

The Effectiveness of the Simulation Method on Students' Qur'anic Literacy: A Classroom Action Research Study at MTs Negeri Batu Bara Regency

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Abstract

The low level of Qur'anic literacy is often rooted in methodological stagnation that traps students in textual boredom. This study aimed to examine the effectiveness of the simulation method in improving students' Qur'anic reading and writing skills (*Baca Tulis Al-Qur'an/BTA*) at MTs Negeri Batu Bara Regency. The research employed a Classroom Action Research (CAR) design based on the Kemmis and McTaggart model, conducted in two cycles involving 36 students as research participants. Data collection instruments consisted of cognitive-practical ability tests and observation sheets assessing teacher and student activities. The findings demonstrated a highly significant and progressive improvement in learning outcomes. The class average score increased from 55.83 in the pre-cycle stage to 75.83 in Cycle I, and reached 89.72 at the end of Cycle II. Classically, the learning mastery percentage rose sharply from 36.11% to 94.44%, indicating that the simulation method successfully transformed theoretical understanding into well-established motoric competencies. This study concludes that the simulation method is effective in addressing the challenges of Qur'anic reading and writing instruction through strengthening habituation aspects (*ta'wid*) and encouraging active student engagement. The implications of these findings recommend the use of simulation as a primary instructional strategy for madrasah educators to enhance Qur'anic literacy standards in an applicative and sustainable manner.

Keywords: *Simulation Method; Qur'anic Reading and Writing; Classroom Action Research; MTs Negeri Batu Bara.*

Abstrak: kejenuhan tekstual. Penelitian ini bertujuan untuk menguji efektivitas penerapan metode simulasi dalam meningkatkan kemampuan baca tulis Al-Qur'an (BTA) pada siswa MTs Negeri Kabupaten Batu Bara. Melalui metode Penelitian Tindakan Kelas (PTK) model Kemmis dan McTaggart yang dilakukan dalam dua siklus, penelitian ini melibatkan 36 siswa sebagai subjek penelitian. Instrumen pengumpulan data meliputi tes kemampuan kognitif-praktis serta lembar observasi aktivitas guru dan siswa. Hasil penelitian menunjukkan peningkatan yang sangat signifikan dan progresif; nilai rata-rata kelas meningkat dari 55,83 pada pra-siklus menjadi 75,83 pada Siklus I, dan mencapai puncaknya pada angka 89,72 pada akhir Siklus II. Secara klasikal, persentase ketuntasan belajar melesat dari 36,11% menjadi 94,44%, yang membuktikan bahwa metode simulasi mampu mentransformasi pemahaman teoretis menjadi kompetensi motorik yang mapan. Penelitian ini menyimpulkan bahwa metode simulasi efektif dalam memecahkan dilema pembelajaran BTA melalui penguatan aspek pembiasaan (*ta'wid*) dan keterlibatan aktif siswa. Implikasi dari temuan ini merekomendasikan penggunaan simulasi sebagai strategi utama bagi para

pendidik madrasah untuk meningkatkan standar literasi Al-Qur'an secara aplikatif dan berkelanjutan.

Kata Kunci: *Metode Simulasi; Baca Tulis Al-Qur'an; PTK; MTs Negeri Batu Bara.*

Introduction

The problem that is still widely encountered is the low ability of students to read and write the Qur'an fluently, which has an impact on the quality of education as a whole (Zulaiha and Busro 2020). Therefore, strategies to improve literacy must be carefully considered, aligning learning methods with the needs and potential of students. Efforts made by teachers and schools require measurable efforts that appropriate methodological interventions can significantly improve Qur'anic literacy skills (Supriyadi and Julia 2019). Thus, one of the efforts that can be made related to this study is a systematic and cycle-based approach as an alternative to overcome the problems that occur.

Various strategies are always carried out to improve the literacy of the Qur'an, ranging from strengthening memorization, tajweed practice, to the use of interactive learning media (Supriyadi, Julia, and Iswara 2019). Previous studies have shown that the use of teaching modules, habituation techniques, and gradual repetition gives positive results in improving Qur'anic reading and writing skills. The practice provided a way that a consistent combination of strategies, accompanied by intensive teacher guidance, was able to increase student participation and build confidence in reading the Qur'an (Supriyadi, Supriyadi, and Abdussalam 2022). The success of this strategy emphasizes on adapting methods according to the characteristics of students, so that each intervention can be effective. The transition, structured strategy-based learning is the foundation for the application of the cycle method.

