The Effect of Contextual Teaching and Learning Method and Motivation toward the Results of English Learning

Mulyadi¹, Athith Outhay¹, Sri Sundari¹ and Etiyasningsih¹

¹Jakarta Islamic University, National University of Laos, Vientiane, Gresik University, East Java

Keywords: Contextual Learning and Teaching, Learning Motivation, Learning Outcomes

Abstract: This study has the objective to obtain scientific information on the English learning effectiveness through contextual teaching and learning method (CTL) and motivation, and its influence on learning outcomes. In this study, there are three variables namely CTL learning method (X1) obtained from the posttest and motivation (X2) obtained from the questionnaire as independent variables and the dependent variable is the result of English learning (Y) obtained from the results of tests. This study used the 2x2 factorial design. The populations in this study were all students of second semester of Jakarta Islamic University totaling 432 students. The research samples were 70 students who were second semester students of Islamic Educational Faculty, Jakarta Islamic University. The results showed 1) There were significant differences of English learning outcomes between students who were taught with CTL and with conventional method, CTL method was better. 2) There were significant differences of English learning outcomes between students who have high motivation taught with CTL and with conventional method, where students who have high motivation learned better with CTL. 3) There were significant differences of English learning outcomes between students who have low motivation taught with CTL and with conventional method, where students who have low motivation learned better with CTL. 4) There was no significant interaction effect between the use of CTL and motivation toward English learning outcomes, however the CTL and motivation are both have relationships with students and significant impact on outcome variables studied.

1 INTRODUCTION

The task of a teacher is attempting students to have an interest and desire to learn constantly. The efforts of the teacher can be done by providing the motivation in learning process, i.e. at the stage appreciation, exploration, consolidation, establishment of competence, and assessment. But, there are still many students who have low motivation shown by tend to come late, lazy, leave class room for various reasons or can not even complete the task on time.

For the successful of the study, teachers must implement a quality learning process. Adequate facilities, professional educators, media utilization and learning appropriate methods make the advantages for the school. The success of learning will be very effected by teaching methods as well as other aspects relating to the learning situation.

While the method of learning is a technique or ways used by teachers that functionally can be used to assist in the optimization of the results of the study. It can be viewed not only from the learning results (output) but it is also seen from the process in the form of the interaction of students with various learning methods which can stimulate and accelerate learning for understanding and mastery of the lesson. Implementation of the learning method of utilization in the process of learning is already listed in the curriculum. Effective learning is a learning process that uses a variety of learning methods. Teaching and learning activities emphasized on the activity of students by observing the objects or situations that exist in the surrounding environment. Further more in the process of learning required a teaching method that suits the purpose of education, students' level of maturity, circumstances, private facilities, and teacher as well as his professional ability in teaching, in the process of interaction between teachers and students.

A good teacher must be able to master the various teaching methods, so as to choose a method of learning which should be applied in a particular
class and on certain subjects. One of the methods that can be used as the basis of learning is Contextual Teaching and Learning (CTL). Contextual Teaching and Learning approach is the concept that helps teachers relate the material being taught with real world situations, students encourage to make connections between knowledge assets with application in daily activities. With the concept of it, learning outcomes expected more meaningful because the process is more important than seeing the results. In this context students need to understand the meaning of learning, what its benefits and how it aims to make aware that they learned, it was a useful thing in the life of the future.

2 PROBLEM FORMULATION

The formulation of the problems are as follow:

1. Are there any differences on the English learning results between the students who taught with contextual teaching and learning method and those who taught with conventional method?
2. Is there any difference on the English learning results between students who have high motivation taught with contextual teaching and learning method and those who taught with conventional method?
3. Is there any difference on the English learning results between students who have low motivation taught with contextual teaching and learning method and those who taught with conventional method?
4. Is there any interaction effect between contextual teaching and learning method and motivation on the English learning results?

3 THEORETICAL DESCRIPTION

3.1 Learning Achievement

3.1.1 Understanding of Learning Achievement

The learning achievement is the results achieved by learners after learning a certain time, after the end of the semester. According Mulyasa, "an achievement of learning outcomes of learners as a whole are an indicator of the degree of competence and behavior change". The learning achievement is the "level of success achieved from an activity that can provide emotional satisfaction, and can be measured by a tool or a specific test. 'Learning is the process by the which an activity originates or is changed through training procedures as distinguished from change by factors not attributable to training' (Hilgard, E.R., 1948: 4). Learning is something changes in behavior through exercise and be with the changes caused by factors that can not be classified to exercise itself "'. Learning is defined as the modification or strengthening of behavior through experiencing'.

