Journal of Islamic Education Management

Postgraduate Program Master of Islamic Education Management State Islamic University of Sunan Gunung Djati

# Enhancing the Analytical Abilities of Fifth Grade Students at SD Pasir Gitung Through the Application of the Picture and Student Learning Model

Siti Nurjanah SDN1 Pasirgitung Cikulur, Lebak, Indonesia \*Email: nurjanahzity96@gmail.com

#### Abstract

This research aims to enhance the analytical skills of fifth-grade students at SD Pasir Gitung, Lebak Banten, on the subject of the Struggle Against Dutch and Japanese Colonization. The study design utilizes Classroom Action Research developed by Kemmis & McTaggart, consisting of four stages: planning, acting, observing, and reflecting. The research was conducted over two cycles, with each cycle comprising two meetings. The subjects were 28 fifth-grade students at SD Pasir Gitung, Lebak Banten. Data collected included information on the results and processes of learning through the implementation of the Picture and Student Active model on the aforementioned topic. Data collection techniques employed were observation, tests, and questionnaires. The findings indicate that the application of the Picture and Student Active model significantly improved the students' analytical abilities. This conclusion is based on the achievement of average scores and completion percentages. Observations of the learning process using the Picture and Student Active model showed that students were able to analyze the background of Dutch and Japanese colonization in Indonesia. Based on the results of the analytical ability tests, the average score achieved in the first cycle was 76.16 with a completion percentage of 52.51%. In the second cycle, the average score was 81.75 with a completion percentage of 83.97%. Therefore, the application of the Picture and Student Active model effectively enhanced the students' analytical skills on the subject of the Struggle Against Dutch and Japanese Colonization.

### Keywords: Analytical Skills; Picture and Student Active Model; Social Sciences

Received: 2023-02-07; Accepted: 2024-06-21; Published: 2024-06-21

# Introduction

The subject of Social Sciences (IPS) is an essential discipline for students to master. However, given the extensive material covered in this subject, not all basic competencies and competency achievement indicators of Social Sciences can be fully met by the students. One important topic in Social Sciences is the Struggle Against Dutch and Japanese Colonization. In this topic, students often face challenges in analyzing the historical background of the colonialists' arrival in Indonesia, understanding the strategic patterns of the heroes' resistance during the colonial period, and analyzing the efforts of local figures in the quest for national independence. These issues indicate that to master the material on the Struggle Against Dutch and Japanese Colonization, students are required to have strong analytical skills in line with the Basic Competencies needed for mastering the material and achieving the set indicators.

Analysis involves dissecting a topic or its various components and examining each part and their interrelationships to gain accurate understanding and grasp the overall meaning. This action of analysis, as mentioned by Sudjana (2012), enables a comprehensive understanding and the ability to dissect integrity into integrated parts, to understand processes in some cases, operational methods in others, and systematic approaches in yet others. It is these characteristics that led Hamdani (2010), for instance, to describe analytical ability as the capacity to identify, separate, and differentiate the components or elements of a fact, concept, opinion, assumption, hypothesis, or conclusion, and to examine each component for contradictions. Such abilities are clearly essential for enhancing students' understanding and mastery of various topics in Social Sciences (Fanny, 2019; Aini, 2022; Bahari, 2020).

As a skill or ability, analysis lies within the cognitive domain. The cognitive domain, as explained by Uno (2013), encompasses learning objectives related to mental processes ranging from basic knowledge to higher levels, such as evaluation. This domain consists of at least six hierarchical levels: (1) Knowledge, defined as the ability to recall or reiterate previously acquired knowledge; (2) Comprehension, interpreted as the ability to explain, interpret, translate, or express in one's own way the knowledge received; (3) Application, seen as the ability to use knowledge to solve various daily life problems; (4) Analysis, defined as the ability to dissect a specific situation or acquired knowledge into its constituent elements or components; (5) Synthesis, interpreted as the ability to link and integrate various elements and aspects of knowledge to form a more comprehensive pattern; and (6) Evaluation, viewed as the

ability to make accurate judgments or decisions based on one's criteria or knowledge.

Based on the Basic Competencies and Achievement Indicators established, it is evident that analytical ability is a crucial skill expected of students to master the studied material. Students should not only memorize historical narratives but also be able to dissect the elements within the material on the Struggle Against Dutch and Japanese Colonization. However, as mentioned earlier, students' analytical abilities have not been adequately developed in the conducted learning sessions. This is evident from the suboptimal achievement of the expected indicators and competencies in Social Sciences, such as the students' inability to analyze the background of Dutch and Japanese colonization in Indonesia.

