BLENDED LEARNING MODEL IMPLEMENTATION TO IMPROVE CRITICAL THINKING SKILL IN HISTORY LEARNING

Tarunasena

ABSTRACT

The focus of the issues that raised in this thesis was motivated by the researcher’s experience based on the preliminary observations result which indicate that the learning process by using only discussions or assignments through e-learning that produces essay without discussion proved to be successful in improving students’ critical thinking skills. The discussions developed to promote cooperation among students, while the critical thinking skills was barely touched. Likewise, the assignment through e-learning, although what out come seems good, but it seemed to be a “copy and paste” work. So it raises the doubts on the assignment result originality. Thus the researchers sought to answer the following research questions: 1) How to plan a blended-learning to improve the critical thinking skills in learning history? 2) How does the implementation of blended-learning models to improve the critical thinking skills in the learning of history? 3) How to overcome the obstacles that rise in blended-learning model implementation in order to improve critical thinking skills? This study used qualitative approach with Classroom Action Research model. The results conclusion included: first, at the planning stage the preparation are syllabus, lecturing events unit, format field notes, observation checklist, as well as the Learning Management System (LMS) by using software moodle provided by the Direktorat TIK UPI. LMS used as an evaluation tool and observation tool of the learning process through e-learning. Second, the implementation of blended learning models could improve the critical thinking skills in learning history through three cycles. Third, The obstacle emerged in this study was particularly the technical constraints on the essay assignment that must be collected online which is overcome by using a CD.

Key words: Blended Learning, Critical Thinking, History Learning

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Introduction

Some learning techniques have been developed by researchers on this course of Learning Problems in the History Learning. At least two techniques have been developed in this course to establish critical thinking skills. First, a discussion with objectives as disclosed by Davies (1981:302):

“As an instructional strategy, discussion serves the following purposes. It: Informs the people taking part, stimulates and motivate them, encourages critical analysis of assumptions and attitudes, stimulates creative solutions, develops sharing and cooperatives skills”

In this regard, the fact that students majoring in history education at several courses, especially in the course of Problems in teaching history shows less ability to utilize resources optimally. It can be seen from the use of limited resources in the process of discussions, assignments did and collected by the students. Besides being limited in terms of quantity and variety of sources, they also appears less critical in the discussion. It is very influential on the ability of the analysis are shown, particularly in Problems of Teaching History course assignments, which is evident in essays and papers collected by student.

Secondly, is using the assignment technique. To cover the shortfall mentioned above, and in line with technological development, the information students required should not only acquired from the textbooks, but also can be accessed via the internet. Learning or knowledge resources are very easy to obtain. This innovation is changing the educational paradigm from the constant acquisition of knowledge and skill levels after the education to the paradigm that knowledge and skills are always updated in a short time. Kamarga (2002:56) explains:

“The terminology of broadening knowledge is not only be interpreted as adding knowledge, but also on regarding the solutions roward the challenges update it. In this case the lecturer will not only provide historical materials as part of completing the curriculum content, but try to develop historical thinking through a variety of information about the history that always improving in the internet. “

Research experience based on the initial observations indicate that the learning process by using only discussions, or assignments through e-learning that produces essay without discussion, proven to not successful in improving students’ critical thinking skills. Discussions are more likely only to promote cooperation among students, lack of critical thinking skills touched. Likewise, the assignment through e-learning, although the outcome seems good, but it impressed the “copy and paste”. So it raises doubts on the originality task in question.

potential in higher education (The Internet and Higher Education. 7 (2), 95-105).

Based on this background, the researchers tried to address these problems by combining e-learning with discussion techniques through the implementation of a blended learning model to improve students’ critical thinking skills.

Based on the background description, it appears that the problems encountered in the teaching history in the Department of History Education is a learning process that gives less emphasis to the students to develop critical thinking through a comprehensive variety of information. Based on this problem identification, this research is focused on the blended learning model implementation to improve critical thinking skill in history learning.

Through the problem focus a problems formulation is developed through these research questions.

1. How to plan a blended-learning to improve the critical thinking skills in the learning history?
   a. Which blended-learning model to be developed?
   b. What are the steps to develop that model?