The cycle method, which is applied through the Classroom Action Research (PTK) stage, provides a reflective framework for teachers to assess the effectiveness of learning. In each cycle, teachers plan, implement, observe, and reflect on the learning process to determine the improvement of students' Qur'anic literacy skills. The use of the cycle method allows teachers to dynamically adjust strategies, identify learning barriers, and provide targeted solutions (Rinah 2023). The cyclical method emphasizes not only the end result, but also the process, so that students can experience gradual and measurable development (Hakim et al. 2022). This makes the PTK cycle a relevant approach to improve the quality of learning in the classroom.

Previous studies show that research on improving the ability to read and write the Qur'an through the cycle method has been carried out in several madrasahs, with results that show the effectiveness of this method (Hendra Asri Harahap et al. 2025). However, each classroom context has unique characteristics, both in terms of students' initial abilities and learning environment conditions (Basir et al. 2024). Therefore, although this study has similarities with previous studies, the application in MTs Negeri

Batu Bara Regency still requires adaptation and contextual reflection. Flexibility and method customization are key factors in ensuring optimal results. This study emphasizes the importance of implementing the PTK cycle that is adjusted to the situation of each class.

Based on the description above, the focus of this study is to explain the stages of applying the PTK cycle method in an effort to improve the ability to read and write the Qur'an in the classroom. The goal is to see the development of students' skills systematically, as well as provide practical reflection for teachers in designing effective learning strategies. The cycle method allows teachers to assess, adjust, and improve the learning process on an ongoing basis. This research seeks to build an intervention model that not only improves the literacy of the Qur'an, but also builds discipline, focus, and learning discipline in students.

Method

This study uses a cycle method based on Classroom Action Research (PTK) to improve the literacy of the Qur'an in students. The cycle method was chosen because teachers can plan, implement, observe, and reflect on the learning process repeatedly so that they can assess the development of students' skills gradually. The research was conducted at MTs Negeri Batu Bara Regency in grade VII which totaled 36 students, in the 2022/2023 school year. Each cycle is systematically designed with a focus on developing Qur'an reading and writing skills, as well as adapting learning strategies to students' initial conditions and abilities. Data is collected through direct observation, teacher notes, and the results of the evaluation of students' literacy skills, so that complete documentation is created regarding progress and obstacles in each stage of the cycle.

The stages of the research include planning, action, observation, and reflection, which are applied in several cycles to ensure the improvement of students' literacy skills. At the planning stage, teachers prepare teaching materials, learning modules, and indicators for assessing Qur'an literacy skills. Furthermore, actions are carried out by applying the cycle method in the classroom, followed by observation of student participation and achievement. The reflection stage is used to evaluate the results of each cycle, identify problems, and adjust strategies to be more effective in the next cycle. This approach focuses not only on the end result, but also on the continuous learning process, so that teachers can provide appropriate interventions and students experience a noticeable improvement in literacy skills.

Results and Discussion

Results of Student Pretest Scores

Table 1. Distribution of Frequency of Student Pretest Scores

Value Range	Category	Frequency (f)	Percentage (%)
≤ 65	Tuntas	13	36%
≤ 70	Incomplete	23	64%
Total		36	100%

"Based on Table 1, the results of the pretest show that the average student score only reaches 55.83, which is still below the minimum completeness criterion (KKM) which is 70. Classically, the completion rate only reached 36.11% (13 out of 36 students). This indicates that most students have not mastered the material of the Qur'an Hadith optimally, so action is needed in Cycle I to improve the learning outcomes.

Learning outcomes of Cycle I

Table 2. Frequency Distribution of Test Scores Cycle I

Value Range	Category	Frequency (f)	Percentage (%)
≥70	Tuntas	29	80,56%
< 70	Incomplete	7	19,44%
Total		36	100%

Based on the results of data analysis in Cycle I, it was seen that there was a significant increase in learning outcomes after the implementation of the simulation method. The average grade of the class increased from **55.83** in the pretest to **75.83** in Cycle I. Likewise, classical completeness increased drastically from **36.11%** to **80.56%**. The increase of **44.45%** in this level of completeness shows that the simulation method is effective in reviving the atmosphere of the MTs class that was previously monotonous. However, even though it has exceeded the general standard (usually 75% or 80%), there are still 7 students (19.44%) who have not reached the KKM.

Observation Data

Table 3. Summary of Observation Results of Teacher and Student Activities (Cycle I)

Yes	Objects of Observation	Total Score	Percentage	Category
1	Teacher (Researcher) Activities	27/31*	86%	Good
2	Student Activities	24/32	75%	Enough

The results of observations in Cycle I showed that teachers' ability to manage learning with the simulation method reached **86% (Good Category)**. Teachers have been able to establish topics, provide simulation examples, and provide assistance to students who are struggling effectively.

