



Effectiveness of the Use of Contextual Teaching and Learning-based PAI Modules in the Face of Learning Outcomes of Class VI Students of SDN 2 Balo-Baloang, Pangkep Regency

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ABSTRACT

This study aims to (1) describe the learning outcomes of students before using *the Contextual Teaching and Learning Based PAI* module, (2) to describe the learning outcomes of students after using *the Contextual Teaching and Learning Based PAI* module, (3) to analyze the effectiveness of using *the Contextual Teaching and Learning Based PAI* module on the learning outcomes of grade VI students of SDN 2 Balo-baloang. The research used is quantitative with a *pre-experimental design approach* with the type of design "*one group pretest-posttest*". The sampling technique uses the saturated sample technique so that a sample of 20 students is obtained. Data collection techniques are carried out through tests, observations, and questionnaires. This study uses descriptive analysis techniques. The results of the study show that the use of CTL-based PAI modules is effective in improving the learning outcomes of grade VI students of SDN 2 Balo-baloang, Pangkep Regency. This is shown from the increase *in pretest and posttest scores* in the calculation of *n-gain* of 0.62 is in moderate categorization. Furthermore, 84% of students were actively involved in learning and 87% of students gave positive responses related to the use of the PAI module.

Keywords: CTL-based modules, Learning Outcomes, PAI

1). INTRODUCTION

Education is the activity of a person or a group of institutions in helping individuals to achieve educational goals. Activities in education can be in the form of education management, guidance activities, teaching and training. The achievement of educational goals must be equipped with the use of the right methods in order to create effectiveness in improving learning outcomes. In the era of globalization, educators are required to look at the conditions in the field of education and the times as well as the social conditions of society, know the problems they face so that the material presented can be relevant and in accordance with the goals faced in terms of changing society towards brilliance

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(Marjuni, 2013:79). The learning process involves two subjects, namely teachers and students who will produce a change in students as a result of learning activities. Changes that occur in students as a result of non-physical learning activities such as changes in attitudes, knowledge and skills (Eko Putra Widoyoko, 2014:25). Therefore, to optimize the learning process and outcomes, we should look at the factors that support success in the learning process, including internal factors and external factors.

Based on the results of initial observations at SDN 2 Balo-baloang, Pangkep Regency, information was obtained that there are still a number of students whose learning outcomes do not reach the predetermined scores, even though teachers have used teaching materials in schools but the results still do not reach the values set in the Islamic Religious Education subject, while according to students in the learning process that occurs in the field, The teaching materials used are only in the form of package books that make students listen more and take notes on the material, and make the lessons monotonous. Regarding these problems, teachers are expected to be able to compile materials with teaching materials that make students able to get learning results in accordance with what has been determined beforehand.

Learning modules are measurement tools that are systematically arranged and can be learned independently by students with educators or other people only as facilitators. A module is referred to as a program that is arranged in the form of a certain unit for the benefit of the learning process (Hafidzah, 2020:9). Learning using modules has many benefits, modules can provide feedback so that students can find out their shortcomings and immediately make improvements, modules that are designed to be attractive, easy to learn, and can answer needs will certainly motivate students to learn. Modules are flexible because module materials can be learned by students in different ways and at different speeds, cooperation can be established because with modules competition can be minimized (Lasmiasi, et al., 2014:164). Based on this description, that the advantages in the use of modules can provide more motivation for an educator to use modules in carrying out learning, as well as for students as learning objects will be able to know their own abilities with their own learning outcomes, thus encouraging the author to conduct research on the effectiveness of using *contextual teaching and learning-based* PAI modules".

2) METHODS

The research used is a type of quantitative research with a *pre-experimental design method*. The research design is "*One Group Pretest-Posttest*". In this study, the population is the total number of students in grade VI of SDN 2 Balo-bloang which totals 20 people. The sampling technique used is the saturated sample technique. Saturated sampling is a sampling technique when samples are taken from the entire population. This is done if the population is relatively small or less than 30 people (Sugiono 2018:124).

