The Influence of the Contextual Teaching and Learning (CTL) Learning Model on Students' Learning Outcomes

*Saritan N. Kaharu, Muhammad Aqil, Kadek Hariana, Sriwahyuni Y. Boromang
1Elementary Teacher Education Department, Faculty of Teacher Training and Education, Universitas Tadulako. Jl. Soekarno Hatta No.KM. 9, Tondo, Palu 94148, Indonesia

*Corresponding Author: kaharusarintan@gmail.com

Received: October 2022; Revised: February 2023; Published: July 2023

Abstract

The purpose of this research is to describe the influence of the Contextual Teaching and Learning (CTL) learning model on student learning outcomes in Indonesian language subjects in grade fifth of Tondo Elementary School. The design of the experimental method used in this study is nonequivalent control group design. The subjects in this study were fifth grade students at Tondo Elementary School, totaling 55 people. There are 28 students in the experimental class and 27 students in the control class. Data collection was carried out using multiple choice tests. Data analysis used the t test with the prerequisite test namely normality test, homogeneity test, and hypothesis testing with the help of SPSS Statistics Version 25. Based on the results of this study indicate the results of a significant value of 0.000 <0.05 then accept the hypothesis Hₐ and reject H₀, meaning the Contextual Teaching and Learning (CTL) learning model influential in improving student learning outcomes in Indonesian language grade fifth of Tondo Elementary School.

Keywords: Contextual Teaching and Learning (CTL), Learning Outcomes


Copyright © 2023, Kaharu et al. This is an open-access article under the CC-BY License.

INTRODUCTION

Elementary school education is basic education which plays an important role in shaping the child's personality and mindset. At the elementary school education level, children are taught various sciences as the foundation for children to undergo education at the next level (Rahmawati, 2018). One of the problems facing the world of education today is the problem of weak learning processes. The implementation of the learning process that takes place in the classroom is only directed at students' ability to memorize information, the student's brain is forced only to remember and hoard various information without being required to understand the information obtained to relate it to situations in everyday life. This condition also applies to Indonesian language subjects, so far the process of learning Indonesian in elementary schools is still mostly carried out conventionally.

Indonesian is one of the most important subjects in school because Indonesian functions in everyday life as a tool for logical thinking. Indonesian is one of the subjects taught at the elementary school level. Indonesian is also used as a means to hone thinking skills and develop self-potential in elementary school students. What's more, at the elementary school education level, Indonesian becomes a reference and benchmark for improving human resources so that they can be better (Handayani, 2021).

Teachers are professional educators with the main task of educating, teaching, guiding, directing, training, assessing, and evaluating students in early childhood education through formal education, basic education and secondary education (Law No. 14 of 2005). The teacher
is the manager of activities during the teaching and learning process, in this case the teacher is in charge of directing student learning activities in order to achieve learning goals. Along with the rapid progress of information technology, the teacher is no longer just acting as a presenter of information. Teachers must also be able to act as facilitators, motivators, and mentors who provide more opportunities for students to find and process information on their own. Thus, teachers must also constantly improve their skills and keep abreast of developments in science and technology so that teachers are able to face various challenges in the process of implementing learning.

Teachers also have an important role in the process of implementing learning. Role is a dynamic aspect of position or status. If a person carries out his rights and obligations according to his position, then he has carried out a role. Like teachers and students, teachers have a very important role in the world of education, especially during teaching and learning activities, because basically students need the teacher's role to help them in the process of self-development and optimizing their talents and abilities (Salsabila, 2021). In addition, the teacher's role in improving student learning outcomes is very important, namely by guiding, encouraging, and providing learning facilities for students to achieve goals.

Learning outcomes are the center of public attention, this is because there is an assumption that an aspect is the final assessment of the various processes that have been carried out by each student. The success of learning objectives is determined by many factors including the teacher factor. Teachers in carrying out the teaching and learning process can directly influence, foster and improve the intelligence and skills of students. The weak learning process developed by teachers is one of the problems faced by our world of education. The learning process that occurs in the classroom is in accordance with the teacher's abilities and tastes (Herliani, 2021).