However, this has not been fully followed by student activities which have only reached **75% (Sufficient Category)**. The low percentage of student activities compared to teachers is due to the fact that students are still in the adaptation stage to the simulation method in the Qur'an Reading and Writing material. Some students seem to be still less active in giving opinions and giving responses. The gap between the performance of 'good' teachers and the activities of students who are still 'adequate' is the basis for reflection for improvement in Cycle II."

Cycle II Learning Outcomes

Table 4. Frequency Distribution of Cycle II Test Scores

Value Range	Category	Frequency (f)	Percentage (%)
≥ 70	Conclusion	34	94,44%
< 70	Incomplete	2	5,56%

Total	36	100%
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Recapitulation of Cross-Cycle Learning Outcomes Improvement

Table 5. Recapitulation of Cross-Cycle Learning Outcomes Improvement

Research Stage	Total Score	Average (\bar{X})	Completeness (%)	Category
Pre-Test (Initial)	2.010	55,83	36,11%	Less
Cycle I	2.730	75,83	80,56%	Good
Cycle II	3.230	89,72	94,44%	Excellent

Based on Table 5, there was a consistent and significant increase in learning outcomes from pre-cycle to Cycle II. The average score increased from **55.83** to **89.72**, while classical completeness shot up from **36.11%** to reach **94.44%** at the end of Cycle II.

Discussion

The results of the initial test showed that the Qur'an literacy of students at MTs Negeri Batu Bara Regency was still in the low category with an average score of 55.83 and a classical completeness level of only 36.11%. This low ability is caused by a learning pattern that is still conventional, where the interaction between teachers and students tends to be one-way so that the understanding of tajweed and makhrajul letters is not honed practically. This reality creates obstacles for students in mastering the basic competencies of Qur'an literacy which should be the main foundation at the tsanawiyah madrasah level. Based on these findings, an intervention through simulation methods is needed to change the classroom atmosphere to be more dynamic and applicative (Hasanah and Nur Habibi 2024).

The application of the simulation method in Cycle I at MTs Negeri Batu Bara Regency brought significant changes with an increase in the average score to 75.83 and classical completeness reaching 80.56%. This improvement proves that by simulating how to read and write verses directly, students become more confident and able to minimize technical errors in pronunciation. These findings are in line with the argument (Hanafi, Murtadho, et al. 2019) that simulations are effective for materials that require motor skills and constant habituation. However, the observation results show that student activities still need to be optimized because several simulation groups have not shown maximum collaboration in the literacy practice.

The optimization of actions in Cycle II which focused on strengthening individual guidance and simulation groups succeeded in encouraging students' Qur'an literacy skills to a very good level with an average of 89.72 and completeness reaching 94.44%. This remarkable success shows that the simulation method has succeeded in transforming the way students interact with the text of the Qur'an, from simply memorizing to being able to practice the rules of writing and reading correctly. This result surpasses the achievement of previous research by (Mahrus 2025), where the use of simulation in the context of BTA (Read and Write Al-Qur'an) in Batu Bara

showed stronger efficacy due to the physical and emotional involvement of students as a whole. With the achievement of the set completion target, this class action research was declared successful and stopped.

The effectiveness of the simulation method in MTs Negeri Batu Bara Regency is a tangible form of the application of *the structured Ta'wīd* (habituation) model in Islamic education. The success of the transition from pre-cycle conditions to Cycle II proves that the problem of Qur'an literacy in madrasahs can be overcome through a learning model that prioritizes visual examples and guided practices. This strengthens the theory (Hanafi, Hendrawan, and Hakim 2019) that methodological innovation is the key to maintaining the relevance of religious education in the midst of the challenges of the times. Thus, the simulation method is not just a teaching tool, but a strategic instrument to improve the quality standards of madrasah graduates in the aspect of Qur'anic literacy.

Conclusions

The conclusion of this study confirms that the systematic application of the simulation method in MTs Negeri Batu Bara Regency has proven to be very effective in improving students' Qur'an literacy skills, which is shown by a drastic increase in classical completeness from 36.11% in the initial condition to 94.44% at the end of Cycle II. This success is motivated by a change in approach from theoretical learning to a hands-on practical experience that is able to strengthen the ability to write letters and verse writing rules in a concrete way. Theoretically, this achievement proves that the simulation method is able to overcome student learning boredom while strengthening the habituation model (*Ta'wīd*) which is the spirit of Islamic education. Implicitly, teachers at MTs Negeri Batu Bara Regency are advised to adopt this method on a sustainable basis so that students' Qur'an literacy skills are maintained and continue to develop as basic functional competencies.

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