semi-rural madrasah settings where technological adaptation, religious instruction, and student motivation intersect in unique ways. Therefore, the novelty of this study lies in its effort to bridge digital pedagogy, Islamic moral education, and motivational theory within a quasi-experimental framework that directly examines students' motivational change through the ARCS model (Cho et al., 2021; Fung et al., 2021).

Based on those gaps, this study proposes a new research direction by positioning student motivation as the central analytical lens for evaluating Flipped Classroom instruction in *Aqidah Akhlak*. Rather than asking only whether the model improves achievement or participation, this research specifically examines how flipped pedagogy reshapes motivational dimensions in Islamic moral education. The focus is therefore not merely on technical innovation, but on the relationship between a student-centered digital learning model and the internal motivational conditions necessary for the meaningful internalization of religious values. This new orientation combines three important perspectives at once: instructional innovation, motivational theory, and the pedagogical character of Islamic moral education. Through a quasi-experimental design, the study investigates the comparative effectiveness of Flipped Classroom and conventional teaching, measures the extent of motivational improvement through N-Gain, and analyzes each motivational component using the ARCS framework. In doing so, the research introduces a more integrated perspective on how digital pedagogy can function not only as a tool of content delivery but also as a transformative mechanism for strengthening students' intrinsic motivation, autonomy, and active moral engagement. This direction is expected to contribute both theoretically to Islamic education studies and practically to the redesign of more adaptive and meaningful teaching strategies in *madrasahs*.

## RESEARCH METHODS

The unit of analysis in this study is primarily focused on student groups within the formal institutional setting of MTs Nurul Iman Berngam Binjai, especially Grade VIII students who participated in the learning intervention. More specifically, the study examines the relationship between the implementation of the Flipped Classroom model

and students' learning motivation in *Aqidah Akhlak*. Thus, the research does not focus on individuals as isolated cases, but on grouped learners within a classroom-based educational process. In terms of design, this study adopts a quantitative orientation using a quasi-experimental method, which is considered appropriate because the researcher intended to test a causal relationship between an instructional model and motivational outcomes under naturally existing school conditions. The specific design employed is the Non-equivalent Pretest-Posttest Control Group Design, in which two intact classes were assigned as the experimental group and the control group without random assignment of individual students. This design allows the researcher to compare motivational changes before and after treatment while maintaining the administrative structure of the madrasah. Through this design, the study seeks to generate empirical evidence regarding the effectiveness of Flipped Classroom instruction as a pedagogical intervention in Islamic moral education (Cresswell, 2012; Kapitány, 2020).

The data in this study were mainly derived from student respondents as the primary source of information, supported by classroom observation data to monitor the fidelity of the instructional implementation. The main instrument was a structured learning motivation questionnaire developed on the basis of Keller's ARCS Model, covering four dimensions: Attention, Relevance, Confidence, and Satisfaction. The questionnaire used a five-point Likert scale and was administered to both groups during the pretest and posttest stages. In addition, classroom observations were conducted throughout the treatment period to document how the Flipped Classroom model was implemented in practice and to ensure that the intervention was carried out consistently (Bryman & Cramer, 2012; Cresswell, 2012; Leavy, 2022). The data collection process was therefore conducted through survey techniques using a questionnaire, followed by direct classroom observation as supporting evidence. The data were analyzed in several stages using SPSS. First, descriptive statistics were used to identify the mean, standard deviation, and score distribution. Second, prerequisite analyses were conducted through the Shapiro-Wilk normality test and Levene's homogeneity test. Third, hypothesis testing was performed using the Independent Samples T-Test. Finally, the N-Gain Score and effect size analysis were calculated to determine the magnitude and effectiveness of motivational improvement in both groups.