Romine revealed that: 'learning is a process or learning activities not only remember, but learning is a modification or reinforce attitudes through experience. So change the behavior of individuals obtained as a result of interaction with the environment. Learning is a whole series of activities done consciously by a person and lead to a change in him in the form of knowledge or skills that are less permanent. Learning can also be interpreted as an activity that produces behavioral changes in the individual that is being studied, potential or actual. Based on some understanding of the learning at the core of learning has the following key aspects: (a) Learning brings changes in behavior (behavior change) actual or potential (b) That change was principally obtained with new skills or upgrading skills. (C) That the change occurred because students actively doing the activity / activities to build their own knowledge.

Achievement is a result that has been achieved. Learning outcomes assessment conducted by educators, educational and governmental units. Learning outcomes assessment conducted by educators and educational units including internal assessment, while the organized government, including an external assessment. Internal assessment is an assessment of planned and carried out by the teacher in the learning process takes place in the framework of quality assurance. External assessment is an assessment carried out by the government as quality controllers, such as the national exam.

Class room evaluation is an internal assessment process conducted by the teacher in the classroom on behalf of the school to assess the competence of learners at a certain level at the time and the end of the lesson. Therefore, this class evaluation done specifically for the implementation of the assessment of learning outcomes by educators and educational units. Classroom assessment is a form of teachers' activities associated with making decisions about the competence or the achievement of learning outcomes of students who follow a particular learning process. The decision-making activities, required the data as the information is reliable as a basis for decision making. The decision
relates to or may not be successful learners in achieving a competency.

In the classification according to Bloom's taxonomy of cognitive domains are as follows:

1. Knowledge (knowledge, memory), that is studying and considering the facts, words, terms, events, concepts, principles, rules, categories, methodology, theory, and so on.
2. Comprehension (understanding, explaining), i.e., interpreting something, translate it in another form, express it in their own words, conclusions based on what is known, suspected due to something based on knowledge.
3. Application (apply), which uses what is learned in a new situation, transfer.
4. Analysis (decipher), describes something the whole into parts to see the nature of the parts.
5. Synthesis (organizing, planning), which combine parts and creative form something new.
6. Evaluation (judge), which uses criteria to judge anything.

Based on the description, it can be concluded learning achievement is outcomes of a learner in the form of changes / additions and the improved quality of the behavior of cognitive, affective and psychomotor achieved through the activities of learners in the learning process.

### 3.1.2 Factors Affecting the Achievement of Students

There are several factors that affect the achievement of learners, they are internal factors and external factors and the factors of learning approaches. Internal factors, such as factors that come from inside a person that can affect academic achievement. Among the internal factors that can affect a person's learning achievements are, among others: 1) intelligence, 2) talent; 3) interest; 4) motivation. As for external factors, such as factors that can affect one's learning achievement that are coming from the outside oneself. Which included these factors are, among others: 1) the family environment; 2) the school environment; and 3) society

### 3.2 Contextual Teaching and Learning Method

Contextual Teaching and Learning is a concept of learning that helps teachers link between the learning materials with real-world situations, teacher encourages students to make connections between the knowledge possessed by students in their lives day-to-day, involving seven major components effective learning, namely constructivism, ask (Questioning), find (Inquiry), learning community, modeling, and actual (authentic) assessment Trianto (2011).

CTL system is an educational process that aims to help students look for meaning in academic material, they learned how to connect the academic subjects in the context of their daily lives. To achieve this goal, the system includes the following eight components: create linkages-linkages are meaningful, do meaningful work, do a self-regulated learning, cooperation, critical and creative thinking, helps individuals to grow and thrive, achieve high standards and using authentic assessment.

In this context, learners need to understand what it means to learn, what are the benefits, what their status, and how to achieve it. They are aware that they are learning useful for later life. Thus they make themselves as requiring a provision for later life. They learn what is beneficial to him and try to reach it. In that effort, they need teachers as counselors.