The data collection methods used in this study are tests, observations and questionnaires. The research instruments are, pretest-posttest questions, observation sheets, and questionnaire sheets. Pretest and postes questions totaled 15 numbers in the form of multiple-choice questions that aimed to determine the improvement of students' learning skills. The observation sheet aims to find out the learning activities of students which contain 4 components, namely activeness, discipline, knowledge and politeness. The questionnaire used was in the form of a *likert* scale containing 11 statements, aiming to find out the response of students regarding the use of the CTL-based PAI module which contained a number of questions or statements that would be given to respondents to be answered (Sugiyono, 2018: 142).

The data analysis technique used in this study is a descriptive analysis technique. Descriptive analysis is a data analysis technique either made for oneself or in groups that describe a data (Agus Rianto, 2019:105). Descriptive analysis consists of mean formulas, standard deviations, variances and ranges which are used to answer the formulation of the first and second problems, namely how to learn students before and after the use of CTL-based PAI modules. The third problem formulation is whether there is an effectiveness of the use of CTL-based modules on the learning outcomes of grade VI students of SDN 2 Balo-baloang, which can be answered using normalized gain or n-gain scores.

3) RESULTS AND DISCUSSION

The results of the study will answer the formulation of the proposed problem, in this study the researcher applies 3 formulations of the problem to be answered.

1. Learning Outcomes of Students Before the Use of Contextual Teaching and *Learning-Based PAI Module* in Class VI SDN 2 Balo-baloang, Pangkep Regency

To obtain the results of research conducted at SDN 2 Balo-baloang, Pangkep Regency on grade VI students before using the CTL-based PAI module, namely *pretest data*, the researcher used descriptive statistical analysis. The descriptive analysis *of the pretest* is presented in table 1.

Table 1 Pretest Descriptive Analysis

<i>Descriptive Statistics</i>							
	<i>N</i>	<i>Range</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>Std. Deviation</i>	<i>Variance</i>
<i>Pretest</i>	20	67.00	20.00	87.00	50.2000	20.59535	424.168
<i>Valid N (listwise)</i>	20						

Source: Results of Research Data Analysis with SPSS Application 29.0.0.0

Based on table 1, it can be seen that, the learning outcomes of grade VI students of SDN 2 Balo-baloang, Pangkep Regency before using the CTL-based PAI module obtained the highest score of 87, the lowest score of 20, the average score of 50, the range value of 67, the standard deviation of 20.59535 and the variance of 424,168 with a sample of 20 students.

The categorization of the learning outcome test for grade VI students of SDN 2 Balo-baloang before using the CTL-based PAI module is presented in table 2.

Table 2 Categorization of Students' Learning Outcomes Before Using CTL-Based PAI Modules

NO	Interval	Frequency	Category	Presentation
1	0 – 16	0	Very low	0 %
2	17 – 36	7	Low	35 %
3	37 – 56	6	Keep	30 %
4	57 – 76	4	Tall	20 %
5	77 – 100	3	Very high	15 %

Table 2 shows that only four categories were achieved out of the five selected categories (very low, low, medium, high and very high). The four categories obtained were 7 students in the low category with a percentage of 35%, 6 students in the medium category with a percentage of 30%, 4 students in the high category with a percentage of 20%, and 3 students in the very high category with a percentage of 15%. Based on the average score of the learning outcome test of grade VI students of SDN 2 Balo-baloang before using the PAI Module, the result was obtained which was 35% in the low category.

2. Learning Outcomes of Students After the Use of Contextual Teaching and Learning-Based PAI Module in Class VI SDN 2 Balo-baloang, Pangkep Regency

To obtain the results of research conducted at SDN 2 Balo-baloang, Pangkep Regency on grade VI students after using the CTL-based PAI module, namely *posttest* data, the researcher used descriptive statistical analysis. The results of *the posttest* descriptive analysis are presented in table 3.

