

Neneng Sulastr¹

Effective Learning Strategies in Improving Students' Academic Achievement at MTSN 2 in Bandung City

Abstract

This study aims to analyze effective learning strategies implemented by teachers to improve students' academic achievement at MTSN 2 in Bandung City. The research employs a qualitative descriptive approach, focusing on the observation of classroom practices, teacher interviews, and document analysis. The findings reveal that effective learning strategies applied by teachers include active learning, cooperative learning, and contextual teaching methods that encourage student participation and critical thinking. The integration of digital media and interactive learning environments also plays a significant role in enhancing student engagement and comprehension. Moreover, teachers' pedagogical competence and their ability to adapt strategies to students' characteristics contribute to better learning outcomes. The study concludes that the success of effective learning strategies depends on the synergy between innovative teaching methods, student-centered learning environments, and continuous evaluation. These strategies are proven to have a positive impact on students' motivation, understanding, and academic achievement in Islamic junior high schools (MTSN 2) in Bandung City.

Keywords: learning Strategies, Academic Achievement, Active Learning, MTSN 2

1. Introduction

Education plays a vital role in shaping students' intellectual and moral development, serving as a foundation for improving the quality of human resources. In this context, Madrasah Tsanawiyah Negeri (MTSN) 2 Bandung City, as an Islamic junior high school, is committed to providing quality education that balances academic excellence and religious values. However, the rapid changes in educational paradigms and the diverse learning characteristics of students require teachers to continuously innovate in applying effective learning strategies. Awwaliyah, N. K., & Fatimah, M. (2024).

Effective learning strategies are essential for achieving optimal learning outcomes and enhancing students' academic performance. Teachers must be able to design learning processes that are interactive, student-centered, and contextual, allowing students to actively construct their understanding and apply their knowledge in real-life situations. The implementation of varied strategies such as cooperative learning, problem-based learning, and the use of digital technology has been proven to increase students' motivation, participation, and comprehension. Prasetyo, H., Roemintoyo, & Sukarno. (2023).

In the case of MTSN 2 Bandung City, efforts to improve academic achievement have been carried out through the adaptation of innovative teaching methods aligned with the curriculum and students' needs. Nevertheless, challenges such as differences in learning

¹ Universitas Islam Nusantara Bandung, Indonesia, Email : nenengsulastr@uninus.ac.id

abilities, limited learning resources, and the integration of technology into classroom practices remain significant. Therefore, identifying and analyzing effective learning strategies that can address these challenges is crucial to improving the overall quality of education. Prasetyo, H., Roemintoyo, & Sukarno. (2023).

This study aims to explore and describe the implementation of effective learning strategies in enhancing students' academic achievement at MTSN 2 Bandung City. The results of this research are expected to provide insights for educators and policymakers in developing more responsive and innovative instructional practices within Islamic educational institutions. Prasetyo, H., Roemintoyo, & Sukarno. (2023).

2. Theoretical Framework

2.1. Concept of Learning Strategies

Learning strategies refer to the systematic plans, approaches, and techniques employed by teachers and students to facilitate effective learning and improve academic outcomes. According to Oxford (1990), learning strategies are specific actions taken by learners to make learning easier, faster, more enjoyable, and more transferable to new situations.

Similarly, Weinstein and Mayer (1986) define learning strategies as behaviors and thoughts that influence how learners acquire, organize, and retain information. In the context of classroom instruction, effective learning strategies are those that encourage active participation, critical thinking, and meaningful learning experiences. Amiruddin, Fiskia Rera Baharuddin, Takbir, & Wirawan Setialaksana. (2023).

2.2. Characteristics of Effective Learning Strategies

Effective learning strategies are characterized by their ability to motivate students, promote interaction, and create a student-centered learning environment. According to Joyce, Weil, and Calhoun (2015), an effective learning strategy should include several key components: clear learning objectives, active student engagement, appropriate use of instructional media, and ongoing assessment.

These strategies help bridge the gap between students' prior knowledge and new learning materials, enabling deeper understanding and long-term retention. Examples include cooperative learning, problem-based learning, and inquiry-based learning, all of which encourage collaboration and critical analysis. Khudriyah. (2023).

2.3. The Role of Teachers in Implementing Learning Strategies

Teachers play a crucial role in determining the success of learning strategies. As facilitators and motivators, teachers must design lessons that are relevant, engaging, and adaptable to students' diverse learning styles. According to Gagné (1985), effective teaching involves organizing instructional activities in a sequence that supports cognitive processes such as attention, retention, and transfer.