In contextual, the task of the teacher is to guide learners to achieve its objectives. Further more teachers to deal with strategy rather than giving information. The task of teachers manage the class as a team work to find something new to the class. Something new kind of knowledge and skills come from "finding themselves" instead of "what the teacher said." That's the role of teachers in the classroom which is managed by a contextual approach. Contextual only as a learning strategy. As with any other learning strategy, contextual learning was developed in order to be more productive and meaningful. Contextual approach can be implemented without having to change the curriculum and the existing contents.

There are a few things to consider for any teacher when using CTL approach Departemen Pendidikan Nasional (2003):

a. Students in learning is seen as a growing individual. The learning ability of a person to be affected by the development and breadth of experience they have. Kids are not adults in miniature, but organisms that
while being in the developmental stages. Ability to learn will be largely determined by the level of development and their experience. Thus, the role of the teacher is not an instructor or "ruler" which forces the will but the teacher mentor students so they can learn at their development stage.

b. Students have a tendency to learn new things and challenging. Craze child is trying things that are considered strange and new. Therefore learning for them is to try to solve every problem that is challenging. Thus, teachers play in selecting learning materials that are considered important for the students to learn.

c. Learning for students is the process of looking for a relationship or connection between the new things with things that are already known. Thus, the role of the teacher is to help each student is able to find a link between the new experiences with previous experience.

d. Learning for children is the process of perfecting the existing scheme (assimilation) or the formation process or queen scheme (accommodation), thus the task of the teacher is to facilitate (simplify) that students are able to perform the process of assimilation and accommodation processes.

The role of teachers in English with an instructional model CTL is as facilitators. They should be able to motivate so that students play an active role in discovering or proving the concepts of the problems in their everyday lives. According to Ibrahim (2003), "One of the theories or views are very well known with regard to constructivism learning theory, that is Piaget's theory of mental development. This theory also called theory of intellectual development or the theory of cognitive development. The learning theory with regard to the child's readiness to learn, which is packaged in a stage of intellectual development from birth to adulthood. Each stage of intellectual development is equipped with certain characteristics in constructing knowledge. For example, at this stage of the motor sensory children think through the motions or actions."

In connection with this, Ibrahim (2003) stated that there are some things that must be considered for each teacher when using CTL approach, namely:

1. Students in contextual learning is seen as a growing individual. The learning ability of a person to be influenced by the level of development of its experience and flexibility. Kids are not adults in miniature, but organisms that were at different stages of development. Ability to learn will be largely determined by the level of development and their experience. Thus the role of the teacher is not an instructor or "ruler" who impose their will, but the teacher is a mentor, so students can learn at their development stage.

2. Every student has a tendency to learn new things and solve any problems that challenge. Thus teachers play in selecting learning materials that are considered important for the students to learn.

3. Learning for students is the process of looking for a relationship or connection between the new things with things that are already known. Thus the role of the teacher is to help each student is able to find a link between the new experiences with previous experience.

4. Learning for students is a process of establishing new schemes (accommodation), thus the task of the teacher is to facilitate (simplify) that the student is able to process assimilation and the accommodation process.

3.3 Motivation

3.3.1 Understanding Motivation

The word "motive" is defined as "efforts that encourage someone to do something" or as Sardiman in his book Understanding of Human Behavior Psychology quoted M. Ngalimi Purwanto: 'motif is the behavior or actions of a goal or incentive'.

WS Winkel, "motivation is the driving force that has become active, the motive becomes active at a given moment, even the need to achieve the goal is perceived or internalized".

Understanding these motivations contains three key elements below.

1. Motivation that led to a change in energy at the individual human being, whose visibility regarding human physical activity;

2. Motivation is marked by the emergence of a person's sense of feeling affection. Motivation matters relevant to psychiatric affections and emotions that can determine human behavior;

3. Motivation will be stimulated for their purposes.
Motivation is not a problem that can be observed, but a problem that can be concluded is. Motivation is something that we see every activity a person does something that is driven by power from within oneself, the driving force that is called motive.

The conclusion is that the motivation is an issue that is very important for every human being to achieve a success or a desire to achieve what is coveted by everyone. If someone already has the motivation, it is in tension, and he is ready to work on the necessary aspects in accordance with what he wanted.

Motivation in the view of Hamzah (2008) is ”internal and external encouragement to students who are learning to hold a change of behavior”. Another suggestion by Mc. Donald (2008) asserts that ”Motivation is the energy change of a person characterized by emerging feeling and preceded with the response to their destination”. Motivation in the classroom to give effect to both the learning process and the students' behavior. The students are motivated to learn, which raised interest in what they have to do, then these students will learn better. The students were active in their learning, in general, able to avoid him of deviant behavior.

