The implementation of contextual learning approach in e-learning based on weblog toward students learning achievements

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ABSTRACT

Technology leads the essence of education into interactive and creative process. The objective of this study is to find out the effect of CTL approach in e-learning based on weblog toward the students learning achievement. The design of the study is experimental research design. The population of this research was public administration students at STIA Padang academic year 2018/2019 which consisted of two classes. The sample of this research was all of public administrations students. The sample was class A as an experimental class and class B as a control class. Test, interview and observation were used as a research instruments. The results of this study reveal that: (1) the increasing of organization and management learning achievement in Experimental Class is 70% while in Control Class 55.7% with differences 14.3%. it means, there is a progress of student learning achievement activity taught by CTL approach in e-learning based on weblog, (2) the students also have positive response and high motivation than before in following the teaching and learning process. Hence, CTL approach based on weblog give a positive effect to the students learning outcomes and it is one of effective e-learning media in teaching.

Introduction

The globalization era brings the changes to the learning process in each level of education. One of the most important parts of development is the technology and information. Technology brings us to the internet where worldwide access becomes so close and easy. The development of technology has greatly influenced the various joints of community life including in the learning process, especially at the University. As stated by Bawaneh (2011), information technology today can not be separated from the learning process in education. Various educational institutions from elementary school up to the University have been competing to invest in information technology as an effort to improve the quality of
In order to improve the learning process of Organization and Management and adapt it to the principles of learning of the XXI century, one of the learning models that can be developed is the Contextual Teaching and Learning Approach (CTL). Smith (2010) states that Contextual Teaching and Learning in a conception of teaching and learning helps teachers relate the content of subject matter to real world situations. In other words, CTL is defined as an innovative learning concept where the process can help learners connect learning to their life context. Hutson (2011) also adds that CTL is defined as a way to introduce the variety content of active learning techniques, designed to help learners how to construct new knowledge from the analysis and synthesis of this learning process. From the explanation above, it can be concluded that CTL is a container of active learning that aims to help learners connect their initial knowledge with new knowledge so that they gain new knowledge of the analysis process during the learning took place. Hence, CTL is one of the active learning model where learners not only receive information but also able to process the information by connecting it into the context of life so that learners gain new knowledge.

Internet technology can be used as a breakthrough in improving learners' access to information and motivation in the learning process. This e-Learning learning media brings the influence of conventional education transformation process to digital form by utilizing ICT facilities that can be viewed positively as a medium that provides and helps the interaction between teachers and students in streamlining learning (Munir, 2008). Globally Concept of Computer Based Learning and Networking is often defined only as e-Learning or Distance Learning. Cyber or electronic learning (E-learning) on the essence of E-learning is a form of conventional learning is poured in digital format through internet technology. E-learning acts to complement conventional classes (face-to-face) instead of replacing conventional classes (Shank, 2008).
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According to Novak (in Balaji, Al-Mahri, & Malathi, 2016) using e-learning can improve the interactivity and efficiency of learning as it gives students a higher potential to communicate more with their faculty, colleagues, and access more learning materials. Besides, there are some positive effects of this E-Learning learning (Wahono, 2005) namely;

1. Flexible because students can learn anytime, anywhere, and with different types of learning.
2. Save time teaching and learning process
3. Reduce travel costs
4. Save overall education costs (infrastructure, equipment, books)
5. Reach a wider geographical area and train more independent learners in gaining knowledge.

It can be concluded that e-learning becomes the new color in the educational process in this XXI century. In the past the teaching and learning process was dominated by the teacher's role called "the era of teacher", while the learner only heard the teacher's explanation. Later, the learning and teaching process is dominated by the teacher and book roles and the current learning and teaching process is dominated by the teacher, book and technology.

The challenge of using innovative learning media becomes an exciting reality to continue to be discussed. Utilization of this media, required creativity as well as instructional considerations from the mature lecturer. The fact that is often seen is, many lecturers use the medium of learning improvise without consideration of learning. One of the media that is very interesting to be utilized in learning in line with the development of technology and information is media Web Blog or commonly referred to as Blog. Blog is a form of web application that resembles the writings (which are posted as posts) on a public web page. Websites like this are usually accessible to all internet users according to the topic and purpose of the user of the blog (Blood, 2000 and Oya Suryana, 2008). Blog as one of the application services from the internet can be utilized by lecturers and learners as an unlimited learning resources. Lecturers can upload all information relating to learning materials taught by adding multimedia (images, animations, sound effects and video) to be interesting and easier to learn. It can be concluded that the blog is one of the learning media that has its own color and completeness of its own that will change the way of learning and learning techniques that are not monotonous so that learners can be more interested to follow the learning process.

Based on the explanation above, the implementation of blog-based contextual learning model becomes one of the things needed to be discussed, especially to revolutionize the learning of Organization and Management in STIA Padang in this XXI century so that the learning process is more meaningful. In conclusion, the purpose of this research is to investigate the learning outcomes of learners in the courses of Organization and Management at STIA Padang taught by CTL approach based weblog.