## RESULTS AND DISCUSSION

### Results

The first evidence of change/transformation in this study is reflected in the shift in students' learning motivation following the implementation of the Flipped Classroom model in Aqidah Akhlak. The data presented in the study indicate that, prior to the treatment, the average motivation scores of the two groups were relatively equivalent. The experimental group recorded a pre-test mean score of 135.21, while the control group obtained a mean score of 134.89. The difference between these two scores was minimal, suggesting that both groups began the study with nearly identical levels of learning motivation. If visualized, these data could be presented in a comparative table of baseline motivation scores for the experimental and control groups. Restated more simply, the findings show that before the intervention, both groups started from an almost equal motivational condition, making it more likely that any subsequent differences were attributable to the instructional model applied. Several patterns emerge from these baseline data: the initial equivalence of the groups, a relatively balanced motivational distribution, the comparability of the two classes, and the existence of a sound empirical basis for testing the effect of the intervention objectively.

A more pronounced transformation became visible after eight instructional meetings had been completed. The post-test results show that the experimental group, which received the Flipped Classroom treatment, achieved a mean motivation score of 188.94, whereas the control group, which was taught through conventional instruction, reached only 151.12. This represents a difference of 37.82 points between the two groups at the end of the intervention. These findings may be visually presented in a descriptive table containing the sample size, pre-test mean, post-test mean, and post-test standard deviation for each group. In simpler terms, the data indicate that following the intervention, the experimental group experienced a substantially greater increase in learning motivation than the control group. This difference suggests not merely an ordinary increase, but a marked and measurable transformation. Several tendencies are evident in these findings: a sharp rise in motivation in the experimental group, a more limited increase in the control group, a widening gap in the final outcomes between the two groups, and a strong preliminary indication that the Flipped Classroom model had a greater effect on students' enthusiasm for learning than conventional teaching.

Table 1. Learning Motivation Data Description

| Group | N | Pre-test Average | Post-test Average | Standard Deviation (Post) |
|---|---|---|---|---|
| Experiment (Flipped Classroom) | 46 | 135.21 | 188.94 | 12.45 |
| Control (Conventional) | 46 | 134.89 | 151.12 | 14.32 |

Source: Processed Primary Data (2025)

The evidence of transformation is further reinforced by the distribution of final scores and the degree of variability within each group. In the results table, the experimental group showed a post-test standard deviation of 12.45, while the control group showed a post-test standard deviation of 14.32. These figures indicate that, in addition to achieving a higher mean score, the experimental group also demonstrated a relatively more controlled distribution of motivation scores than the control group. If visualized through a bar chart or a score distribution diagram, the experimental group would appear not only to have a higher average but also a more stable pattern of student performance. Restated for clarity, these data suggest that the increase in motivation in the experimental group was not limited to a few individual students, but rather tended to occur more evenly across the class. Several patterns can be identified from these data: first, the final results in the experimental group were more consistent; second, the control group displayed wider motivational variation; third, the intervention increased not only the average score but also the overall coherence of classroom performance; and fourth, the transformation that occurred was collective rather than merely individual. Thus, the first body of evidence demonstrates a measurable, strong, and relatively stable transformation in student motivation.

Table. 2 Prerequisite Analysis and Hypothesis Testing

| Prerequisite Test | Statistical Value | Significance (p) | Conclusion |
|---|---|---|---|
| **Normality (Shapiro-Wilk)** | 0.963 | 0.178 | Normal Distribution |
| **Homogeneity (Levene's Test)** | 1,123 | 0.292 | Homogeneous Variance |

Source: SPSS Analysis Results

The second evidence of solution in this study is found in the prerequisite tests and hypothesis-testing results, which demonstrate that the increase in motivation in the

experimental group rests on a statistically sound foundation. The data indicate that the Shapiro-Wilk normality test for the post-test scores yielded a significance value of 0.178, indicating that the data were normally distributed. Meanwhile, Levene's homogeneity test produced a significance value of 0.292, showing that the variances of the two groups were homogeneous. These data may be visualized in a prerequisite testing table displaying the statistical values, significance levels, and conclusions. Restated more plainly, the findings show that the dataset met the assumptions required for parametric statistical analysis, meaning that the comparison between the experimental and control groups could be conducted with methodological validity. Several tendencies can be derived from these results: the appropriateness of the data for further statistical testing, the stability of score distribution, the equality of variance across groups, and the strong methodological basis for concluding that the differences found were not the result of statistical irregularities. In other words, the pedagogical solution tested in this study was supported by data that were both appropriate and analytically reliable.

