

# Contextual Teaching and Learning Approach Using Type Word Square Based E-Learning Through Students' Thinking Ability

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**Abstract**—To improve teacher creativity in teaching many things must be done by an educator of his students, namely a teacher should understand the functions and objectives in a learning process. One approach and model used in this study is the Contextual Teaching and Learning Approach (CTL) Using Type Word Square Based E-Learning. Based on the background above, the writer takes the title "Contextual Teaching and Learning (CTL) Approach Using Type Word Square Based E-Learning Through Students' Thinking Ability", on civic education subjects in grade X Office Administration 1, this research is located at SMK Pasundan 1 Serang City, The author formulates the problem under study, namely how the Contextual Teaching and Learning (CTL) Approach Using Type Word Square Based E-Learning Through Students' Thinking Ability in the civic education subject matter. In this study, the authors used the Classroom Action Research method using a qualitative approach. The results of the study the average thinking ability of students in learning from each cycle has increased namely the achievement of the average value of the first cycle 67.14% increased in cycle two to 77.38% than in the third cycle showed 83.76%, from the results of this study that is the Contextual Teaching And Learning (CTL) Approach of Word Square Type Based E-Learning Against Students' Thinking Ability in learning civic education it can be said that the results of this study have increased students' thinking abilities achieved.

**Keywords:** *Contextual Teaching and Learning (CTL) Approach, Type Word Square, Thinking Ability, student*

## I. INTRODUCTION

Many different learning strategies, approaches, learning methods, and learning models. The purpose of implementing a variety of learning strategies, learning methods, and learning models is that educators (teachers) are easier, more effective and efficient in implementing learning so that what is the goal of learning will be easily achieved optimally. Whether or not an effective learning model is applied is not determined by the sophistication of a learning model, because in principle no one learning model is the best. The best learning model is a learning model that is relevant to the objectives to be achieved.

This study races on the word square learning model using the Contextual Teaching and Learning Based E-Learning approach which is a learning model that combines the ability to answer questions with carefulness in matching answers in the answer boxes. It's similar to filling in a crossword puzzle,

but the difference is that the answer is already there, but is disguised by adding a box with any letters/numbers in disguise or deception. E-Learning based learning models using Google Class Room are suitable for all subjects. Just how the teacher can program many selected questions that can stimulate students to think effectively. The purpose of deceptive letters/numbers is not to make it difficult for students but to practice being careful and critical.

When using CTL approaches the teacher's role becomes that of a facilitator guiding group collaboration and problem solving (Berns & Erickson, 2001). In the CTL classroom students spend more time actively engaged with the material and the classroom becomes a learning community where students experience real life situations (Johnson, 2002). Reese (2002) states that a diversity of learner types can become engaged when they relate class material to scenarios outside of the classroom, which suggests that students of varying learning styles can be reached through CTL[1]

## II. PROBLEM FOCUS AND SUBFOCUS

### A. Focus

This study focuses on the Contextual Teaching and Learning (CTL) Approach Using Type Word Square Based E-Learning Through Students' Thinking Ability.

### B. Subfocus

In the focus of the research above, the sub-focus of this research is how to use Contextual Teaching and Learning (CTL) Approach Using Type Word Square Based E-Learning through Students' Thinking Ability.

## III. METHODOLOGY

This study uses classroom action research using qualitative approaches, "class action research has four stages namely planning, implementing, observing and reflecting"[2]

## IV. THEORETICAL REVIEW

### A. Contextual Teaching And Learning (CTL) Approach

The Contextual Teaching And Learning (CTL) approach is a different approach, doing more than just guiding students in combining academic subjects with the context of their circumstances. Contextual Teaching And Learning (CTL) also involves students in searching for the meaning of

"context" itself. Contextual Teaching And Learning (CTL) encourages them to see that humans themselves have the capacity and responsibility to influence and shape a range of contexts that include family, class, club, workplace, community, and neighbourhood so that the ecosystem.

The Contextual Teaching and Learning (CTL) approach is also said to be a comprehensive system. Contextual Teaching and Learning (CTL) consists of connected parts. If these parts are intertwined with one another, it will produce effects that exceed the results given by the parts separately[3]

### B. Type Word Square Based E-Learning

The Word Square learning model is a development model of the lecture method which is enriched and oriented to the activeness of students in learning. This model is also a model that combines the ability to answer questions with caution in matching answers to answer boxes similar to filling in "Crosswords" but the difference is that the answer is already there but is disguised by adding additional boxes with random letters/numbers impersonator or deception (Kurniasih, 2016: 97). The special thing about this learning model can be practiced for all subjects, just how the teacher can program many selected questions that can stimulate students to think effectively. The purpose of deceptive letters/numbers is not difficult to make it difficult for students but to practice being careful and critical[4].