The teacher in the teaching and learning process only uses the lecture method, without using visual aids, and the subject matter is not presented chronologically. (Nurhaliza, 2020) stated that the lecture method can be considered as a technique for delivering teaching material through speech. The lecture method is a method that can be said to be a traditional method, because this method has long been used as a means of oral communication between teachers and students in the teaching and learning process.

Each learning method given must have advantages and disadvantages of each, as well as the lecture method has advantages and disadvantages. One of the advantages of the lecture method is that it is cheap and easy because it only uses oral media. In addition, the lecture method also has drawbacks, namely, the process of absorbing knowledge is lacking and students get bored quickly.

Researchers found facts in the field when carrying out learning activities, teachers at Tondo Elementary School still emphasized concepts that only exist in books and did not make use of the environment and other learning resources around them. The researcher made observations of VA class students as an experimental class totaling 28 students and VB class as a control class totaling 27 students at Tondo Elementary School with the average student score in the Indonesian subject being below the KKM.

Based on the description above, it can be identified that there are problems that must be overcome to improve student learning outcomes. The problems in learning activities are that they are only fixated on source books, rarely make observations or experiments and do not take advantage of the environment and other learning resources around them, this allows students to be less active and motivated and do not understand the material presented so that student learning outcomes are not reach KKM. Responding to problems that occur in the learning process, the teacher needs to make updates in the learning process stage in the classroom by applying several learning models.

The learning model can be interpreted as a conceptual framework that describes in a structured way the learning process to achieve the desired learning objectives and as a teacher's guide in planning the learning process. As found in Contextual Teaching and Learning (CTL)
learning. Learning that uses this approach places students as learning subjects, meaning that students play an active role in each learning process by finding and exploring subject matter. So that the knowledge that students have always develops according to the experiences they experience, therefore in each student there can be differences in interpreting the nature of the knowledge they have, in the end students have self-satisfaction when participating in learning and not only assessing the final result with grades or numbers.

One way that can be done is by applying contextual learning. According to Jhonson (2010) the Contextual Teaching and Learning (CTL) Model is a learning concept that helps teachers relate the material being taught to students' real-world situations and encourages students to apply it to their lives as members of their families and communities. Contextual Teaching and Learning (CTL) learning engages students in important activities that help students relate academic learning to the real-life contexts they encounter. By associating the two, students see meaning in the material studied at school.

One indicator of quality education is increasing student learning outcomes (According to Diputra in Widiani et al. 2021). The application of the Contextual Teaching and Learning (CTL) learning model is expected to improve student learning outcomes. According to Rusman (in Handoyo, 47) learning outcomes are a number of experiences gained by students which include cognitive, affective and psychomotor domains, learning is not only mastery of subject theory concepts only but also mastery of habits, perceptions, pleasures, interests, talents, social adjustments, types of skills, ideals, desires and hopes. According to Dimyati and Mudjiono (in Fu'ady, 2018) learning outcomes are the result of an interaction of acts of learning and acts of teaching, from the teacher's point of view, the act of teaching ends with the process of evaluating learning outcomes from the student's side, learning outcomes is the end of the learning process peak. Based on the opinions of experts, it can be concluded that learning outcomes are learning outcomes obtained by students after going through the process and ending with an evaluation of learning outcomes that include students' cognitive, affective, and psychomotor domains.

The learning model that examines the influence of student learning outcomes using the Contextual Teaching and Learning (CTL) method was chosen because in learning Indonesian it can attract students’ attention because the Contextual Teaching and Learning (CTL) method has various components so that learning is not boring. The Contextual Teaching and Learning (CTL) method can help students engage in meaningful activities that are expected to help them relate the knowledge acquired in class to the context of real life situations. Learning with the participation of the environment will naturally be more useful and meaningful if a student experiences what is being learned, not just knowing. Learning is not just memorizing but students must be able to apply the knowledge they have to the reality of everyday life. Thus the Contextual Teaching and Learning (CTL) method in learning Indonesian in the aspects of listening, speaking, reading and writing will make learning more varied.

METHOD
Types Of Research

This type of research uses quasi-experiments or quasi-experiments. According to Sugiyono (2018) the experimental research method can be interpreted as a research method used to look for the effect of certain treatments on others under controlled conditions. This study used two classes as samples, in which the first class was given treatment (experimental) and the second class received no treatment (control).