Once the data had been shown to meet the required statistical assumptions, hypothesis testing was conducted using the Independent Samples T-Test on the post-test scores. The analysis revealed a 2-tailed significance value of 0.000, which is far below the 0.05 threshold. In addition, the comparison between the calculated t-value and the critical t-value showed that the results led to the rejection of the null hypothesis and the acceptance of the alternative hypothesis. These results may be visualized in a hypothesis-testing table presenting the t-value, degrees of freedom, significance level, and statistical decision. Restated simply, the data confirm that the difference in learning motivation between students taught using the Flipped Classroom model and those taught through conventional instruction was statistically significant. Several patterns are apparent from this finding. First, the instructional model had a real and measurable effect on motivational outcomes. Second, the difference between the groups was not accidental. Third, the experimental group gained a greater instructional advantage. Fourth, the Flipped Classroom intervention can be regarded as a pedagogical solution supported by convincing quantitative evidence. These results clarify that the motivational changes visible in the descriptive tables are not merely apparent differences, but statistically validated outcomes.

Table 3. Analysis of Improvement Effectiveness (N-Gain Score)

| Group | Average N-Gain | N-Gain Percentage | Effectiveness Category |
|---|---|---|---|
| **Experiment (FC)** | 0.78 | 78.14% | Tall |
| **Control (Conventional)** | 0.22 | 22.35% | Low/Medium |

Source: N-Gain Calculation Results[1]

The second line of evidence is also strengthened by the N-Gain Score analysis, which was used to measure the magnitude of normalized improvement in motivation in each group. The data show that the experimental group obtained an average N-Gain of 0.78, or 78.14 percent, which falls into the high-effectiveness category. In contrast, the control group obtained an N-Gain of only 0.22, or 22.35 percent, which lies in the low-to-medium effectiveness range. These findings may be presented visually in a comparative N-Gain table including the effectiveness category of each group. Restated clearly, the results indicate that the Flipped Classroom model not only produced a higher final score but also generated a much greater rate of motivational improvement than the conventional method. Several patterns can be identified here: the high effectiveness of the intervention in the experimental group, the relatively slow motivational growth in the control group, the wide effectiveness gap between the two instructional models, and the substantial short- to medium-term impact of the intervention. Accordingly, the second body of evidence confirms that the Flipped Classroom functioned not merely as a different instructional approach, but as a considerably more effective solution for accelerating the growth of students' learning motivation in *Aqidah Akhlak.*

Table 4. ARCS Motivation Dimension Analysis

| ARCS Dimensions | Average Score (Experiment) | Interpretation | ARCS Dimensions |
|---|---|---|---|
| **Attention** | 4.45 | Very high | Attention |
| **Relevance** | 4.38 | Very high | Relevance |
| **Confidence** | 4.60 | Very high | Confidence |
| **Satisfaction** | 4.40 | Very high | Satisfaction |

Source: ARCS Instrument Analysis

The third evidence of trend as well as solution in this study is evident in the detailed analysis of motivational dimensions based on the ARCS model. The data indicate that the Flipped Classroom model had a positive effect across all dimensions of motivation in the experimental group. The mean scores for Attention, Relevance,

Confidence, and Satisfaction were 4.45, 4.38, 4.60, and 4.40 respectively. All of these scores fall within the very high category. If visualized, these results could be displayed in a table or radar chart showing the distribution of each motivational dimension in the experimental group. Restated more simply, the findings demonstrate that the motivational increase was not confined to a single aspect, but covered students' attention, perceived relevance of the material, self-confidence, and satisfaction with learning simultaneously. Several patterns emerge from these data. First, all motivational dimensions moved toward a very high level. Second, none of the dimensions showed a pronounced weakness. Third, the influence of the instructional model was comprehensive rather than selective. Fourth, students' motivation developed in a multidimensional manner. These findings indicate that the trend of increased motivation was not partial, but broad and integrated across multiple aspects of the students' learning experience.