Initial reflections by the author indicate that the students' inability to achieve the competency achievement indicators from the material on the Struggle Against Dutch and Japanese Colonization is linked to the instructional procedures using the lecture method. While the lecture method is beneficial for various subjects, it is less suitable for mastering the material on the Struggle Against Dutch and Japanese Colonization. Document reviews conducted by the author on students' learning outcomes show that out of 28 students, 17 students or 60.71% did not meet the expected Minimum Competency Standards (KKM), while the remaining 39.29% met or exceeded the KKM, as illustrated in the following figure:



Figure 1. Graph of Students' Analytical Abilities

The data above indicates that the majority of students studying Social Sciences (IPS), particularly the topic of the Struggle Against Dutch and Japanese Colonization, have not achieved an adequate percentage of mastery. This issue stems from the implementation of inappropriate teaching methods. Indications of suboptimal analytical abilities in students are evident from various symptoms, such as (1) the majority of students' inability to analyze the background of Dutch and Japanese colonialism in Indonesia, (2) students' struggles to analyze the patterns and strategies of national heroes in their fight for independence, and (3) students' challenges in analyzing the factors contributing to colonization.

As mentioned, the root of the problem lies in the use of an unsuitable learning model. Lecture methods in teaching often lead to students passively listening and merely receiving material from the teacher. This approach hinders the effective development of students' cognitive abilities. Consequently, the expected analytical abilities, especially in Social Sciences (IPS), are not optimally developed (Widodo et al., 2020; Marselina et al., 2021).

This issue is compounded by teachers' lack of mastery of lecture methods appropriate to the class conditions and the context of the material being taught. The use of unsuitable teaching methods ultimately impacts the teacher's ability to develop students' analytical thinking. However, this analytical ability is essential for students to master the material taught and to achieve the competency indicators effectively.

The deficiency in teachers' ability to deliver and implement lessons, particularly concerning the appropriateness of the teaching methods used, as previously mentioned, results in the fifth-grade students at SD Pasir Gitung, Lebak Banten, failing to achieve set achievement indicators and hindering the development of the necessary analytical skills to master the material. Therefore, as a teacher, it is imperative to select the right learning model to make Social Sciences (IPS) lessons more meaningful, as meaningfulness can enhance students' learning outcomes. The choice of a learning model significantly determines the quality of students' learning processes and should be tailored to the students' and school's conditions.

To address this, a learning model for Social Sciences (IPS) that encourages and stimulates student engagement is necessary, such as the Picture and Student Active model. The Picture and Student Active model, as explained by Djamarah (2002), is a learning model based on the concept of 'know how to know.' In other words, this model fosters easier comprehension of material through pictures rather than text alone. However, students are also expected to understand and analyze specific events from the images.

Previous research has shown that the use of the Picture and Student Active model significantly enhances certain abilities of students. For example, a study by Munandar et al. (2022) demonstrates that the Picture and Student Active (PASA) Model, with the Contextual Teaching and Learning (CTL) approach, can improve biology learning outcomes in class VII students at Makassar National Junior High School, marked by an increase in the category of student learning outcomes from cycle I to cycle II. In the first cycle, 20 students or 50% were in the category, and in the second cycle, 40 students or 100% were in the high category, with the completeness of learning outcomes in the first cycle being 20 students or 50% and the second cycle being 40 students or 100%.

Similarly, a study by Yulianti (2021) shows that the application of the Contextual Teaching And Learning (CTL) approach with the PASA (Pictures And Student Active) Model in teaching the chemical industry process successfully increased students' interest, motivation, and academic achievement. Another study by Ashofa and Djuhan (2021) reveals that (1) the implementation of learning using the picture and picture cooperative learning model is highly favored by students for being more enjoyable and less monotonous compared to the lecture method, which often leads to boredom and inattention. (2) the use of the picture and picture cooperative learning model has succeeded in fostering student interest in learning social studies.

Therefore, the Picture and Student Active model demands effective learning in line with students' characteristics. Learning through images depicting specific historical events can stimulate students' interest and facilitate their understanding of the narrative and construction of historical narratives. The Picture and Student Active model is expected to make students more active and contribute to learning, ultimately aiding them in developing the analytical skills expected from Social Sciences (IPS). Based on these reasons, this study aims to examine how to enhance the analytical abilities of fifth-grade students at SD Pasir Gitung, Lebak Banten, through the Picture and Student Active learning model.

# Methods

In this Classroom Action Research, the design draws on Hopkins' model (2011), utilizing the Kemmis & McTaggart research design, which includes four stages in each cycle: planning of action (planning),

implementation of action (acting), observation of the action (observing), and reflection on the action (reflecting). The research was conducted over two cycles. Should the evaluation results from Cycle I indicate unresolved issues or new problems arise, improvements will be made in Cycle II following the same pattern. In other words, reflections from Cycle I are used to determine corrective steps for Cycle II.