2. How the implementation of blended-learning models to improve critical thinking skills in the learning of history?

3. How to overcome the obstacles that arise in the blended-learning models implementation in order to improve the critical thinking skills?

Theoretical Study

To obtain an understanding of research variable, this chapter will discuss the learning definition, methods of learning, blended learning, and critical thinking.

Learning

1. Learning definition

   Learning as an integral part of education is a process that involves the students to acquire the knowledge, skills and values for the student’s adolescence process. This is supported by the following Kamarga opinion about learning (2002:38)

   a. is a part of education; in the sense that learning is a process included in acquiring knowledge, skills, and values which resulted in a positive change of the students.

   b. comprehensible output is the process supporting materials that must be understood and assimilated by the students to be used effectively in a various situations

   c. “..materials presently available in the classroom, fall significantly short of that goal”.

   Learning is a changing process in behavior that occurs as a result of experience and training. It is as specified by Hamalik (1994:75):

   Learning is a changing process, meaning that anything that has not been existed become exist; not knowing become knowing; disagree become agree; unable to perform an action become able to perform an action. There are stages that must be passed towards the better, more capable, more aware, more skilled, and so on.
Based on the development of educational technology, there is conventional and non-conventional learning concepts. Conventional learning concept is a learning process that emphasizes on face to face meeting aspects at a certain time and space between educators and learners simultaneously, which is called synchronous. This opinion is based on the Kamarga (2002:39) about the Conventional Learning Concept:

a. The learning form is interaction between teachers, students, and learning material in a given environment.

b. Space and time aspect is very important, because the face-to-face interaction is always in a certain space and time (synchronous).

2. Long Distance Learning Model

a. Synchronous Long Distance Learning Model

Synchronous long distance learning model is a distance learning between teachers/faculty and students, but carried out at the same time, consists of tutorials, computer-based, and audio tele conference as described in Kamarga (2002:39):

1) Tutorial, the teacher / instructor will send study material that should be studied by students in the form of learning modules, and regularly conducted meetings (tutorial) between teacher/instructors and students.

2) Computer Based, is an interactive learning by using computers. The development of this model is the Instructional Multimedia.

3) Audio / Tele Conference, associated with the development of internet technologies that lead the synchronous long distance learning developed into Audio/Tele Conference. There is distance between teachers/instructors but they can communicate directly via the internet which is connected to the camera. Because it was a two-way communication, time is very important.

b. Asynchronous Long Distance Learning Model

This learning model is the model of separate distance learning between teachers / instructors and do not at the same time so that students can set their own pace of learning time. Students set their own material needs and set their own learning pace of learning. Thus, both the study material and the speed of learning is fully the decisions / choices students (Kamarga, 2002: 42).

Based on the explanation above, the characteristics of long distance learning can be identified as follows:

a. The educators and learners are at different place.

b. There is the influence of educational organizations in the preparation of teaching materials and study aids.

c. Highly dependent on the learning material and various media for educators and learners contact.

d. The Two-way communication is mediated by technology

e. Involvement in the form of education industry

In detail, long distance learning in asynchronous is described in Kamarga (2002:42-43) as follows:

a. Distributed Learning, a learning models through correspondence but the learning materials is not only delivered through mails, but using various information technologies
such as video, CD ROM, cassette, and internet technologies.

b. Web-based Training, a training package distributed through the Internet. Location of students or training time is not a concern, the most important is that students can pass the test well.

c. E-learning, a model of learning to enrich students knowledge through a variety of sites in the Internet network. Learning is not confined to the package such as the web-based training, but students are free to choose the site that is expected to contain the learning materials they need. Number of study materials is very dependent on students needs, and the time to access the internet is not limited. This learning model focused on knowledge expanding, deepening, renewal.

Learning Method

2. Kind of Learning Method

There are various kind of learning methods, such as suggested by Djamarah (2002:93-110), “… the project method, experimental method, assignment and recitation method, discussion method, sociodramatic method, demonstration method, problem solving method, field trips method, question-and-answer method, training method, and a lecture.” Related to the study variables developed, this study will discuss more about the assignment and discussion methods.

a. Assignment Method

Assignment or recitation method is a method of presenting material that puts educator role by assigning students to perform learning activities both in the classroom and outside the classroom. Reece and Walker (2003:136) describes the assignment as follows: “The students are usually given an individual topic for an indepth analysis. They often have to work independently, do research, and report either in writing or verbally to a group.”