In Islamic educational settings like MTSN 2 Bandung City, teachers are also responsible for integrating moral and spiritual values into learning, ensuring that students' cognitive and affective domains develop harmoniously. Lathifah, Z. K., Putri, E. A., Efendi, I., Rusli, R. K., Radiamoda, A. M., & Meatam, A. (2025).

2.4. Academic Achievement

Academic achievement refers to the measurable performance of students in academic subjects, typically evaluated through tests, grades, and teacher assessments. According to Slavin (2018), academic achievement is influenced by various factors, including students' motivation, the quality of instruction, and the learning environment. In the context of madrasah education, academic achievement not only reflects mastery of cognitive skills but also encompasses the development of religious understanding and character. Therefore, effective learning strategies must be designed to support both intellectual and moral growth. Wae, P., & Herwin. (2025).

2.5. Relationship Between Learning Strategies and Academic Achievement

A strong relationship exists between the implementation of effective learning strategies and students' academic achievement. Studies by Zimmerman (2002) and Schunk (2012) emphasize that students who are exposed to interactive and student-centered learning strategies demonstrate higher academic performance, better problem-solving skills, and increased self-regulation. Rismawati, A. E., Rahmawati, L. E., & Suparmin. (2025).

Effective strategies encourage active learning, where students are engaged in discovering, analyzing, and applying concepts rather than passively receiving information. In the case of MTSN 2 Bandung City, the consistent application of innovative and adaptive learning strategies can significantly enhance students' academic outcomes while fostering their religious and moral awareness.

3. Methods

3.1. Research Design

This study employs a **qualitative descriptive research design**, which aims to describe and analyze the implementation of effective learning strategies used by teachers to improve students' academic achievement at MTSN 2 in Bandung City. Adawiah, R., Selvi, N., & Nur Fajrin, S. (2025).

The qualitative approach was chosen because it allows the researcher to explore in depth the teaching and learning processes, teacher-student interactions, and contextual factors influencing learning outcomes. According to Creswell (2018), qualitative research emphasizes understanding phenomena from the participants' perspectives and interpreting meanings within real-life settings.

3.2. Research Location and Participants

The research was conducted at **Madrasah Tsanawiyah Negeri (MTSN) 2 Bandung City**, an Islamic junior high school known for its academic and religious programs. The participants consisted of teachers and students selected through **purposive sampling**, focusing on those actively involved in the learning process. Novitasari, D., Samsudin, Lumbantoruan, J. H., Simorangkir, Y. N., & Pramono, T. (2024).

The sample included 5 teachers and 20 students from various grades who represented different academic performance levels. Teachers were chosen based on their experience and involvement in implementing innovative learning strategies.

3.3. Data Collection Techniques

Data were collected using three primary techniques:

- a. **Observation:** The researcher observed classroom activities to understand how teachers apply learning strategies and how students respond to them. Observation sheets were used to record the methods, interactions, and engagement levels of students.
- b. **Interviews:** Semi-structured interviews were conducted with teachers and students to gain deeper insights into their perceptions of effective learning strategies and their impact on academic performance.
- c. **Documentation:** Relevant school documents, such as lesson plans, students' report cards, and curriculum guidelines, were reviewed to support the findings and provide contextual evidence.

3.4. Data Analysis Techniques

The collected data were analyzed using **Miles and Huberman's interactive model**, which consists of three main stages:

- a. **Data Reduction:** The researcher summarized, selected, and focused on essential data related to learning strategies and academic achievement.
- b. **Data Display:** The data were presented in descriptive narrative form, allowing patterns and relationships to emerge clearly.
- c. **Conclusion Drawing and Verification:** Conclusions were drawn from the data, verified through triangulation, and validated by comparing observations, interviews, and documentation results.

This method ensures the credibility and reliability of the research findings by maintaining consistency across multiple data sources.

3.5. Research Validity

To ensure the validity of the data, the study employed **triangulation techniques**, including source triangulation (teachers, students, and documents) and method triangulation (observation, interview, and documentation). Member checking was also conducted by confirming key findings with participants to ensure accuracy and authenticity of interpretation.

3.6. Ethical Considerations

The researcher followed ethical research principles by obtaining informed consent from all participants, ensuring confidentiality, and using the collected data solely for academic purposes. Participants' identities were anonymized to protect their privacy and integrity. Putri, T. O., Angelia, B., Rahmadilla, N., Syahrani, C. D., Efendi, R. A., Agusdianita, N., & Yusnia, Y. (2025).

4. Result

The findings of this study reveal several key aspects regarding the implementation of effective learning strategies and their impact on students' academic achievement at MTSN 2 in Bandung City. The results were derived from classroom observations, interviews with teachers and students, and analysis of relevant school documents.