Among all ARCS dimensions, Confidence obtained the highest mean score, namely 4.60. This indicates that self-confidence was the motivational component most strongly enhanced after the implementation of the Flipped Classroom model. In addition, Attention reached 4.45, Satisfaction 4.40, and Relevance 4.38, all of which remained within the very high category. These data may be visualized through a bar chart comparing the four dimensions, clearly showing Confidence as the highest-scoring component. Restated for clarity, the results suggest that students became not only more interested and more satisfied, but also more confident in their own learning ability after participating in Flipped Classroom-based instruction. Several tendencies can be observed from these data: the strong reinforcement of self-confidence, the model's high capacity to attract student attention, the strong sense of usefulness students perceived in the subject matter, and the stable learning satisfaction that followed the intervention. Thus, the third body of evidence suggests that this instructional model promotes a motivational trend grounded in student autonomy and confidence, rather than merely in temporary classroom participation or surface engagement.

Overall, the quantitative field data in this study reveal one overarching pattern: the Flipped Classroom model produced a significant, effective, and broadly distributed increase in students' learning motivation in *Aqidah Akhlak* at MTs Nurul Iman Berngam Binjai. This evidence appears across three layers of data at once, namely the descriptive comparison of pre-test and post-test scores, the results of inferential statistical testing, and the detailed analysis of motivational dimensions. If visualized comprehensively, the findings may be summarized in a three-level matrix: changes in average scores, strengthened statistical significance and effectiveness, and the expansion of impact across

all ARCS dimensions. Restated more directly, the intervention did not merely raise the numerical indicators of learning motivation, but also transformed the quality of students' learning experience in a broader sense. Four major tendencies can be identified from the dataset as a whole: a high level of motivational transformation in the experimental group, an intervention effect that clearly exceeded that of conventional instruction, the strongest improvement occurring in the dimension of confidence, and the multidimensional development of students' motivation. In this way, the Results section demonstrates that the trajectory in this study moved from the problem of low motivation toward measurable transformation, solution, and sustained motivational improvement.

**Discussion**

This study examined the effect of the Flipped Classroom model on students' learning motivation in *Aqidah Akhlak* at MTs Nurul Iman Berngam Binjai through a quasi-experimental design involving an experimental group and a control group. The central issue addressed was the low level of student motivation associated with conventional, teacher-centered instructional practices in Islamic moral education. The findings demonstrated that the implementation of the Flipped Classroom model produced a substantial increase in learning motivation in the experimental group, as evidenced by higher post-test scores, a high N-Gain value, and statistically significant differences compared with the control group(Cho et al., 2021; Erbil, 2020). More specifically, the intervention did not merely improve motivation in a general sense, but strengthened all four dimensions of Keller's ARCS model: Attention, Relevance, Confidence, and Satisfaction. Among these, Confidence emerged as the most strongly enhanced dimension. In essence, the results indicate that the Flipped Classroom model functioned as a transformative instructional strategy capable of making *Aqidah Akhlak* learning more active, autonomous, and meaningful (Fung et al., 2021; Mazlan et al., 2025). The study therefore confirms that pedagogical innovation in Islamic education can significantly improve students' motivational engagement when it is structured in a participatory and learner-centered format.

The relationship tested in this study can be explained by the way the Flipped Classroom model restructures the learning process and redistributes students' cognitive and participatory roles. The model appears to increase motivation because it shifts students from passive recipients of information to active participants in the learning process. When foundational material is accessed before class through digital media, classroom time can be used for discussion, problem-solving, and reflective engagement with moral issues (Cho et al., 2021; Erbil, 2020). This instructional arrangement likely explains why the experimental group showed higher levels of motivation than the control

group. Students were not only exposed to content in a more flexible manner, but were also given greater responsibility for preparing, thinking, and responding during in-class activities. This process seems particularly important in *Aqidah Akhlak*, where meaningful learning depends not only on content delivery but also on students' affective and reflective involvement. The strong improvement in the Confidence dimension further suggests that students became more secure in their ability to understand and discuss the material because they had already encountered it beforehand (Hew & Lo, 2018; Lu et al., 2023). Thus, the findings suggest that motivation increased because the intervention combined autonomy, preparation, active classroom interaction, and opportunities for meaningful engagement with moral content in one integrated pedagogical experience.