Motivation expected and developing of self-esteem, is self motivation. In the sense of a student or students themselves who develop their own interest in learning. But how efforts to develop self-motivation on the sisiwa? Here's the opinion presented by experts, including: Flow Humanism. Carl Roger argued that "there is a natural or innate predilection of the students to learn, so teachers can develop and push for further improved”. While the flow of behaviorism. As B.F. Skiner argues that: "the classroom environment should be arranged so that can reinforce behavior as an indication of motivation”.

### 3.4 Hypothesis

The research hypothesis is formulated in the form of these statements.

1. There is a difference between contextual teaching and learning method and conventional method on English learning results.
2. There is a difference between students who have high motivation taught with contextual teaching and learning method with conventional method on English learning results.
3. There is a difference between students who have low motivation taught with contextual teaching and learning method and with conventional method on English learning results.
4. There is an interaction effect between contextual teaching and learning method and motivation toward English learning results.

### 3.5 Research Methodology

#### 3.5.1 Methods

Methods used in this study were experiment methods, the statistical approach used is descriptive analysis, comparative and correlative.

<table>
<thead>
<tr>
<th>Learning model</th>
<th>CTL A1</th>
<th>conventional A2</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Motivation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>A1B1</td>
<td>A2B1</td>
</tr>
<tr>
<td>Low</td>
<td>A1B2</td>
<td>A2B2</td>
</tr>
</tbody>
</table>

Figure 1: Experimental research design

Information:
A = Learning Methods
A1 = a group of students were given the contextual teaching and learning method as an experimental class
A2 = group of students were given conventional method as a control or comparison class
B1 = High motivation
B2 = Low Motivation
A1B1 = Groups with highly motivated students who use the learning contextual teaching and learning method
A1B2 = group of students with low motivation who use learning contextual teaching and learning method
A2B1 = group of students with low motivation who use conventional method
A2B2 = group of students with low motivation that use conventional method

#### a. Population and Sample

##### 1. Population

The populations in this study were all second semester students of Jakarta Islamic University totaling of 432 people.

##### 2. Samples

The sample set is taken 70 second semester students of Islamic Educational Faculty, consists of two classes as
experimental class and control class, each class has 35 students.

b. Data Collection Techniques

Data collection techniques used in this study in two ways: using the test and non-test. Test is used to measure the results of English learning (Y), and Contextual Teaching and Learning (X1). Non-test techniques in the form of questionnaires for learning motivation (X2).

<table>
<thead>
<tr>
<th>Statements</th>
<th>TA</th>
<th>A</th>
<th>SS</th>
<th>DA</th>
<th>TDA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Negative</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Considerations using Likert scale model in this study are as follows:
1. Likert Scale has a high reliability based on the intensity of certain attitudes.
2. Likert Scale is extremely flexible and versatile, more flexible than other measurement techniques.

c. Hypothesis testing

The formula used to test hypotheses is the test formula t test Statistics Sugiono (2010)

d. Hypothesis Testing

Hypothesis 1

After conducting the posttest for the experimental class and control class, the data obtained were analyzed. The following are the results of the posttest analysis using the SPSS version 19 program.

\[
t = \frac{r \cdot \sqrt{n - 2}}{\sqrt{1 - r^2}}
\]

Based on the table above obtained information that the Fcount value of 29.243 is greater than Ftable of 3.98 at the real level of 0.05, thus the variance of the data of the two groups is the same or homogeneous therefore H0 is accepted, thus reading the table is aimed at Equal variances assumed. Then it can be seen that t count (-4.515) is smaller than t table (2.000) at the real level 0.05 and df = 68, then there is a significant difference in the posttest results of the two groups. Therefore H1 is accepted and \( \mu_{A1} > \mu_{A2} \), meaning that the experimental class average is greater than the control class mean.

