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## The Effect of Implementing Authentic Assessment on Student Learning Activities and Outcomes

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### Abstract

This study investigates the effect of implementing authentic assessment on student learning activities and outcomes in the context of elementary school history education. The research design involved an experimental approach, with one group receiving authentic assessment and another group receiving conventional assessment. Participants were fifth-grade students from a specific school. Data collection methods included pre-test and post-test assessments, observation of student activities during lessons, and a questionnaire to gauge student attitudes toward the learning process. The findings revealed that students who underwent authentic assessment demonstrated higher levels of engagement in learning activities compared to those subjected to conventional assessment. Additionally, significant improvements were observed in the learning outcomes of students in the authentic assessment group. This suggests that authentic assessment not only fosters greater student involvement in the learning process but also enhances their understanding and retention of the subject matter. These results underscore the importance of incorporating authentic assessment practices in educational settings to promote more meaningful and effective learning experiences for students.

Keywords: Authentic Assessment; Effect; Implementing; Learning Activities; Learning Outcomes

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## INTRODUCTION

The progress of a country is always closely related to the development of its education system. Educational issues are the main focus in efforts to improve the quality of education, considering the important role of education in forming individuals who are able to face competitive challenges in various fields (Agustina, 2021; Dezaneru & Kurniawan, 2021; Veronica, 2018). The government has sought improvements in various aspects of education, including the curriculum, as an important tool in the success of the education system (Arliani, 2021; Shukurov, 2021). The right curriculum is the key to achieving the desired educational goals, and the history of Indonesian education records several changes to the curriculum to adapt to developments over time, for optimal results (Susilawati, 2021; Winda & Firmansyah, 2021).

Curriculum development from the 2006 to 2013 version aims to change the teacher paradigm, especially in relation to assessment standards. Assessment in learning, which includes learning activities, must be an integral part of the process (Dumford & Miller, 2018; Hasanah, 2021). However, assessment often focuses on cognitive aspects and uses tests at the end of learning, while assessments

should be carried out throughout the learning process to understand student learning outcomes as a whole, including affective and psychomotor aspects (Sutrimo, 2021; Wickens & Norris, 2018). To achieve this, an assessment system is needed that is able to measure all aspects of learning (Bahira, 2021; Rusdi et al., 2020).

Authentic assessment, which is the focus in implementing the 2013 curriculum, offers an approach that is more in line with the demands of modern education. This assessment not only evaluates student learning outcomes, but also attitudes, skills and knowledge based on learning processes and outcomes (Harahap, 2020; Kruit et al., 2018). Thus, authentic assessment is able to provide a more accurate picture of student achievement in various learning domains.

In this context, assessment of learning outcomes is an integral part of the learning process, along with the objectives and learning process itself (Ariyanto et al., 2018; Fadila, 2021). Comprehensive and precise assessment can be an important tool in improving the quality of education and student output, which in turn will influence the progress of a society, nation and state (Dirgantoro, 2018; Handayani, 2021; Novalia, 2020). In an effort to achieve optimal learning outcomes, it is important to provide learning that allows students to learn independently and actively. The learning process must be student-centered and involve physical and mental activity to ensure deep understanding and achieve optimal learning outcomes.

When assessing learning outcomes, it is important to pay attention to all aspects of learning, including cognitive, affective and psychomotor aspects, so that the assessment reflects student achievement as a whole. Based on this understanding, this research aims to explore the effect of implementing authentic assessment on student activities and learning outcomes in the context of history learning in an elementary school.

One of the implications of this research is the need to implement authentic assessment in the learning process to improve student learning activities and outcomes. By using authentic assessment, teachers can more effectively measure student progress in various aspects of learning, including knowledge, skills, and attitudes. This can trigger students' enthusiasm for learning because they understand how they are assessed and see the relevance of learning activities to the final objective of the assessment.

## **RESEARCH METHODS**

### ***Research Design***

The research design used in this research is an experimental study. In an experimental study, researchers will implement authentic assessment in the experimental group, while the control group will continue to use conventional assessment methods (Marwiyah, 2021; Raffaghelli et al., 2018). Thus, researchers can compare the impact of implementing authentic assessment on student activities and learning outcomes with groups who did not receive this treatment.

### ***Research Target/Subject***

The targets or subjects of this research are class V students at SDN No. 68/1 Simpang Mersam. These students are the focus of the research because they are a population relevant to this research topic and representative of the targets for using authentic assessment in the context of history learning at the elementary school level.

### ***Research Procedure***

The research procedure will begin with collecting initial data about students' initial abilities and their knowledge of the historical material to be studied. After that, the researcher will divide the students into two groups, the experimental group and the control group. The experimental group will receive learning using authentic assessment, while the control group will receive learning using conventional

assessment (Darwis, 2021; Syamsuddin et al., 2021). Data will be collected through observing student activities, knowledge tests, and student attitude questionnaires.

### *Instruments, and Data Collection Techniques*

The instruments that will be used in this research include authentic assessment rubrics, knowledge tests about historical material, and questionnaires to measure students' attitudes towards learning. Data collection techniques will involve direct observation of student activities during learning, administering knowledge tests, and distributing questionnaires to students to assess their attitudes towards learning.

### *Data analysis technique*

The data analysis technique that will be used is descriptive and inferential statistical analysis. Observation data will be analyzed to see differences in student activities between the experimental and control groups. In addition, test and questionnaire data will be analyzed to see differences in learning outcomes and student attitudes between the two groups. Inferential statistical analysis such as the t test will be used to test the significance of differences between the two groups.