When compared with previous studies, the findings of this research show both continuity and distinction. In terms of similarity, the results support earlier scholarship indicating that the Flipped Classroom model can improve learning outcomes, increase student engagement, and promote active participation. The present study is also consistent with prior research suggesting that flipped learning is effective in encouraging learner autonomy and in creating more interactive classroom environments. However, this study differs from many previous works in several important respects (Ma, 2023; Zhang et al., 2024). First, whereas a large portion of the literature has concentrated on cognitive achievement in general subjects, this research focuses specifically on learning motivation within *Aqidah Akhlak*, a subject closely linked to moral and affective development. Second, the study analyzes motivation not as a general impression, but through the structured ARCS framework, thereby providing a more nuanced account of how motivational change occurs across multiple dimensions (Baig & Yadegaridehkordi, 2023; Nja et al., 2022). Third, the context of a madrasah in Binjai adds contextual specificity that is often absent in broader international studies of flipped pedagogy. The novelty of this study, therefore, lies in its integration of digital instructional innovation, Islamic moral education, and motivational theory within a quasi-experimental framework that yields both contextual and analytical depth.

The meaning of these findings extends beyond the immediate classroom and should be interpreted within broader social, historical, and ideological contexts. Socially, the results reflect the urgent need for Islamic education to remain relevant in an era marked by digital acceleration, fragmented attention, and shifting patterns of youth engagement. Historically, religious education in many contexts has long been associated with lecture-based and authority-centered modes of instruction, where students are expected to listen, memorize, and obey (Alham et al., 2025; Zhang et al., 2024). The success of the Flipped Classroom model in this study suggests a meaningful shift from

such traditional pedagogical patterns toward a more dialogic and participatory form of Islamic instruction. Ideologically, the findings carry the implication that Islamic moral education need not be in tension with educational technology; rather, technology can be employed as a medium through which religious and ethical values are more effectively internalized. In this sense, the study points to a reinterpretation of pedagogical authority: the teacher remains central, but as a facilitator of reflection and moral engagement rather than merely a transmitter of doctrine. Thus, the results signify a broader transformation in how Islamic education may be understood in the contemporary era, namely as a field where spirituality, autonomy, and digital pedagogy can be meaningfully integrated (Lu et al., 2023; Mazlan et al., 2025).

The implications of these findings reveal both functional strengths and possible dysfunctions. Functionally, the Flipped Classroom model appears to offer a practical solution to the problem of low learning motivation in Islamic moral education by creating a more stimulating and student-centered learning environment. It supports greater student autonomy, strengthens confidence, and allows classroom time to be used for richer moral discussion rather than one-way explanation (Fung et al., 2021; Lu et al., 2023). This can enhance not only motivation but also the quality of classroom interaction and students' sense of ownership over their learning. However, the study also implies certain risks or dysfunctions if the model is implemented without adequate preparation. The effectiveness of flipped learning depends heavily on teacher readiness, the quality of digital materials, and students' access to pre-class learning resources. If these conditions are not met, the model may become an additional burden rather than a motivating strategy. There is also the possibility that students with weaker self-regulation may struggle to benefit fully from pre-class activities (Hew & Lo, 2018; Nja et al., 2022; Zhang et al., 2024). Therefore, although the findings are promising, they also suggest that pedagogical innovation cannot be separated from institutional readiness, instructional design quality, and equitable technological support. The model's success is therefore conditional, not automatic.