In addition to using the word square learning model direct learning is also used which is generally designed specifically to develop student learning activities related to aspects of procedural knowledge (knowledge of how to do things) and declarative knowledge (knowledge of something that can be in the form of facts, principles, concepts, or well-structured generalizations), which can be step by step. The main focus of this learning is training that is applied from real situations that are simple to more complex[4]

### C. Thinking Ability

In the Indonesian dictionary, Poerwadarminta (1984: 752) stated that thinking is to use the mind to consider, decide something. Thinking is a process of considering and deciding everything related to each individual. The formation and development of one's thinking ability to understand or comprehend something are born from the maturity of intellectual abilities as well as those obtained from learning for a certain time. The importance of the ability to think in the implementation of mathematics learning, if related to Piaget's theory (cognitive development theory). So based on this theory, the learning process can take place if there is an active data processing on the part of the learner. Active data processing is a follow-up activity of information seeking activities and continued with discovery activities (Gredler in Ari; 1997: 24). Bruner developed a learning theory called Bruner's theory. According to this theory, learning is an active process in which students construct new ideas or concepts based on prior knowledge. Students select and change information, construct hypotheses, and make decisions based on cognitive structures (Kamarga, 2000). According to Bruner that the development in learning explains, "Teaching a lesson to students at any age can

introduce the scientific structure of the lesson as long as it is adjusted to the way students think"[5].

The ability to think highly, especially critical thinking, is very important to be taught in school because these skills are needed by students to be successful in their lives. According to Kronberg and Griffin quoted by Marpaung (2005), some lessons that can be applied to practice critical thinking skills include problem analysis, problem-solving, or problem-based learning that emphasizes scientific methods[6].

The ability to think means that thinking can be taught and requires practice to be able to have it, as well as with other abilities. Thinking ability is always developing and can be learned (Marzano, et al. 2008. Compared to other abilities, thinking ability is a mental ability while the other ability is a manual ability (Piaw, 2010). Thinking ability is a grouping of thinking abilities that shows the sequence of thinking based on cognitive processes. Thinking ability models include 1) basic thinking skills, 2) complex thinking abilities, and 3) metacognitive thinking abilities (Costa, 1985)[7].

## V. RESULTS AND DISCUSSION

Based on data cycles 1,2 and 3 the average value of student learning outcomes in cycle 1 is 67,14. The highest value obtained by students is 80 as many as 15 people (35.71%), while the lowest value is 50 as many as 9 people (21.43%). This shows that the results of the evaluation of learning seen from the mind-set of students about the nature of the nation and the formation of elements of the country are not optimal because there are still many students who get grades below the minimum completeness criteria of 73.

After conducting the first cycle of research with the observer (teacher) holding a discussion, together with the data obtained from the observations of the field notes and the results of students' ability tests in understanding material about human rights, the researcher and the observer held a discussion about matters that must be considered or improved. From the identification of the problem, it can be concluded that the cycle 1 action process must still be improved, especially students' learning abilities and student activeness when participating in the learning process using the Contextual Teaching and Learning (CTL) Approach Type Word Square based on E-learning towards students' thinking abilities, e-learning in the learning process using Google classroom to help students during the learning process so that students can learn on the basis of e-learning.

In connection with this, in cycle 2, it is planned to have activities that are more focused on student activities by exploring students' experiences regarding daily activities or experiences related to Human Rights so that the teaching and learning process is maximized. And it is known that the completeness of learning cycle 2 is only 69.04% and the unfinished reaches 30.96%. Based on, the average value of student learning outcomes in cycles is 77.38. The highest score obtained by students is 90 as many as 6 people (14.29%), while the lowest score is 60 as many as 4 people (9.52%). The results of the data description show that the results of the evaluation of learning cycle 2 there was an increase from cycle 2 and aimed at sufficient results because most students got a score of 60.

The results of the cycle 2 field notes many things appear and can interfere with the course of learning, some students are asking for permission to leave so that they interfere with the concentration of learning. Besides, time management has not been effective because it is too long in the explanation of the exercise sheet. From the results of the description, it can be concluded that the lesson runs smoothly, students fill out activity sheets, questions and answers, and group discussions by using Google classroom as a medium in the learning process in class. The problem that occurs is that when understanding the material there are still students who are confused about the work done so that it inhibits the learning process. Based on the results of the analysis, the problems faced are from the beginning of learning. The teacher does not explain the work steps that will be carried out in learning. The problem will be fixed in the next cycle.

Based on the results of observations on student activities in the learning process, obtained a percentage of student learning activities that are already good in cycle 3 that is readiness to receive lessons by 80% listening to the objectives delivered by the teacher by 80%, active in observing the filling of activity sheets by 70%, active in holding training by 90%, expressed experience or implementation relating to the material taught reached 75%, dared to express opinions relating to the material taught reached 65%, actively asked questions and answers 65%, and dared to appear in the future only reached 90%. Thus when viewed from the activities and abilities of students in the learning process cycle 3 experienced a significant increase because in terms of all aspects it had reached 60%. Observation results showed that the lesson went smoothly and was conducive. In this connection, learning is considered sufficient and not carried out in the next cycle.

## VI. CONCLUSION

Learning planning using the Contextual Teaching And Learning (CTL) Approach Type Word Square based on e-learning on students' thinking abilities is formulated in the learning implementation plan (RPP) and also by implementing e-learning using Google classroom which will be implemented including materials/materials taught, strategies, learning methods, tools or media to be used and learning objectives to be achieved.

Student learning activities and students' mindset in learning cycles 1, 2 and 3 have increased. In cycle 1 the number of students who scored above an average of 60 was 21 people while in cycle 2 the number of students who scored above an average of 80 was 28 people and in cycle 3 students who scored above an average of 90 were 24 people. This proves that the 1st, 2nd and 3rd cycle of student learning activities and students' mindset has increased quite high.

## ACKNOWLEDGMENT

This study and research uses self-funding Brief biography of Author:

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