4.1. Implementation of Active and Student-Centered Learning

Observations show that teachers at MTSN 2 Bandung have gradually shifted from traditional teacher-centered instruction to more active and student-centered approaches. Strategies such as **cooperative learning**, **problem-based learning**, and **discussion methods** were frequently applied to enhance student engagement. Syahputra, M. I., Djono, D., & Azmi, M. (2025).

Teachers encouraged students to work in groups, exchange ideas, and solve real-life problems collaboratively. These activities fostered critical thinking, teamwork, and communication skills among students, leading to greater interest and enthusiasm in learning.

4.2. Integration of Digital and Multimedia Learning Tools

The study found that teachers made effective use of digital technologies to support interactive learning. Tools such as **PowerPoint presentations**, **educational videos**, and **online quizzes** were utilized to make lessons more engaging and accessible. During the teaching process, teachers also used learning management systems (LMS) and social media platforms for assignments and feedback. Both teachers and students agreed that digital learning tools helped visualize complex concepts and improve comprehension, particularly in science and mathematics subjects.

4.3. Adaptation of Learning Strategies to Students' Needs

Teachers demonstrated flexibility in adapting learning strategies to students' abilities and learning styles. Differentiated instruction was applied by modifying teaching methods and materials according to students' learning pace and understanding. High-achieving students were often given enrichment tasks, while those who needed additional support received personalized guidance. This approach helped reduce learning gaps and ensured that all students could achieve the minimum learning competencies set by the curriculum.

4.4. The Role of Teachers' Pedagogical Competence

Interviews revealed that the success of learning strategies largely depended on teachers' pedagogical competence. Teachers who possessed strong mastery of teaching methods and classroom management were more effective in creating positive learning environments. They were able to motivate students, build emotional connections, and provide constructive feedback. In contrast, teachers with less experience tended to rely on conventional methods, resulting in lower student engagement and achievement.

4.5. Improvement in Students' Academic Achievement

Document analysis and teacher reports indicate a notable improvement in students' academic performance after the consistent application of effective learning strategies. Students demonstrated higher test scores, increased participation, and greater self-confidence in classroom activities. Moreover, teachers observed improvements not only in cognitive outcomes but also in students' attitudes, discipline, and responsibility toward learning. This holistic progress aligns with the objectives of Islamic education, which emphasizes both intellectual and moral development.

4.6. Challenges in Implementing Learning Strategies

Despite these positive outcomes, several challenges were identified. Limited technological facilities, large class sizes, and time constraints often hindered the full implementation of interactive learning methods. Some teachers also faced difficulties in designing innovative lesson plans due to a lack of professional development opportunities. However, continuous collaboration among teachers and support from school management have helped mitigate these issues. Hasanah, N. (2025).

Overall, the findings suggest that the use of **active, student-centered, and technology-supported learning strategies** has significantly contributed to improving students' academic achievement at MTSN 2 in Bandung City. The effectiveness of these strategies depends on teachers' pedagogical competence, adaptability, and the availability of adequate learning resources. The study highlights the importance of continuous teacher training and institutional support to sustain and enhance effective teaching practices in Islamic secondary education.

5. Discussion

The findings of this study demonstrate that the implementation of effective learning strategies has a significant impact on improving students' academic achievement at MTSN 2 in Bandung City. The results align with various educational theories emphasizing the importance of active learning, teacher competence, and the integration of technology in modern education. Wang, L. (2025).

5.1. Active and Student-Centered Learning as a Catalyst for Achievement

The research revealed that active and student-centered learning strategies, such as **cooperative learning, discussion, and problem-based learning**, have enhanced student engagement and motivation. These results are consistent with the theory of constructivism proposed by Piaget and Vygotsky, which suggests that learning is most effective when students actively construct their own understanding through social interaction and experience.

According to Slavin (2018), cooperative learning encourages interdependence and accountability among students, fostering deeper comprehension and retention. At MTSN 2 Bandung City, the shift from teacher-centered to student-centered instruction allowed learners to develop critical thinking and communication skills, which contributed to improved academic outcomes.

5.2. The Role of Digital Learning Tools in Enhancing Understanding

The integration of digital and multimedia tools in classroom instruction proved to be an effective method for supporting students' comprehension and participation. This finding supports Mayer's (2001) *Multimedia Learning Theory*, which states that combining verbal and visual information enhances students' ability to process and retain knowledge. Izza, N. N., Mahmud, S., Fadli, F., & Dewi, R. L. (2025).

The use of technology in the classroom also aligns with 21st-century learning principles, emphasizing creativity, collaboration, and digital literacy. Teachers at MTSN 2 Bandung effectively utilized technology to create interactive learning environments, although limited infrastructure sometimes restricted full implementation.