In light of these findings, several action-oriented implications can be proposed for educational practice and policy. At the classroom level, *Aqidah Akhlak* teachers should begin to redesign instruction by integrating digital pre-class materials and reserving face-to-face time for reflective dialogue, case analysis, and collaborative moral reasoning. At the institutional level, madrasahs need to provide systematic training for teachers in digital instructional design, classroom facilitation, and motivationally responsive pedagogy. Such professional development is essential to ensure that the Flipped Classroom model is implemented with pedagogical integrity rather than merely

technological formality. At the policy level, educational authorities should consider supporting the broader adoption of adaptive learning models in Islamic education, particularly by improving digital infrastructure, providing access to instructional platforms, and encouraging innovation in value-based subjects. In addition, curriculum planners should recognize that student motivation is not a secondary outcome, but a central condition for the successful internalization of moral and religious values. If these steps are taken, the findings of this study may serve not only as academic evidence but also as a practical blueprint for modernizing Islamic education in ways that are pedagogically effective, spiritually grounded, and responsive to the realities of contemporary learners.

## CONCLUSION

The most important lesson emerging from this study is that meaningful improvement in students' motivation in Islamic moral education is not achieved merely through the transmission of content, but through the transformation of the learning experience itself. The findings demonstrate that when the *Flipped Classroom* model is applied in *Aqidah Akhlak*, students become more motivated because learning is reorganized in a way that promotes autonomy, active participation, and reflective engagement. The key insight, therefore, is that motivation in value-based education grows more strongly when students are treated not as passive recipients of doctrine, but as active moral learners who are given space to prepare, think, discuss, and interpret. The strong increase in the Confidence dimension further suggests that students respond positively when learning structures enable them to feel capable and prepared. In this sense, the broader wisdom of the study lies in showing that pedagogical change can revitalize Islamic education without compromising its moral and spiritual aims. On the contrary, the study indicates that a well-designed digital and student-centered learning model can strengthen the internalization of values by making religious learning more relevant, participatory, and personally meaningful to contemporary madrasah students.

The strength of this study lies in its contribution to the growing intersection of Islamic education, motivational theory, and digital pedagogy. From a scholarly perspective, the study provides empirical data showing that the *Flipped Classroom* model has a significant positive effect on students' learning motivation in *Aqidah Akhlak*, a field that has received less attention than general academic subjects. It also contributes analytically by treating motivation as a multidimensional construct rather than a vague or secondary outcome, using Keller's ARCS model to capture changes in attention, relevance, confidence, and satisfaction. Conceptually, the study broadens the discussion on instructional innovation in madrasahs by demonstrating that technology-supported

pedagogy can function not only to improve efficiency but also to strengthen affective engagement in religious learning. In methodological terms, the quasi-experimental design offers a structured and credible basis for causal comparison between innovative and conventional teaching models. In addition, the study opens new questions for future research, particularly regarding how digital learning strategies may influence not only motivation but also moral reasoning, long-term character development, and the internalization of Islamic values in different educational settings.

Despite its contributions, this study has several limitations that should be acknowledged. First, the research was conducted in a single madrasah, namely MTs Nurul Iman Berngam Binjai, so its findings cannot be generalized directly to all Islamic junior secondary schools with different institutional, social, or technological contexts. Second, the study focused specifically on learning motivation as the primary outcome variable and did not examine in detail whether increased motivation was followed by long-term changes in students' moral behavior, academic achievement, or value internalization outside the classroom. Third, although the ARCS framework provided a useful analytical lens, the study relied mainly on questionnaire-based measurement and classroom observation, which may not fully capture deeper psychological and spiritual dimensions of students' learning experience. Fourth, the intervention was limited to eight meetings, meaning that the stability and sustainability of the motivational gains over time remain uncertain. For this reason, future studies should expand the scope by involving multiple institutions, longer intervention periods, and additional qualitative or longitudinal methods. Such extensions would provide a more comprehensive understanding of how *Flipped Classroom* pedagogy shapes Islamic education in both immediate and enduring ways.