Researchers in this study used a form of experimental design in the form of nonequivalent control group design. This design is almost the same as the pretest-posttest control group design, only in this design the experimental group and control group are not randomly selected (Sugiyono, 2013). In this model, before starting treatment the two groups were given a pretest or pretest to measure the initial conditions (O1 and O3). Furthermore, the experimental group was given treatment (X1) and the comparison group was given treatment (X2). After finishing
the treatment, both groups were given another test as a posttest (O2 and O4). Based on the research design, the evaluation was carried out twice, namely before and after the experiment. The previous evaluation was the treatment called the pretest, while the evaluation that was carried out after the treatment was given was called the posttest. This design can be described as follows:

| Tabel 1. Nonequivalent Control Group Design |
|-------------------------------|----------------|----------------|
| Class            | Pretest | Treatment | Posttest |
| Experiment       | O₁      | X₁        | O₂      |
| Control          | O₂      | X₂        | O₄      |

**Population and Sample**

The population is the totality of each element to be studied which has the same characteristics, it can be an individual from a group, an event, or something to be studied. The subjects of this study were all students of Tondo Elementary School, Mantikulore District, totaling 296 students consisting of 147 female students and 151 male students.

The sample is part of the number and characteristics possessed by the population, or a small part of the population members taken according to certain procedures so that they can represent the population. The samples taken by the researchers in this study were fifth grade students at Tondo Elementary School, Mantikulore District. Grade V students with a total of 55, consisting of 29 female students while 26 male students.

**Data collection technique**

1. The test is a technique used in order to carry out measurement activities, in which there are various questions, or a series of tasks that must be done or answered by students to measure aspects of student behavior. This method is carried out to see student learning outcomes after using the Contextual Teaching and Learning (CTL) model in the experimental class and learning outcomes in the control class using the lecture method.

2. An interview is a technique of collecting data through a one-way question-and-answer process, meaning that the questions come from the interviewee and the answers are given by the interviewee. Interviews are a form of direct communication between researchers and respondents. The interview technique is a method used to obtain data by conducting direct interviews with informants.

3. Documentation is a method used to obtain data and information in the form of books, archives, documents, written numbers and pictures in the form of reports and information that can support researchers. Documentation is used to view the necessary data, such as school archives, learning tools, learning outcomes and photos during research.

**Data analysis technique**

1. Testing the normality of the sample or testing the normality of the sample is nothing but testing the normal distribution of the data to be analyzed. (Sudjana, 2005). Therefore, it is necessary to test for normality with the liliefors method.

2. The homogeneity test is used to determine whether the sample has a homogeneous variance or not in learning in the experimental class and the control class. In carrying out a homogeneity test, first determine the hypothesis, after determining the hypothesis then the data is divided into two parts or groups.

3. Hypothesis testing is a test that is used to test the truth of a statement statistically and draw conclusions whether to accept or reject the statement.

**RESULTS AND DISCUSSION**

**Results**

Based on the research that has been carried out, the research data is obtained. The data obtained is then analyzed to get a conclusion from the research results. Data analysis was carried out, namely pretest data analysis and posttest data analysis.
The pretest (initial test) was carried out in the experimental class with a total of 28 students, while the pretest was carried out in the control class with a total of 27 students. The pretest is an initial test to determine students' initial ability to understand material about rhymes before being tested in the experimental class and control class, the questions given to students have been tested using validity and reliability tests.

Table 2. Pretest Analysis Results

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Experiment Class</th>
<th>Control Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>37.84</td>
<td>38.64</td>
</tr>
<tr>
<td>Minimum Score</td>
<td>22.2</td>
<td>22.2</td>
</tr>
<tr>
<td>Maximum Score</td>
<td>55.5</td>
<td>55.5</td>
</tr>
</tbody>
</table>

The posttest (final test) was carried out in the experimental class with a total of 28 students, while the posttest was carried out in the control class with a total of 27 students. Posttest (final test) is used to determine students' ability to understand material about rhymes and find out the results of the learning process that has been implemented.