Hypothesis 2

Based on the table above, it is obtained information that there is a significant effect between the application of learning methods and learning motivation together on English learning outcomes,
this is indicated by the value of Sig. = 0.000 is smaller than the real level 0.05 and Fcount is 10.056 is greater than Ftable (3.13) at the real level 0.05 and d denominator = 2 and the numerator = 69 or 9.754> 3.13. In the learning motivation variable the value of F is 0.023 is smaller than Ftable (3.98) at the significant level of 0.05 and dk = 69 or 0.023 <3.98; thus H0 is accepted and H1 is rejected

Hypothesis 3
From the results of the calculation analysis obtained the following data:

Table 4: Comparison of high motivation variables test results against CTL learning methods with conventional

<table>
<thead>
<tr>
<th></th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>MTi</td>
<td>46.240</td>
<td>0.00</td>
</tr>
<tr>
<td>nggi</td>
<td>-4.522</td>
<td>26.9</td>
</tr>
</tbody>
</table>

Based on the table above obtained information that the two groups of data came from the same or homogeneous variants, because the Fcount value (46.240) was greater than Ftable (4.03) at the significance level of 0.05 and dk = 50, therefore the reading of the analysis was shown at equal variances assumed and the result is that there is a significant difference between the CTL method and the conventional seen from the tcount smaller than ttable (-4.822 <2.009) at the 0.05 level with dk = 50, therefore H1 is accepted meaning μA1B1 > μA1B2 or the average group of students who have high motivation with the CTL method is greater than the average group of students who have high motivation with conventional methods.

Hypothesis 4
The following is the result of data analysis of differences between groups with high motivation through the use of CTL learning methods with conventional learning using the SPSS version 19 program.

Table 5: Comparison of low motivation variable test results to the CTL method with conventional

<table>
<thead>
<tr>
<th></th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>MRendah</td>
<td>3.887</td>
<td>0.066</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on the table above, it is obtained information that the two groups of data come from the same or homogeneous variants because the value of Sig. greater than the probability value at the level of 0.05 (0.066> 0.05), therefore the reading of the analysis is aimed at equal variances assumed and the result is that there is a significant difference between the CTL method and the conventional seen from the value of tcount<t table (-0.397 < 2.120) at the level of 5% with dk = 16, because H1 is accepted meaning μA2B1 > μA2B2 or the average group of students who have low motivation with the CTL method is greater than the mean group of students who have low motivation with conventional methods.
4 DISCUSSION

The results of the research hypothesis analysis showed that the experimental class had higher learning outcomes compared to the control class. Based on the difference in mean scores between the experimental class and the control class, the difference is 3, and this is a fairly high difference. This means that with this CTL learning method, students in the experimental class are much more interested and attentive to the material being taught. In learning in the experimental class, classroom conditions are directed at the reality that occurs and the learning method is adapted to the material to be taught. Thus there is a new atmosphere in the teaching and learning process in the classroom, and this makes students do not feel bored and gain new experience in the process of receiving learning information.

Piaget, known as the first constructivist, asserted that this knowledge was built in the mind of children through assimilation and accommodation. Piaget further stated in DadiPermadi that: "Knowledge is not passively obtained by someone, but through action. In fact, children's cognitive development depends on how far they actively manipulate and interact with their environment. Meanwhile, cognitive development itself is a continuous process about the state of imbalance and equilibrium. From Piaget's view of the stage of cognitive development of children can be understood that at some stage the way and ability of the child to construct science varies based on the intellectual maturity of the child. Learning is an activity that takes place interactively between internal factors in the student's self and external or environmental factors, giving birth to behavioral changes. That is, that students must be mentally active in building their knowledge structures based on their cognitive maturity. In other words, students are not expected to be small bottles ready to be filled with various knowledge in accordance with the teacher's will.

5 CONCLUSIONS

From the results of the study, the researchers then provide conclusions as a target of the problems and hypotheses raised in this study, following the conclusions:

5. There are significant differences in the learning outcomes of English subjects between students who taught CTL learning methods and those who were taught conventionally, where CTL learning methods are better.

6. There is a significant difference between students who have high learning motivation towards CTL learning methods and conventional, where students who have high learning motivation towards CTL learning methods are better.

7. There is a significant difference between students who have low learning motivation towards CTL learning methods and conventional, students who have low learning motivation towards CTL learning methods are better.

8. There is a significant interaction effect between the use of learning models and learning motivation on English learning outcomes.

REFERENCES

Departemen Pendidikan Nasional, Direktorat Pendidikan Dasar dan Menengah, Direktorat Lanjutan Pertama (2003). Pendekatan Konsektual (Contextual Teaching and Learning (CTL)).