**Bibliography**

1) Aini Safitri. (2021). Comparisonal Analysis of Students' Learning Achievements From Ibtidaiyah Elementary School and Madrasah in Learning Islamic Religious Education At Smp Negeri 4 Rantau Aceh Tamiang Regency. *International Journal of Islamic Education, Research and Multiculturalism (IJIERM)*, *3*(1), 35–48. https://doi.org/10.47006/ijierm.v3i1.51
2) Alham, Zainuri, A., & Arni. (2025). Implementasi Administrasi Pendidikan Sekolah Berlandaskan Kurikulum Berbasis Cinta. *SINDORO: Cendikia Pendidikan*, *17*. https://cibinstitute.id/index.php/sindoro/article/ view/360
3) Anggun Safitri. (2022). Pengaruh Model Pembelajaran Problem Based Learning (PBL) Berbasis Online Terhadap Hasil Belajar Peserta Didik Pada Pembelajaran Akidah Akhlak. *Skripsi*, (8.5.2017).

4) Anwar, S., Hardhienata, S., & Sunardi, O. (2024). Increasing The Quality Of Lecturer Service Through Strengthening Servant Leadership, Empowerment, Work Motivation, And Job Satisfaction: An Empirical Study Approach using Path Analysis and SITOREM Analysis. *International Journal of Islamic Education, Research and Multiculturalism (IJIERM)*, *6*(2), 508–527. https://doi.org/10.47006/ijierm.v6i2.333
5) Azhima, F. (2022). Model Problem Based Learning Dalam Menulis Teks Eksplanasi. *PENDALAS: Jurnal Penelitian Tindakan Kelas Dan Pengabdian Masyarakat*, *2*(2), 68–74. http://repository.lppm.unila.ac.id/3129/
6) Baig, M. I., & Yadegaridehkordi, E. (2023). Flipped classroom in higher education: a systematic literature review and research challenges. In *International Journal of Educational Technology in Higher Education* (Vol. 20, Number 1). https://doi.org/10.1186/s41239-023-00430-5
7) Bryman, A., & Cramer, D. (2012). *Quantitative Data Analysis with IBM SPSS 17, 18 & 19*. Routledge. https://doi.org/10.4324/9780203180990
8) Cho, H. J., Zhao, K., Lee, C. R., Runshe, D., & Krousgrill, C. (2021). Active learning through flipped classroom in mechanical engineering: improving students' perception of learning and performance. *International Journal of STEM Education*, *8*(1). https://doi.org/10.1186/s40594-021-00302-2
9) Cresswell, J. W. (2012). *Eduactional Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research*. Person Education, Inc.
10) Erbil, D. G. (2020). A Review of Flipped Classroom and Cooperative Learning Method Within the Context of Vygotsky Theory. In *Frontiers in Psychology* (Vol. 11). https://doi.org/10.3389/fpsyg.2020.01157
11) Fahmi, F. (2022). The Effect of Applying Teaching Method on English Learning Process in Islamic Education Study. *PENDALAS: Jurnal Penelitian Tindakan Kelas Dan Pengabdian Masyarakat*, 75–81. https://doi.org/10.47006/pendalas.v2i2.99
12) Fung, C. H., Besser, M., & Poon, K. K. (2021). Systematic Literature Review of Flipped Classroom in Mathematics. *Eurasia Journal of Mathematics, Science and Technology Education*, *17*(6). https://doi.org/10.29333/ejmste/10900
13) Hartati, S. (2024). Implementation of Drill Method to Improve Student Learning Outcomes in Islamic Education Learning at SMA Negeri 1 Pancung Soal. *MADINA : Journal of Islamic Studies*, *1*(2), 78–85. https://doi.org/10.62945/madina.v1i2.287
14) Hew, K. F., & Lo, C. K. (2018). Flipped classroom improves student learning in health professions education: A meta-analysis. *BMC Medical Education*, *18*(1). https://doi.org/10.1186/s12909-018-1144-z