Table 3 Posttest Descriptive Analysis

<i>Descriptive Statistics</i>							
	<i>N</i>	<i>Range</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>Std. Deviation</i>	<i>Variance</i>
<i>Posttest</i>	20	47.00	53.00	100.00	78.8500	14.52140	210.871
<i>Valid N (listwise)</i>	20						

Source: Results of Research Data Analysis with SPSS Application 29.0.0.0

Based on table 3, it can be seen that the learning outcomes of grade VI students of SDN 2 Balo-baloang after using the CTL-based PAI module obtained the highest score of 100, the lowest score of 53, the average score of 79, the range value of 47, the standard deviation of 14.52140 and the variance of 210.871 with a sample of 20 students.

Furthermore, the analysis of the categorization of the PAI learning outcome test for grade VI students of SDN 2 Balo-baloang, Pangkep Regency after using the CTL-based PAI module is presented in table 3.

Table 4 Categorization of Student Learning Outcomes After Using the PAI Beer-Based CTL Module

NO	Interval	Frequency	Category	Presentation
1	0 – 16	0	Very low	0 %
2	17 – 36	0	Low	0 %
3	37 – 56	3	Keep	15 %
4	57 – 76	7	Tall	35 %
5	77 – 100	10	Very high	50 %

The data in table 4 shows that there are only three categories achieved out of the five selected categories (very low, low, medium, high and very high). The three categories obtained were 3 students who were in the medium category with a percentage of 15%, 7 students were in the high category with a percentage of 35% and 10 students were in the very high category with a percentage of 50%. Based on the average score of the learning outcome test of grade VI students of SDN 2 Balo-baloang after using the CTL-based PAI module, the result was obtained which was 50% in the very high category.

3. The Effectiveness of the Use of *Contextual Teaching and Learning-Based* PAI Modules on the Learning Outcomes of Grade VI Students of SDN 2 Balo-baloang

The use of CTL-based PAI modules on student learning outcomes can be said to be effective if two or more than three indicators meet the success criteria. The success criteria for the effectiveness in question are: (1) if the PAI learning outcome test of students using *the n-gain* test has increased at least at medium categorization or *the n-gain* value ≥ 0.3 . (2) if $\geq 75\%$ of students are actively involved in learning. (3) if $\geq 75\%$ of students give a positive response related to the use of PAI modules based on *Contextual Teaching and Learning*.

a. **Improving student learning outcomes using PAI modules based on *Contextual Teaching and Learning***

Improvement of PAI learning outcomes of students using the n-gain formula, more details can be seen in table 5.

Table 5 N-Gain Score Calculation

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Pretest Scores	Posttest Scores	<i>Pretest – Posttest</i>	Ideal Score – <i>Pretest</i>	<i>N-Gain</i>
50,2	78,85	28,65	49,8	0,62

Table 5 above shows that the average pretest score is 50.2 and the average posttest score is 78.85 so that the *normalized gain* or the average *normalized gain* is 0.62.

For more details, the categorization of improving student learning outcomes can be seen in table 6.

Table 6 Categorization of Improvement with *N-Gain* Score

N-Gain Value	Kategorisasi	Frequency	Presented (%)
$g > 0,7$	Tall	7	35 %
$0,3 \leq g \leq 0,7$	Keep	12	60 %
$g < 0,3$	Low	1	5 %

Based on table 6 If the average *n-gain value* of students of 0.62 is converted in the 3 categorizations above, then the average *n-gain value* is at the interval of $0.3 \leq g \leq 0.7$, which means that the improvement of student learning outcomes by using contextual teaching and learning-based PAI modules is generally in moderate categorization. The average $\leq n-gain$ value is 0.62 which means it is in a moderate categorization or the *n-gain value* ≥ 0.3 , so it can be concluded that the improvement of student learning outcomes meets the success criteria.

b. Results of observation of student activities during learning

The results of the observation of student activities using the CTL-based PAI module during 2 meetings are stated in the following table 7:

Table 7 Results of Observation of Student Activities

No.	Assessment Aspects	Meeting		Percentage
		I	II	
1	Activeness	81	91	86%
2	Discipline	79	77	78%
3	Knowledge	74	81	77%

4	Decency	96	97	96%
Percentage		82%	86%	84%

Based on table 7 of the observation results of student activities above, it can be seen that the percentage of student activity is 86%, the percentage of student discipline is 78%, the percentage of student knowledge is 77%, and the percentage of student politeness is 96%. Based on the 4 activities observed during the two meetings above, the average percentage of student activities is 84%, which means that $\geq 75\%$ of students are actively involved in learning, so it can be concluded that student activities in learning meet the success criteria.

c. Response to the use of CTL-based PAI modules

Data on students' responses to learning using CTL-based PAI modules was obtained through the distribution of student response questionnaires containing 11 statements. The results of data analysis of student responses to learning using CTL-based PAI modules filled out by 20 students are shown in table 9.

Table 8 Students' Responses to CTL-Based PAI Modules

No	Learners	Percentage
1	P1	89
2	P2	90
3	P3	89
4	P4	95
5	P5	84
6	P6	95
7	P7	86
8	P8	93
9	P9	75
10	P10	90
11	P11	66
12	P12	95
13	P13	95
14	P14	84

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15	P15	90
16	P16	93
17	P17	89
18	P18	73
19	P19	93
20	P20	86
Average Percentage		87%

Based on table 8, it can be seen that the average percentage of student responses related to the use of CTL-based PAI modules is 87%, which means that $\geq 75\%$ of students give positive responses related to the use of CTL-based PAI modules, so it can be concluded that student responses related to the use of CTL-based PAI modules meet the success criteria.

Based on the three indicators of the effectiveness of the use of CTL-based PAI modules on the learning outcomes of students in grade VI of SDN 2 Balo-baloang above, the results were obtained that 1) The increase in student learning outcomes towards the use of CTL-based PAI modules in the calculation of *n-gain* obtained a value of 0.62 was in moderate categorization. 2) Based on the observation results, the activities of students who were actively involved in learning were 84%. 3) based on the results of the questionnaire, the students' response to the use of the CTL-based PAI module obtained a score of 87% of students giving a positive response. Based on the above statement, it can be concluded that the use of CTL-based PAI modules is effective in improving student learning outcomes.

This is possible because the use of modules can help students learn faster, students can achieve learning goals well in a time that suits their speed and ability, students are motivated to participate more actively in learning, because they have to learn and discover the concepts they learn themselves, modules can be worked on and used in various situations and places, Modules can also be arranged according to patterns that are in accordance with the students' abilities.

In addition, the results of this study are also in accordance with research conducted by Andi Ilham Badawi and Muhammad Qadafi (2015) which stated that the use of environment-based modules on student learning outcomes is effective, judging from the number of students who achieve learning proficiency with KKM standards of 75% of students. Similarly, the results of research conducted by

Akhirunnisa Hasibuan and Meliyani Sari Sitepu (2023) who said that the use of Islamic-based learning modules in rights and obligations material is effectively used in the learning process.

4). CONCLUSIONS

The use of contextual teaching and learning-based PAI modules is effective in improving the learning outcomes of grade VI students of SDN 2 Balo-baloang, Pangkep Regency. This is shown from the average value of the increase *in pretest* and *posttest* through *n-gain* of 0.62 which is in moderate categorization. Then the activities of students in the learning process were obtained as a result of 84% being actively involved in learning. The students' response to *the contextual teaching and learning-based PAI module* was obtained as a result of 87% of students giving positive responses. The above description shows that the three indicators in this study meet the criteria for effectiveness success, so it can be concluded that the use of *contextual teaching and learning-based PAI modules* is effective in improving the learning outcomes of grade VI students of SDN 2 Balo-baloang, Pangkep Regency.

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