## **RESULTS AND DISCUSSION**

Based on the description that has been presented previously, in this chapter an analysis of the discussion obtained in this research will be carried out. The results of this research are described as being in accordance with the hypothesis proposed previously.

After the research was carried out, data was obtained on student learning activities and student learning outcomes in the form of numbers as a result of the process learning with apply authentic assessments and assessments that only assess cognitive aspects, on the theme of the history of Indonesian civilization, the sub-theme of Islamic kingdoms in Indonesia, 1st, 2nd and 3rd learning. The average student activity and learning outcomes and their standard deviations are as listed in table 1 and table 2.

Table 1 Average Student Learning Activities and Standard Deviation

Class	The number of students	Average learning activity	Standard deviation
Control Class	22	81.59	6.33
Experimental Class	22	85.77	5.92

Table 2. Average Student Learning Outcomes and Standard Deviation

Class	The number of students	Average learning activity	Standard deviation
Control Class	22	78.40	6.12
Experimental Class	22	83.72	5.35

Table 3. Hypothesis Test Results

Data	T <sub>count</sub>	T <sub>table</sub>	Information
Learning activity	7.46	1,681	T <sub>count</sub> > T <sub>table</sub>
Learning outcomes	2.67	1,681	T <sub>count</sub> > T <sub>table</sub>

From the t test hypothesis test above , for data on student learning activities , T count = 7.46 p in T table =1, 681 with dk =4 2 . Means T count > T table , and a decision is made to reject H0 and accept Ha . So it can be concluded that there is a significant influence of the application of authentic

assessment on the learning activities of class V students at SDN No 68/1 Simpang Mersam in the 1st, 2nd and 3rd lessons, Sub-theme of the Islamic Kingdom of Indonesia, Theme of the History of Indonesian Civilization.

Data on student learning outcomes in the table above  $T_{count} = 2.67$  and  $T_{table} = 1.681$  with  $dk = 42$ . Means  $T_{count} > T_{table}$ , and a decision was made to reject  $H_0$  and accept  $H_a$ , with the hypothesis that there was a significant influence of the application of authentic assessment on the learning outcomes of class V students at SDN No. 68/1 Simpang Mersam in the 1st, 2nd, and 3rd, Sub-theme of the Islamic Kingdom of Indonesia, Theme of the History of Indonesian Civilization.

Based on the results of research that has been carried out, for students who were taught by applying authentic assessment (experimental class) a sample of 22 students with the highest score of 93 and the lowest score of 74, obtained an average learning activity of 85.77 with a standard deviation of 5.92. In contrast to learning activities that apply only knowledge assessment (control class), a sample of 22 students with the highest score of 93 and the lowest score of 72, obtained an average learning activity of 81.59 with a standard deviation of 6.33. For the normality test  $Lo < L_{table}$ , the learning activity data from both samples have a normal data distribution, because for the student learning activity data in the experimental class  $Lo (0.148) < L_{table} (0.190)$ , while in the control class  $Lo (0.083) < L_{table} (0.190)$ .

From the results of the analysis of the homogeneity of variance test of learning activity data using the F test above, it can be seen that  $F_{count} = 1.11$  and  $F_{table} = 3.23$ . Because  $F_{count} < F_{table}$ , it can be concluded that the two classes have homogeneous variance at  $\alpha = 0.05$ . After carrying out the hypothesis test using the t test, there is a  $t_{count}$  of 7.46 and a  $t_{table}$  of 1.681 at the 95% confidence level. This shows that the application of authentic assessment produces different (higher) activities than the application of knowledge assessment alone in the 1st, 2nd and 3rd lessons of the Indonesian Islamic Kingdom sub-theme, History of Indonesian Civilization theme V SDN No 68/1 Simpang Mersam.

For student learning outcomes based on research conducted, for students who were taught by applying authentic assessment (experimental class) a sample of 22 students with the highest score of 91 and the lowest score of 73 obtained an average learning outcome of 83.72 with a standard deviation of 5.35 which is different from learning outcomes that applied only knowledge assessment (control class) for a sample of 22 students with the highest score of 91 and the lowest score of 68, obtained an average learning outcome of 78.40 with a standard deviation of 6.12.

For the normality test  $Lo < L_{table}$ , the learning outcomes data from both samples have a normal data distribution, because for the student learning outcomes data in the experimental class  $Lo (0.1696) < L_{table} (0.190)$ , while in the control class  $Lo (0.1247) < L_{table} (0.190)$ . From the results of the analysis of the homogeneity of variance test of learning outcomes data using the F test above, it can be seen that  $F_{count} = 1.58$  and  $F_{table} = 3.23$ . Because  $F_{count} < F_{table}$ , it can be concluded that the two classes have homogeneous variance at  $\alpha = 0.05$ . After carrying out the hypothesis test using the t test, there is a  $t_{count}$  of 2.67 and a  $t_{table}$  of 1.681 at the 95% confidence level. This shows that the application of authentic assessment produces different (higher) learning outcomes than the application of knowledge assessment alone in the 1st, 2nd and 3rd lessons of the Indonesian Islamic Kingdom sub-theme History of Indonesian Civilization theme V SDN No 68/1 Simpang Mersam.

## CONCLUSION

Conclusions can be generalized findings according to research problems, can also be in the form of recommendations for the next step.

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