15) Huda, S. (2022). Strategi Guru Akidah Ahlak dalam Menciptakan Pembelajaran Berbasis PAIKEM (Aktif, Inovatif, Kreatif, Efektif Menyenangkan) di MTs Nurut Tauhid. In *Khazanah: Jurnal Edukasi*.
16) Kapitány, R. (2020). James Cresswell, *Culture and the Cognitive Science of Religion*. *Journal for the Study of Religion, Nature and Culture*, *14*(1). https://doi.org/10.1558/jsrnc.39043
17) Leavy, P. (2022). *Research design: Quantitative, qualitative, mixed methods, arts-based, and community-based participatory research approaches*. books.google.com.
18) Lu, C., Xu, J., Cao, Y., Zhang, Y., Liu, X., Wen, H., Yan, Y., Wang, J., Cai, M., & Zhu, H. (2023). Examining the effects of student-centered flipped classroom in physiology education. *BMC Medical Education*, *23*(1). https://doi.org/10.1186/s12909-023-04166-8
19) Ma, Y. (2023). Exploration of flipped classroom approach to enhance critical thinking skills. *Heliyon*, *9*(11). https://doi.org/10.1016/j.heliyon.2023. e20895
20) Mazlan, R., Mahamod, Z., & Jamaludin, K. A. (2025). Flipped classroom approach of language education: a systematic review. *International Journal of Evaluation and Research in Education*, *14*(2). https://doi.org/10.11591/ijere.v14i2.31718
21) Mokodompit, R., Setyaningsih, S., & Suhendra. (2024). Increasing Teacher Performance Through Strengthening Transformational Leadership, Personality, and Work Motivation. *International Journal of Islamic Education, Research and Multiculturalism (IJIERM)*, *6*(2), 618–636. https://doi.org/10.47006/ijierm.v6i2.352
22) Nja, C. O., Orim, R. E., Neji, H. A., Ukwetang, J. O., Uwe, U. E., & Ideba, M. A. (2022). Students' attitude and academic achievement in a flipped classroom. *Heliyon*, *8*(1). https://doi.org/10.1016/j.heliyon.2022. e08792
23) Rahmawati, & Hang, N. T. T. (2025). Character Education Strategies in Shaping Noble Morality of Students in Madrasah Ibtidaiyah. *International Journal of Islamic Education, Research and Multiculturalism (IJIERM)*, *7*(3), 1139–1157. https://doi.org/10.47006/ijierm.v7i3.526
24) Shafa, R., Lubis, L., & Wijaya, C. (2021). Construction of climate of social affection in realizing the noble morals of youth (Phenomenology study in Medan Johor Kota Medan district). *International Journal of Islamic Education, Research and Multiculturalism (IJIERM)*, *3*(2), 93–119. https://doi.org/10.47006/ijierm.v3i2.68
25) Syamsu Nahar, N. C. W. (2022). The Influence Of Learning Strategies And Logical Thinking Skills On The Learning Outcomes Of Islamic Religious Education And Ethics. *International Journal of Islamic Education, Research and Multiculturalism (IJIERM)*, *3*(3), 197–215. https://doi.org/10.47006/ijierm.v3i3.122

26) Uswatun Hidayah. (2021). the Role of the Teacher in Shapeing Student Learning Behavior in Arabic Learning. *International Journal of Islamic Education, Research and Multiculturalism (IJIERM)*, *2*(3), 178–186. https://doi.org/10.47006/ijierm.v2i3.42
27) Vu, D. Van, & Peters, E. (2022). Incidental Learning Of Collocations From Meaningful Input. *Studies in Second Language Acquisition*, *44*(3), 685–707. https://doi.org/10.1017/S0272263121000462
28) Yasmin, R. P., Kartono, K., & Hartono, E. (2025). The Influence Of Organizational Culture And Leadership on The Performance of Bank Syariah Indonesia Frontliners With Motivational Mediation. *International Journal of Islamic Education, Research and Multiculturalism (IJIERM)*, *7*(1), 32–53. https://doi.org/10.47006/ijierm.v7i1.405
29) Zahroh, I., Safi'i, I., & A'yun, Q. (2023). PENERAPAN STRATEGI PROBLEM BASED LEARNING DALAM PEMBELAJARAN AKIDAH AKHLAK DI MADRASAH TSANAWIYAH ATTAROQQIE PUTRI MALANG. *Jurnalpendidikanislam*, *8*(5).
30) Zhang, F., Wang, H., Zhang, H., & Sun, Q. (2024). The landscape of flipped classroom research: a bibliometrics analysis. *Frontiers in Education*, *9*. https://doi.org/10.3389/feduc.2024.1165547