Table 3. Posttest Analysis Results

<table>
<thead>
<tr>
<th>Statistik</th>
<th>Data Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Experiment Class</td>
</tr>
<tr>
<td>Mean</td>
<td>83.67</td>
</tr>
<tr>
<td>Minimum Score</td>
<td>66.6</td>
</tr>
<tr>
<td>Maximum Score</td>
<td>100</td>
</tr>
</tbody>
</table>

Normality test

The test criteria used to measure normality in this study, if the Sig value is > 0.05, the data is normally distributed and if the Sig value is <0.05, the data is not normally distributed. The results of the data normality test in the experimental class and control class are as follows:

Table 4. Results of Normality Test of Pretest Data for Experimental and Control Classes

<table>
<thead>
<tr>
<th>Class</th>
<th>Statistic</th>
<th>Df</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experiment Class</td>
<td>0.142</td>
<td>28</td>
<td>0.152</td>
</tr>
<tr>
<td>Control Class</td>
<td>0.149</td>
<td>27</td>
<td>0.127</td>
</tr>
</tbody>
</table>

Based on the table above, the results of the normality test using liliefors with the help of the IBM SPSS Statistics 25 program, show that all research data has a value of Sig > 0.05. The experimental class pretest value was (0.152 > 0.05), and the control class pretest value was (0.127 > 0.05), so it can be concluded that the data is normally distributed. All data is normally distributed so the analysis can be continued.

Homogeneity Test

The test criterion used to determine the homogeneity of the population in this study is if the Sig value obtained ≥ the specified α level, which is 5% (0.05). The following describes the results of the data homogeneity test in the experimental class and control class which can be seen in table 5

Table 5. Homogeneity Test of Experimental Class and Control Class

Test Homogeneity if Variance

<table>
<thead>
<tr>
<th>Results</th>
<th>Levene Statistic</th>
<th>df 1</th>
<th>df 2</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Based on Mean</td>
<td>1,394</td>
<td>1</td>
<td>53</td>
<td>0,533</td>
</tr>
</tbody>
</table>
Based on table 5 above, the magnitude of the significant value in the experimental class and control class is 0.533 greater than the set α level (0.533 > 0.05), so it can be concluded that the experimental class and control class data are both homogeneous.

**Hypothesis testing**

Hypothesis testing is a test used to test the truth of a statement statistically and draw conclusions whether to accept or reject the statement. Testing the effect of the Contextual Teaching and Learning (CTL) learning model on student learning outcomes in the Indonesian language subject of grade fifth of Tondo Elementary School, using the Paired Sample T Test analysis through the IBM SPSS Statistics 25 program.

**Table 6. Paired sample T Test Results**

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>Std. Deviation</th>
<th>Mean</th>
<th>Std. Error Mean</th>
<th>Lower</th>
<th>Upper</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PretesEksperiemn</td>
<td>11.071</td>
<td>-45.832</td>
<td>1.103</td>
<td>-50.1252</td>
<td>-41.5391</td>
<td>27</td>
<td>0.000</td>
</tr>
<tr>
<td>PosttestEksperiemn</td>
<td>-5.321</td>
<td>1.2092</td>
<td>0.203</td>
<td>-41.905</td>
<td>-21.905</td>
<td>27</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Based on table 4.6 above, there is a significant value of the Paired Sample T Test which is 0.000, because the significant value of the T-test <0.05 (0.000 <0.05) then Ha is accepted and Ho is rejected. So it can be concluded that there is an influence of the Contextual Teaching and Learning (CTL) learning model on the learning outcomes of Indonesian students in grade fifth of Tondo Elementary School.

**Discussion**

Based on the results of the analysis described above, it shows that the pretest score of Indonesian students' learning outcomes before being given treatment in the experimental class with an average score of 37.84 and the posttest in the experimental class with an average score of 83.67 because it is based on the results of interviews with three students in the experimental class where the three students were students who got the highest, medium, and lowest scores they had different opinions, namely students with the highest scores argued that when learning in class using the Contextual Teaching and Learning (CTL) learning model students could observe the environment directly and linking it to the material being discussed, namely pantun material, while for the opinions of students who get moderate scores, namely the learning model used is different from what they usually get in class besides that students are also more enthusiastic and active, students with moderate scores also can the learning model used is very exciting because they can make direct observations in the surrounding environment, for the opinion of the student who gets the lowest score, that student is indeed not focused on learning so he does not really understand the learning material.

