

The Effect of Contextual Teaching and Learning (CTL) Strategy with the Assistance of Multimedia on Students' Learning Outcomes

Togi Martua Damanik¹, Khoirul Pahmi¹, Muhammad Farras Nasrida¹, Devi Tamala Br.Ginting¹ and Desi Hikma Sitompul¹

¹Postgraduate Student Education of Economy, Universitas Negeri Medan, Medan -Indonesia

Keywords: CTL Learning Strategy, Multimedia, Students' Learning Outcomes

Abstract: The problem of this study is the low learning outcomes of students. This research aimed to investigate the effect of Contextual Teaching and Learning (CTL) with Multimedia on learning outcomes of eleventh grade students of SMKS AL-Washliyah 3 Medan in the academic year of 2018/2019. The population of this research is all eleventh grade students of SMKS Al-Washliyah 3 Medan, which is 50 students in total. The sample of the research was taken using total sampling, which means all students were made to be the sample of the research. Classes made to be the sample of this research are XI AP and XI AK which consisted of 50 students. The data collecting techniques used were observation, documentation and test. Instrument used is objective test of multiple-choice test consisted of 20 questions with five-choice answers. The technique used in the data analysis are normality test, homogeneity test, and hypothesis test which are made as parameters to draw conclusion. The data analysis showed that the average score of experiment class was 80 with standard deviation of 9.68 where variance value was 93.75. Meanwhile, the average score of class control was 73 with standard deviation of 10.61 where 112.50 was the variance value. The testing of the hypothesis was done using t-testing with $dk = n_1 + n_2 - 2 = 25 + 25 - 2 = 48$ on the significance level of 95%, it was obtained that t_{table} was 1,677 and t_{value} was 2,29. The result of the hypothesis test showed that $t_{value} (2,29) > t_{table} (1,677)$, therefore, the hypothesis was accepted.

1 INTRODUCTION

Education is an effort of human to develop self potential through the learning process. Education in Indonesia has not achieved the desired results compared to other countries. The government has done various ways to improve the quality of teachers, fulfill teaching materials, and provide equipment for teaching and learning in schools. The ways of the government in improving the quality of teachers are done by (1) task learning programs, (2) certification programs, and (3) training and work shop.

This is done by the government to improve the quality of teachers. Because in the context of education, teachers are the main actors of education. Teachers have a very broad and strategic role because teachers are at the forefront of education. Teachers deal with students directly in learning activities which include activities of transferring science and technology and instilling positive values

through guidance and role models, both in behavior and in language.

When the quality of the teacher has been improved, what is done next is the transferring of knowledge called the teaching and learning process. Learning is an effort to obtain knowledge and who controls knowledge will get success. To obtain success, there are certainly many obstacles that must be faced by students in the learning process. However, in capturing the contents and messages of learning, during learning process, students use abilities in the domains as follows: (1) cognitive which is the ability related to knowledge, reasoning and thought; (2) affective which is the ability to prioritize feelings, emotions, reactions that are different from reasoning; (3) psychomotor, which is the ability to prioritize physical skills. A teacher can observe the behavior of students who have learned by comparing to the behavior of the students before they learn.

The application of active, innovative and fun learning method can help students to listen to the learning given by the teacher when learning in class.

In the teaching and learning process, a teacher must certainly have the competence in teaching and teaching students. Teachers as educators are the most social and interact with students compared to others in school. A teacher must be professional in carrying out his duties, the teacher can make teaching a task that must be carried out by giving birth to intelligent students and able to get along with the world of work when they graduate from school. Teachers must be able to plan and carry out the learning process, assess learning outcomes, conduct training guidance, conduct research and communicate with the community.

In Vocational Schools (SMK), especially the subjects of entrepreneurship are important subjects in the marketing department. When researcher did an observation at SMKS Al-Washliyah 3 Medan, the teachers of entrepreneurship subject still used an expository learning strategy. The teacher only used the lecture method, so that the learning system was a one-way learning system. The teacher explained to students then the students are given practice questions and discuss. This is certainly not enough because it does not generate creativity and enthusiasm for student learning. This condition will have an impact on students' learning outcomes.

The same thing was found by researcher when conducting interviews with some eleventh grade students, they said that the learning atmosphere was not interesting. Teachers only depended on the textbook. This is what makes learning boring and causes laziness in students which ultimately affects students' learning outcomes. Circumstances like this will also affect students' level of understanding as students will only understand as long as the material is delivered. After that students will just forget the material because the concepts embedded in students' minds are not so strong since when the teaching and learning process takes place, students do not participate in learning. Based on this observation, the research could tell that the learning outcomes of students in entrepreneurship subjects were still low which did not meet the Minimum Criteria of Mastery learning set by the school which is 75.