The first analytical technique employed is descriptive statistical analysis. This method is applied to examine simple quantitative data. The second data analysis technique is the interactive analysis method (Miles & Huberman, 2014). This technique is used for examining qualitative data, consisting of words about the ongoing and completed learning processes

### **Results and Discussions**

# Competencies of 21st-Century Learning

This research was conducted in the fifth grade at SD Pasir Gintung, Lebak Banten, involving a total of 28 students. Specifically, the study focused on the Social Sciences (IPS) subject, addressing the topic of the Struggle Against Dutch and Japanese Colonization during the odd semester of the 2019/2020 academic year.

The study provided insights into the classroom condition, results, and changes occurring during and after the implementation of the Picture and Student Active model. It was observed that the teacher executed all the action steps effectively, as evidenced by an observation scale score of 77.78 in the first research cycle. However, some areas for improvement were noted: (a) The teacher's explanation of the procedures related to the learning model was somewhat unclear to the students; (b) There was a lack in guiding students in arranging and sequencing pictures for historical narration in line with the studied material. These aspects were subsequently addressed in the second research cycle.

In Cycle II, the teacher refined the execution of the action steps, particularly in the initial stages of explaining the learning steps using the Picture and Student Active strategy in greater detail. This effort continued with the third step of the teacher's action, which more effectively guided students in organizing and sequencing pictures in accordance with the learning material. Consequently, the implementation of the teacher's actions improved to 88.89%. The level of student activity and participation was satisfactory, as evidenced by their engagement in learning activities following the procedures of the Picture and Student Active model.

The Picture and Student Active model significantly assisted the teacher in enhancing students' analytical abilities on the topic of the Struggle Against Dutch and Japanese Colonization. This improvement was characterized by several aspects serving as indicators of success. Observations of the learning process using the Picture and Student Active model showed that students became more capable of analyzing the background of the Allied and NICA forces' arrival, strategizing resistance patterns in regions like Surabaya, Ambarawa, Medan Area, and Bandung Lautan Api to defend independence, and analyzing the efforts of local figures in maintaining independence. Based on the test results for students' analytical abilities, the average score achieved in the first cycle was 76.16 with a completion percentage of 52.51%. In the second cycle, the average score obtained was 81.75 with a completion percentage of 83.97%. Thus, the implementation of the Picture and Student Active model effectively enhanced the students' analytical skills on the subject of the Struggle Against Dutch and Japanese Colonization.

The outcomes of the action implementation over the two research cycles can be illustrated in the following graph.



Figure 2. Perbandingan Hasil antar Siklus

Subsequently, the students' response to the Picture and Student Active model was overwhelmingly positive, as indicated by the survey results conducted by the teacher. Generally, students found this model engaging because it actively involved them and made the material more interesting, leading to more intensive participation.

These results align with the theory behind the Picture and Student Active model, which emphasizes that teachers can aid students in learning by presenting a model that facilitates understanding of material through a more engaging presentation. The use of images and narrative construction through the organization of pictures not only helps to increase students' interest in the material but also makes it easier for them to communicate their ideas through these images (Djamarah, 2002).

This study also highlights the significant impact of using the Picture and Student Active learning model in various teaching contexts across different levels and types of subjects, as demonstrated in previous research on the application of this model (Biru, 2023; Auliana et al., 2021; Ashofa & Djuhan, 2021; Yulianti, 2021; Munandar et al., 2022; Sadikin, 2020).

### Conclusions

This study demonstrates that the implementation of the Picture and Student Active model can be effectively applied across various subjects, particularly in Social Sciences (IPS), and specifically on the topic of the Struggle Against Dutch and Japanese Colonization, as long as teachers can adapt its application steps to the classroom context, learning needs, and student characteristics.

The impact of the Picture and Student Active model on students' analytical abilities shows positive results, especially in Social Sciences (IPS) learning on the topic of the Struggle Against Dutch and Japanese Colonization. The utilization of this model significantly enhanced the analytical skills of fifthgrade students at SD Pasir Gitung, Lebak Banten, regarding the studied material. This improvement is reflected in the students' abilities to (a) analyze the background of Dutch and Japanese colonization in Indonesia; and (b) explain the efforts made by the freedom fighters. Based on the test results for students' analytical abilities, the average score achieved in the first cycle was 76.16 with a completion percentage of 52.51%. In the second cycle, the average score was 81.75 with a completion percentage of 83.97%. Thus, the application of the Picture and Student Active model successfully enhanced the students' analytical skills on the subject of the Struggle Against Dutch and Japanese Colonization.

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