Method

This type of research is experimental research. This is in accordance with the purpose of research is to analyze the academic achievement of learners in the course of Organization and Management taught by CTL approach based weblog. The population of this study is administration public students at STIA Padang. The research sample consisted of two classes, namely experiment and control class, each consisting of 27 students. The instruments of this study are tests, interviews, and observation. The test and observation is used to see the academic achievement of students in the course of Organization and Management and students activity in the process of teaching and learning. Interview used to see students perception about CTL based weblog. The type of test is essay. Before using it, the test is validated by an expert in the field of Organization and Management courses. The reliability of the test is also seen by doing a try out.

Results and Discussion

This study was conducted on administration public students at STIA Padang in academic year 2018/2019. There were 54 students which were divided into two classes. Inspite of the population was small all of them was chosen as a sample of this research; class A as an experiment class and class B as a control class. These classes have similar characteristic in which teaching by similar Organization and Management lecturer, similar curriculum, syllabus and material. Contextual learning approach in e-learning based on weblog was used in the experimental class, whereas small group discussion was implemented in the control class. This research consisted of five meetings.
Contextual learning approach in e-learning based on weblog was implemented by several ways. They are; the lecturer made a weblog that can be assessed by public administration students. The weblog was consisted of the issues related of the topic that will be discussed, the material in one meeting, students assignment (individual and group) and also the recommendation of book that can be read by the students before entering the classroom. Furthermore, this weblog is update every week before the class is started. The purpose of creating this weblog is to prepare the students with the topic that will be discussed in the classroom, so that the students having prior-knowledge about the material and it is also done to attract students interested in learning Organization and Management subject. Meanwhile, the students who taught by using lecture method was followed the instruction of the lecturer and using power point as a learning media. The students in this control class was divided into several groups and each group should present each material in every meeting. Then, the question-answered is also done in this process of teaching and learning. In the end of the five meetings, the lecturers gave the test to the students in both classes. The test was used to analyse the students learning achievement. There are ten questions in the form of essay tests. The questions were related the material of organization and management learned by the students in five meetings, they are basic organizational theories; theories of organizations, associations and institutions; organizational behavior; organizational culture; and organizational change. Moreover, interview was also done in order to find the information toward the students perceptions on using the contextual learning approach in e-learning based on weblog. There are five open-ended questions in the process of interview related to the use of weblog, the effect of using it and the students perception about this model of learning.

Based on the results of research known that the students of the organization and management that is taught by using CTL approach in e-learning in the form of weblog have a good level of activity and better achievement than the class taught by using conventional techniques. For more details, the results of learner’s activities and achievement are shown in graph 1 below.

![The result of learners' achievements and activities](image)

The graph above shows the level of activity and achievement of learners in organizational and management subjects in the experimental and control class during the five meetings. From the results of the observation obtained during the five meetings, in the experimental class, the learners' activity in the classroom increased by 70%, where the learners were actively asking questions, expressing opinions and even looking ready with the issues that will be discussed in the class so that the discussion went well in the classroom. It was collected by the number of questions asked by the students and their responses. While the control class, learners' activities as much as 35%, because the students were rarely asked the questions, they look passive and avoid questions from lecturers.

Furthermore, based on the final test results conducted after five meetings showed that the average value of students test in experimental class reached 95 while the control class get the highest score 75. Therefore, the average achievement of learners in experimental class by 70% while the control class as much as 55.7%. It can be concluded that learners' activities and learners' achievement taught using CTL approach based on weblog higher than the class taught by lecture method. This finding is the same as previous research conducted by Juniar and Hanum (2010). The study was conducted at high school level in chemistry lessons where students taught by CTL-based learning model of weblogs increased their chemical learning outcomes by 75%. These findings also prove that students seem more interested in learning, more active in the classroom and their achievements are also satisfactory.
In addition, based on the results of interviews, students' perception toward the use of learning model-based CTL weblog has a positive side good for the learning process of organization and management. For more details, the findings are explained in the following graph 2.

The analysis results presented in the graph above shows the perception of students in the courses of organization and management taught using CTL-based weblog. They argue that the learning model of CTL based on weblog is very helpful for them in preparing the lecture material. They are able to master the material and relate it to the latest issues they get or hear. This makes them easy to understand and they are more motivated to learn because of easy in accessing to information.

**Conclusions**

Technological development influences the world of education require renewal in all aspects of education. The results of this study prove that learners who are taught using CTL-based weblog have better achievement and increased learning activities in the course of organization and management at STIA Padang. In addition, learners also feel the positive effect of using this weblog where information on learning materials is more accessible and this helps them understand learning easily. Learners feel ready to start lectures because there is already their initial knowledge about the material they have read on the weblog. Furthermore, their motivation for learning and more curiosity about the material increases compared with the learning process using the lecture method. In conclusion, using CTL approach based on web blog improves the activity and achievement of students in the courses of organization and management.

**Acknowledgments**

This great task was impossible to be accomplished without helps and supports from many persons. Therefore, a sincere gratitude and appreciation is highly addressed to to Lecturers at STIA Padang and students of Public Administration who have sincerely helped and allowed the writer to conduct the research.

**References**