This method can be applied individually or in groups for a variety of purposes which products include research report, written or oral report, motorical tasks, tasks in the laboratory, essays, etc. For its implementation, Reece and Walker (2003:136) suggest: “Students may need help with the study skills INVOLVED, particularly when working on their own. The project and the assignment have to be realistic in terms of learning time and cost. Clear intentions are needed.”

In practice this method includes steps that consist of assignment phase, task execution steps and to account the task,
b. Discussion Method

Effort to solve the problem is the focus of discussion learning method. It is expressed by Dimiyati and Mudjiono (1995:51) as follows:

Discussion is a learning activity that discuss a topic or issue, which is performed by two or more persons, where the people talking has the same attention to the topic or issue being discussed. In the discussion, interaction is formed between the two or more individuals involved, exchanging experience, information, and solving problems.

Opinions on the discussion also revealed by Carter V. Good in Suriadinata (1991:20), which states that the discussion is “an activity in roommates people talk together in order to share inform about a topic or problem or to seek answer to a problem based on all possible available evidence, frequently used as a learning procedure “.

Djamarah and Zain (2002:99) also have similar opinion, which suggest that the method of discussion is “… one of the teaching and learning techniques are performed by a teacher [lecturer] … in which there is interaction between two or more individuals … exchanging experience, information, problem solving.” Of course the the teacher/lecturer role as facilitator of the discussion will determine the success of achieving learning intention.

According to Girlstrap and Martin (Moedjiono and Dimyati, 1995:51), discussion method is a behaviour in which a number of people talking together exchanging opinions about a topic or issue or find answers to problems based on facts.

The basic definition of discussion method proposed by Suryosubroto (2002:179) is as follows:

1) Group discussion is a scientific conversation by some people who are members of a group or exchanging opinions about something or the problem to find solutions to get the answers and the truth of a matter.

2) The discussion method is a way of presenting a lesson where teachers give an opportunity to the students to have a scientific discussion to brainstorm, make a conclusion, or alternative solutions to the problem.

3) The discussion forum can be followed by all students in the classroom or forming a small group. The main concern is that the students should actively participate in any discussion forums. The more students involved and contribute his thoughts, the more they can learn. Note also the role of the teacher, too much “interference” and orders given by teachers undoubtedly will make students not learn a lot to.

4) Discussion can be done in a variety of forms with various purposes. Various well-known form of discussion include:

a. *The social problem meeting*

Students talk to solve social problems in class or at school with expectation that every students would feel “called” to learn and behave in accordance with the rules applied, such as to the teacher or other school personnel, rules in the classroom or school, the student’s rights and obligations and so on.

b. *The open-ended meeting*

The students talk about any issues related to their daily lives with their
lives at school, with something going on in the environment around them, and so on.

c. The educational-diagnosis meeting
The students talking about the class’s lesson in order to correct each other understanding of the subjects for a better understanding.

Based on the definition above, it can be understood that the discussion method is scientific meetings to exchange ideas, discuss a problem. Discussion method is a way of presenting the subject matter in which educators provide an opportunity for students to have a scientific discussion to brainstorm, make a conclusion or alternative solutions to a problem.

In this study the discussion method was used is seminar. Seminar is a discussion forum to discuss policies that will be used as the basis for the problems of a technical nature. Because the results of the seminar will be used as the foundation, and the issues discussed are usually the results of the research or the results of the literature study.

Based on the above explanation, the discussion method used in this study is seminar discussion with the form of Social Problems Meeting. It is in accordance with the participant conditions which was quite a lot but should have the opportunity to actively participate in discussion forums. The discussion forum will have sharing process, reacting, and valuing, as revealed by Davies (1981:315): “It will be seen that sharing, reacting, and valuing involves an interactive communications network. Everyone interacts with everyone else, without general focus. “

5) Purpose and Use of Discussion Method.
Discussions have fundamental goal which is to think about something reflective and innovative in the context of the attitudes formation in addition to knowledge and specific skills practice such as speaking. According to Davies (1981:302):

“As an instructional strategy, discussion serves the following purposes. It: Informs the people taking part, stimulates and motivate them, encourages critical analysis of assumptions and attitudes, stimulates creative solutions, develops sharing and cooperatives skills”.