In the control class students with an average score of 38.64 and the posttest in the control class with an average score of 43.99 because based on the results of interviews with three students in the control class where the three students are students with the highest, medium and lowest scores they also have different opinions, namely students with the highest scores argue that the learning model used is the same as what they got before or it is the same as the way their teachers teach in class, these students also think that in learning they must focus and listen to the teacher's explanation, while students' opinions those with moderate values, namely learning that is carried out makes students less understanding and teachers tend to be more active than students so that students cannot explore their knowledge in different ways because the learning that is carried out tends to be boring, for the opinion of students with...
the lowest score, namely he does not understand what is explained by teacher d it is very
difficult to focus because these students are bored with learning models that are not attractive
to students.

The treatment that the researcher uses in the experimental class is using the Contextual
Teaching and Learning (CTL) learning model which can help the teacher to connect the
material being taught with the real world situation of students so that students become more
active and more enthusiastic in following the learning process, while in the control class using
lecture method.

Learning in the control class without treatment or using only the lecture method did not
experience a significant increase in learning outcomes because the provision of material was
very limited, students only obtained material from books and the learning model used where
teachers were more active than students, so students tended to only get information in little
learning and students are less active in learning. This is because the weakness of the lecture
method itself is that the material that can be mastered by students as a result of lectures will be
limited to what is mastered by the teacher. This weakness is indeed the most dominant
weakness, because what the teacher gives is what he is good at, so that what students master
will depend on what the teacher knows.

Based on the results of calculations using the Paired sample T Test obtained a significant
value of 0.000 <0.05, thus accepting the alternative hypothesis (Ha), namely, There is an
influence of the Contextual Teaching and Learning (CTL) learning model on Indonesian
language learning outcomes for fifth grade students of Tondo Elementary School and reject the
null hypothesis (HO), that is, there is no effect of the Contextual Teaching and Learning (CTL)
learning model on the results of learning Indonesian in grade fifth of Tondo Elementary School.
The researcher concluded that there was an influence of the Contextual Teaching and Learning
(CTL) learning model on the learning outcomes of Indonesian in grade fifth of Tondo
Elementary School.

CONCLUSION
Based on the results of data analysis, it can be concluded that the t-test analysis obtained
a significant value of 0.000 because the significant value of t-test <α (0.000 <0.05) then Ha is
accepted and HO is rejected. The results of the research above show that the experimental class
using the Contextual Teaching and Learning (CTL) learning model has a higher student
learning outcomes in Indonesian subjects compared to the control class using the conventional
learning model, namely the lecture method. Thus it can be concluded that there is an influence
of the Contextual Teaching and Learning (CTL) learning model on student learning outcomes
in the Indonesian Language subject at Tondo Elementary School.

RECOMMENDATION
Recommendation describe things that will be done related to the next idea of the research.
Barriers or problems that can influence the results of the research are also presented in this
section.

ACKNOWLEDGMENT
The researchers express their gratitude to the Rector of Tadulako University and the Dean
of the Faculty of Education and Teacher Training (FKIP) of Tadulako University as the
responsible person for the research program, the Chair of Elementary Teacher Education
Department for administrative support in the research.

We extend our heartfelt gratitude to SD Negeri Tondo, including the headmaster,
teachers, and students, for their invaluable support and cooperation in facilitating this research.
We would like to thank the headmaster for granting us permission to conduct the study and the
teachers for their dedication in implementing the talking stick learning model in the
experimental class. The enthusiasm and commitment of the teachers and students in embracing
this innovative teaching approach were instrumental in shaping the research findings. Their participation and willingness to explore new pedagogical methods are highly appreciated. This research would not have been possible without the support and collaboration of SD Negeri Tondo, and we express our deepest gratitude to all the stakeholders involved.

REFERENCES


John Dewey. (1916). Democracy and Education, New York: Macmillan Originally Published


Rini (2006). Bahasa Indonesia dan Komunikasi. PT Gava Media