The low student learning outcomes could be seen from the achievement of the final results in the daily tests conducted by the teacher. From 50 students, there were only 19 people who scored above 75 and fulfilled the KKM. Meanwhile, 31 people still scored below 75, which meant they had not met the KKM.

From the data above, it can be concluded that the learning outcomes of entrepreneurship subject of the eleventh grade students were still low. This can be seen from the scores of students that were still under the KKM (Minimum Criteria of Mastery Learning). Based on the results of the conducted interviews at

school for students and teachers, that teachers still taught students with an expository strategy which is a type of learning that emphasizes more on speaking to students. Thus, students easily feel bored during the teaching and learning process. Therefore, teachers need to design active and interesting learning strategies that can encourage students to participate in learning activities. If the teaching and learning process is still monotonous, then students will become bored and less motivated to learn so that it will have an impact on student learning outcomes. However, if the teacher designs an interesting learning strategy, it will certainly increase students' desire to learn and create creativity in obtaining good learning outcomes.

Effort that can be done to reduce the monotonous classroom atmosphere is applying learning strategies and dividing students into heterogeneous small groups. Therefore, teaching and learning activities are more student-centered, while teachers are only as mentors, motivators, and facilitators in the classroom. Of the many learning strategies, the choice of researchers is the Multimedia-assisted Contextual Teaching and Learning learning (CTL) strategy.

From the above explanation, the researcher was interested to conduct a research entitled: *The Effect of Contextual Teaching and Learning (CTL) Strategy with the Assistance of Multimedia on Students' Learning Outcomes of Entrepreneur Subject of Class XI of SMKS Al-Washliyah 3 Medan in the Academic Year of 2018/2019*".

2 LITERATURE REVIEW

Contextual Teaching and Learning (CTL) is learning taught by linking learning material with something experienced by students in real-world life, or events experienced by students in daily life and applied to classroom learning. In Contextual Teaching and Learning (CTL) strategy, students are required to play an active role in learning activities. While multimedia is defined as a collection of computer-based media and communication systems that have a role to build, store, deliver and receive information in the form of text, graphics, animation, audio, video and so on. Therefore, the use of media when teaching is highly recommended with the intention of strengthening the quality of learning. With this concept, the learning process takes place naturally in the form of student work activities and experiences, not the transfer of knowledge from teacher to student. So that learning will be more meaningful for students if students experience or practice their own what they learn not only knowing it. So learning

using Multimedia learning strategies Contextual Teaching and Learning will help students improve remembering that learning material is longer stored in memory because students themselves experience the learning.

Contextual Teaching and Learning (CTL) is strategies that involve students fully in the learning process. Students are encouraged to do activities studying subject matter in accordance with the topics they will learn. Learning and the context of CTL are not just listening and taking notes, but learning is a process of direct experience. Contextual Teaching and Learning (CTL) strategy is a conception that helps teachers associate subject content with real-world situations, and motivates students to make connections between knowledge and their application in their lives as family members, citizens, and labor (Trianto, 2014: 138).

Sanjaya (2013: 256) explains that there are 5 important characteristics in the learning process that use the CTL strategy, which are:

1. In CTL, learning is the process of activating existing knowledge, meaning that what is learned cannot be separated from the knowledge that has been learned, thus the complete knowledge has interrelationship with one another.
2. Contextual learning is learning in order to acquire and add new knowledge. The new knowledge is acquired by deductive means that learning begins with learning in its entirety and paying attention to the details.
3. Understanding of knowledge, meaning that the knowledge gained is not to be memorized but to be understood and believed, for example by asking for responses from others about the knowledge gained and based on the responses that knowledge is developed.
4. Practicing this knowledge and understanding means that the knowledge and experience gained must be applicable in the lives of students so that behavioral changes appear in their students.
5. Reflecting on knowledge development strategies. This is done as feedback for the process of improvement and improvement of the strategy.

Trianto (2014: 144) explained that in general, the steps for implementing CTL strategies in class are as follow:

1. Develop the idea that children will learn more meaningfully by working alone, finding themselves, constructing their own new knowledge and skills.
2. Implement as far as possible inquiry activities for all topics.

3. Develop the curiosity of the students by giving them questions.
4. Create learning communities (learn in groups).
5. Present model as an example of learning.
6. Do reflection in the end of the meeting.
7. Do the real assessment in various ways.