In the perspective of the learning process, according to Carter V. Good in Suriadinata (1991:20) discussion have a very close connection with efforts for personal coaching, because it has guidance activities “...which seeks to Achieve planned learning through the interchange of ideas and experiences in group discussions”. Any exchange of views and experiences on the discussion for a planned study completion is a personal coaching process.

**Blended Learning**

1. E-learning
E-learning as a form of learning depends on the development of the internet is a global network that connects millions of computers in the world. For more details, Darin E. Hartley (2001) in Wahono (2003:1) argues that “e-Learning is a type of learning which allows delivering teaching materials to students by using the internet, intranet or other computer media networks.” Facilities are very dominant in where people can relate to, among other
internet facility through E-mail, mailing list and WWW. Details are described in Kamarga (2002:7-14) as follows:
a. E-mail (electronic mail) is mail that is sent over the internet and was introduced in 1971
b. Mailing list one of the facilities that can be used to create a group discussion or dissemination of information via email and this facility was introduced since 1972
c. WWW (World Wide Web) is one of the internet facility to facilitate the network browse thousands of websites (sites).

2. The Internet Facilities that can be Used for Learning

a. Synchronous Learning (Kamarga, 2002:43-47)
   - Tele conference: is learning developed through the internet in which learners gather at a place and instructor are in a separate place and the communication is established via the internet by using a camera and audio.
   - Netmeeting: almost like a tele conference, the difference lies in learners who are also separated by a space, and communication is established via the internet by using a camera and audio.
   - Chat: learning activities are carried out through the chat-room facility, where instructors and learners connected through the internet at the same time, and the communication is done in text.

b. Asynchronous Learning (Kamarga, 2002:47-50)
   - Email: learning is done through correspondence (electronic/internet) between instructor and learner.
   - Message-board: the learning is done in writing via the message board facility
   - Mailing lists: learning through correspondence (electronic/internet) between instructors and learners, while it is entirely incorporated in the mailing list
   - WWW (World Wide Web) is learning developed through various sites that are on the internet

c. Learning Management System (LMS) is a form of e-learning that combines the principles of inform and perform, where teachers can design lessons of e-learning and blended-learning. First introduced in 1997, the LMS used is Moodle-based facility provided by the Direktorat TIK UPI. Moodle (Modular Object-Oriented Dynamic Learning Environment) is a software provided for web-based learning or the Internet using the principle paedagogy (Tn, 2011:3). LMS is intended to facilitate researchers to observe the intensity of the internet as a tool do discuss of various tasks and concepts by the students during the learning process, such as the students activity in asking, answering/and arguing. Student response to the development of a simple model can be observed from the frequency of occurrence in the learning management system.

In this study blended-learning model is learning method that combines face to face learning to online learning. As noted by Watson (2008: 6): “The integration of face-to-face and online learning to help enhance the classroom experience and
extend learning through the innovative use of information and communications technology.” (Watson. 2008). The term Blended learning is actually a term widely known by various other names such as “integrative learning”, “hybrid learning”, and “multi-method learning”. It is described by Node as follows:


Thorne (2003) in Dwiyogo describe blended learning as “It Represents an opportunity to integrate the innovative and technological advances offered by online learning with the interaction and participation offered in the best of traditional learning.” While Bersin (2004) defines blended learning as:

...the combination of different training “media” (technologies, activities, and types of events) to create an optimum training program for a specific audience. The term “blended” means that traditional instructor-led training is being supplemented with other electronic formats. In the context of this book, blended learning programs use many different forms of e-learning, perhaps complemented with instructor-led training and other live formats”. (http://id.wikibooks.org/wiki/Pembelajaran_Berbasis_Blended_Learning [February 26, 2013].