5.3. Teacher Competence and Pedagogical Adaptability

Another critical factor influencing the success of learning strategies is teachers' pedagogical competence. The study showed that teachers who possessed strong instructional skills and classroom management abilities were more capable of applying innovative teaching strategies effectively. This aligns with Gagné's (1985) theory of instructional design, which highlights the teacher's role in organizing learning experiences that activate students' cognitive processes. Furthermore, effective teachers at MTSN 2 Bandung were able to adapt their teaching to students' diverse learning needs, demonstrating the importance of **differentiated instruction** as emphasized by Tomlinson (2014). The teachers' ability to integrate religious and academic learning also reflects the holistic educational goals of madrasah institutions.

5.4. Correlation Between Learning Strategies and Academic Achievement

The results of this study confirm previous research by Zimmerman (2002) and Schunk (2012), which found that active and self-regulated learning strategies positively influence academic performance. Students who participate actively in the learning process tend to develop metacognitive skills that enable them to plan, monitor, and evaluate their own learning progress. At MTSN 2 Bandung City, students exposed to interactive learning environments showed significant improvements not only in test scores but also in self-confidence, discipline, and motivation. These findings illustrate that effective learning strategies foster not only cognitive development but also affective and behavioral growth.

5.5. Challenges and Implications for Educational Practice

Despite the overall success of the implemented strategies, several challenges remain. The limited availability of technological resources, large class sizes, and time constraints often hinder teachers from applying varied strategies consistently. These obstacles are common in many Indonesian schools and highlight the need for institutional support and professional development programs. As Fullan (2007) notes, sustainable educational improvement requires systemic collaboration among teachers, administrators, and policymakers.

Therefore, continuous training and workshops should be provided to help teachers enhance their instructional innovation. Additionally, schools should invest in technological infrastructure to support blended learning models, ensuring that students can access interactive and digital-based education both inside and outside the classroom.

In summary, the discussion confirms that effective learning strategies—particularly those that are active, student-centered, and technology-integrated—play a crucial role in improving students' academic achievement at MTSN 2 Bandung City. The success of these strategies depends largely on teachers' pedagogical competence, adaptability, and institutional support. The study emphasizes that sustainable improvement in students' academic performance requires ongoing innovation in teaching methods, strong professional collaboration, and the creation of supportive learning environments aligned with Islamic educational values.

6. Conclusion and Suggestions

6.1. Conclusion

Based on the research findings and discussion, it can be concluded that the implementation of effective learning strategies has a significant and positive impact on improving students' academic achievement at MTSN 2 in Bandung City. Teachers who applied

active, student-centered, and technology-integrated learning approaches were able to create engaging and meaningful learning experiences for their students.

The study showed that cooperative learning, problem-based learning, and contextual teaching methods encouraged students to participate actively, think critically, and collaborate effectively. The integration of digital media further enhanced comprehension and motivation, while differentiated instruction helped address the varying abilities of students. Moreover, the pedagogical competence and creativity of teachers were found to be crucial determinants of successful learning outcomes.

Overall, the research confirms that effective learning strategies not only improve cognitive performance but also contribute to the development of positive attitudes, discipline, and motivation among students. These strategies align with the holistic goals of Islamic education, which emphasize the integration of intellectual, moral, and spiritual growth.

6.2. Suggestions

Based on the findings and conclusions, several suggestions can be proposed:

- a. **For Teachers:** Teachers should continuously develop their pedagogical and technological skills to design more innovative and interactive learning strategies. Regular participation in training and workshops will help them stay updated with new instructional methods and digital tools.
- b. **For Schools:** School administrators should provide adequate support by improving facilities, promoting collaborative teaching, and offering professional development opportunities. Enhancing access to digital technology and teaching resources will allow teachers to implement effective strategies more efficiently.
- c. **For Students:** Students should take an active role in the learning process by engaging in discussions, collaborating with peers, and practicing self-regulated learning. Developing motivation and responsibility for their own learning will strengthen their academic achievement.
- d. **For Future Researchers:** Future studies are encouraged to explore the long-term effects of effective learning strategies on students' academic achievement across different subjects and educational levels. Quantitative or mixed-methods approaches could also be applied to measure the effectiveness of specific learning models more precisely.

Summary: In conclusion, the success of effective learning strategies at MTSN 2 Bandung City demonstrates the importance of innovative, student-centered teaching in achieving educational excellence. Continuous teacher development, strong institutional support, and active student participation are key elements in sustaining and enhancing learning quality in Islamic junior high schools.

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