Trianto (2014:144) explains that CTL has seven main components, they are:

1. Constructivism
2. Inquiry
3. Questioning
4. Learning Community
5. Modelling
6. Reflection
7. Authentic Assessment

Multimedia is a medium that combines two elements or more media consisting of text, graphics, images, photos, audio, and animation and integrated (Ariani and Haryanto, 2010: 25)

Learning multimedia characteristics are the first to have more than one convergent media, for example combining audio and visual elements. It is interactive, in the sense of having the ability to accommodate user responses. It is independent, in the sense of providing ease and completeness of content such that users can use without guidance other people (Ariani and Haryanto, 2010: 26)

The benefits of multimedia learning is that the learning process is more interesting, more interactive, the amount of teaching time can be reduced, the quality of student learning can be motivated and boosted and learning can be done wherever and whenever (very flexible), and students' learning attitudes and attitudes can be improved and centered (Ariani and Haryanto, 2010: 26)

Learning outcomes can be explained by understanding the two words that compose it, namely 'Outcomes' and 'learning'. Definition of outcomes (product) refers to an acquisition due to an activity or process that results in a functional change in input. In the input-process-outcome cycle, outcomes can be clearly distinguished from inputs due to changes in the process. Similarly, in teaching and learning activities, after experiencing learning, students change their behavior compared to before. Learning is done to try to change behavior in individuals who learn. Behavioral change is a result of learning outcomes.

3 RESEARCH METHOD

Type of Research

This research is an experimental research. The dependent variable in this research is the learning

outcomes with the independent variable Contextual Teaching and Learning (CTL) learning strategies with the assistance of Multimedia.

Time and Place of Research

This research was conducted at SMKS Al-Washliyah 3 Medan, Jl. Garu 2A No. 2 Medan. This research was conducted in Class XI in odd semester of academic year 2018/2019.

Data Collecting Technique

In this research, the data was obtained directly by giving treatment to two experiment classes. Therefore, the data is primary data. The technique used for data collecting is using test to measure the entrepreneurship learning outcomes of the students.

Data Analysis Technique

The data analyzed is data of post-test result. The data of the last condition is for describing the data of the difference of the effectivity of Contextual Teaching And Learning Learning (CTL) with Multimedia help and Expository.

4 RESULT AND DISCUSSION

This research was started by giving treatment of learning strategy. After the treatment, post-test was given to find out the effect of the application of Contextual Teaching and Learning (CTL) with the help of the assistance of Multimedia and Ekspository. From the result of the post-test, pre-condition test was conducted to determine the statistic technique that needed to be used. Homogeneity test and normality test of post-test data showed that it was normal distribution and had homogeneic variance.

From the hypothesis test using t test, it was obtained that $t_{value} > t_{table}$ showed that H_a was accepted and H_o was rejected. Therefore, null hypothesis that says that the average learning outcomes of the students taught by Contextual Teaching and Learning (CTL) strategy with the assistance of Multimedia were higher than the student learning results taught using expository learning strategy were on significance level of 95%.

From the data obtained from the research results, it was obtained that experiment class given treatment with Contextual Teaching and Learning (CTL) learning strategy with the assistance of Multimedia had the average of 80%. Meanwhile, the control class given treatment with Expository learning strategy had the average of 73. From the average

score of the two classes, there was a significant difference between experiment class and control class which means there was difference in term of the learning outcomes between the students of the two classes.

Therefore, a conclusion can be drawn that the application of Contextual Teaching and Learning (CTL) with the assistance of Multimedia had more significant effect compared to the application of Expository learning strategy.

5 CONCLUSION

The average learning outcomes of entrepreneurship class taught using Contextual Teaching and Learning (CTL) with the assistance of Multimedia were higher than those of class taught by using Expository-learning strategy. The average learning outcomes of experiment class was 80 while the average learning outcomes of control class was 73

From the hypothesis test, it was obtained that t_{value} was 2,29 and t_{table} was 1,677 on significance level of 95% $dk = n_1 + n_2 - 2 = 25 + 25 - 2 = 48$. If t_{value} was compared to t_{table} then, it was obtained that $t_{value} 2,29 > t_{table}$ was 1,677. Therefore, the hypothesis that says that there was a positive and significant effect of the application of Contextual Teaching and Learning (CTL) with the assistance of Multimedia on the learning outcomes of the eleventh grade students of SMKS Al-Washliyah 3 Medan in the academic year of 2018/2019 was accepted. In addition, the learning outcomes obtained by the application of Contextual Teaching and Learning (CTL) with assistance of Multimedia was higher than the learning outcomes obtained by the application of Expository learning strategy.

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