Regarding the exact form, there is no standard provision. What proportion of face-to-face learning, or what proportion of online learning. Similarly, the form of online learning, face-to-face are varied over time. This was disclosed by Watson (2008:7) as follows:

“Regardless of the exact definition of blended-learning, growing number online schools and programs are combining online schools and face-to-face instruction in some way. The blending maybe at the course level...[or] at the institutional level...[or] some students are taking one or more fully online courses and attending a traditional classroom for one or more face-to-face courses...”

Based on the above opinion and concerns associated with the author on the background, the Blended Learning Model that developed here is combining assignment method based on online discussion methods during face to face method. This is done in order to complete deficiency of each method with the advantages of other methods.

Critical Thinking

1. Critical Thinking Definition

Critical thinking is a process with the goal of making sensible decisions about what they believe and do. It is as disclosed
by Ennis (1996: xvii), “Critical thinking is a process, the goal of roommates is to make reasonable decisions about what to believe and what to do.” (Ennis, 1996: xvii)

Associated with critical thinking skills, Harris (2001) in Hasan (2008:3) argues that critical thinking is: “the ability to think critically that has four attributes ... which are analysis, attention, awareness, and giving independent consideration. “

2. Critical Thinking for 17 year old and above

In the process, critical thinking emphasize that our primary concern as educators and researchers are noticing the question of “how” and “why”. According to Stice in Zuchdi, D. (2008:125) ‘The what is important, but we should pay attention to the hows and whys’. Therefore, it is necessary to exercise the activities of a series of steps. Zuchdi suggest:

“The tasks given by the teacher ... in the form of reading the reading material on critical thinking and problem solving, followed by an activity to make criticisms in writing, as a class discussion. At the end of the course, students are tasked with making a written over three pages on how to manage the course.”(2008:126)

Based on this definition, the steps of critical thinking, are:

a. Assign paper assignment by reading literature sources.

b. Giving in depth criticism of these sources

c. Discussing with other students and write it down

Contextual issues of education provided for the students to be comprehensively criticized is critical thinking habituation process as part of a quality scientists expected. In line with this opinion, Zuhdi (2008:127) suggested:

“... Provide as many opportunities for students to think critically about ontology, epistemology, and axiology of science, as one of the exercises to achieve quality scientist who has a moral and social responsibility. Critical in order to build a culture of critical thinking ... then habituation as a necessity, based on awareness of its benefits. (127) To that end, should be chosen contextual and functional topics, which is related to the problems actually encountered in life. Educational programs for students, topics related to education problems relevant in Indonesia would be the focus the discussion. “

3. Critical Thinking in the History Education Department

Critical thinking can be developed through the various functions of e-learning in the Department of History Education, Kamarga (2002:58-71) suggest:

a. Finding Concept Definition and Terminology

Studying history can not be separated from understanding the concept. The understanding of this concept often escapes from teacher focus, because most teachers assume that students have grasped the concept, or the concept is not yet well understood by teachers and students.

b. Sharpening Analysis

Usually writings that contain analysis are in the journal, so if the teacher or
students wishing to deepen one of the topics with strategy analysis, it can use the journal websites as sources of information.

c. Finding Information to develop controversial issues

1) Models of teaching history with controversial issues can refine the analysis and develop the skills of students in historical thinking in giving consideration to a historical event

2) Controversial issue refers to the developing issues that caused the argumentative reaction.

3) This controversial issue arise due to several reasons, among others, a different point of view, the partisanship, lack of evidents, or the delivering manner which is considered unethical.

4) Using the search engine.

d. Finding problemsn for discussion

1) Assigning students to find information/material to be discussed.

2) The teacher provides signs in the form of topics and issues that contain a number of questions

Study Method

This chapter will explain about the research methods used to apply a blended-learning model of learning that can improve critical thinking skills in teaching history. This chapter will include: A) Study Location and Subject, B) Study Methods, C) Study Design, D) Operational Definition, E) Research Instruments, F) Data Collection Techniques and G) Data Analysis.

Study Location and Subject

The research was conducted at History Education Departement, Faculty of Social Science Education, Indonesia University of Education, located at 229 dr. Setiabudhi street, Bandung. Subject or target of the research is students who attend Problematika dalam Pembelajaran Sejarah course in the first semester of 2012-2013, consisting of 34 people, including 16 male students and 18 female students.

Based on previous research, the researchers saw the class belongs to the class that has great potential to learn, but unfortunately this potential can not be developed to the maximum. This happens because the literature is limited and uniform resource referenced by student learning. This class has been showing enthusiasm in learning, but if supported by optimizing the use of e-learning facility that combined the methods used are more varied then the “dry” lecture is expected to be avoided.

Based on these field observations, the researcher believes Blended-learning model approach will help faculty and students develop a meaningful historical materials through exploration and richer historical material by utilizing e-learning in the course in question. While the aspects that were examined in this study are:

1. The lecture, the learning process that takes place in the course is the Problematika dalam pembelajaran sejarah (Problems in the teaching history) in which interaction is between teachers and students, students with fellow students and between students and other literature sources.

2. Lecturers are associated with the ability to improve their ability to lead the student on the course management skills through face to face and online means.

3. Students have the ability of students to explore the historical sources in
adding the historical insight, and communication skills through online means.

The method was used by the researchers known as Classroom Action Research that refers to the Spiral model of Kemmis and Taggart (1988). This study aims to improve and enhance the quality of learning history on an ongoing basis and is expected to improve the deficiencies that exist in the history of the learning process.

Classroom research, described by Hopkins in Wiriaatmadja (2002:124), as the activities carried out by teachers/educators in order to improve the quality of teaching or the quality of teaching colleagues, or test the assumptions in educational theories in practice or reality in the classroom, or for implementing, or evaluating school policies. By conducting classroom research, teacher/lecturer replenish his role as an educator to perform critical reflection on teaching duties in order to improve its quality.

The above description of some researchers argue that the action research or Classroom Action Research, expected teacher/lecturer is able to overcome the problems it faces. Teacher/lecturer responsible for seeking solutions to the problems they face because of they know the problems in detail so that in the end improvement can be achieved in the quality of learning.

Action research method is to improve and enhance the condition and quality of learning in the classroom. Especially in learning activities with the application of this method during the discussion that took place less dynamic, because the resources are limited to students who study textbooks that are required in the syllabus. Through the e-learning based assignment method, combined with the activities referred to in the above discussion the students quality learning of history is expected to improve. In the implementation the researcher collaborate with the lecturer of Problematika dalam Pembelajaran Sejarah (Prof. H. Dadang Supardan, M.Pd.) aspeers, and other partners (Teuku Happy Kusuma, S. Pd) who assist the observations and any actions planned. This collaboration aims to further facilitate the implementation of the action research.

Research Procedure

The classroom action research procedures that used was Spiral Model of Kemmis and Taggart (1988) which has a set of actions (cycle) which consists of plan, act, observe, and reflect. In the next cycle, the revised plan in accordance with the results of previous observations. Thus the deficiencies in the previous cycle can be addressed and corrected, and is expected in the next cycle of teaching and learning can take place properly as expected. As is described as follows:

Picture 1.1.
Spiral Model of Kemmis dan Taggart (1988)


From the picture above the classroom action research procedure is conducted in several stages. Each cycle carried out an effort to improve and overcome the shortcomings of the previous cycle. Number of cycles in this study is designated to the needs, if the results obtained are in
accordance with what is expected then research or cycle can be stopped. The picture above will be explained in accordance with the procedures of research conducted in this study, consists of several steps:

1. **plan**

   In this planning stage a preliminary is conducted with initial observation. From this early observation problems are found, such as (1) the assignment products seems good, but the originality is doubtful, (2) the learning process during discussion is less dynamic, because the knowledge the students have is similar due to the limitations and the relatively similar text books owned by students as their literature resource (3) the ongoing discussion process is the contents (knowledge) delivery dominated by the teacher, while the ability to think critically is not enough explored. Based on the problems identification, with collaborators, researchers determined the steps to overcome these problems by using a blended-learning model that attempts to integrate e-learning-based learning with face-to-face model in using the method of discussion.

   Before the class action, the following are the action planning determination:

   a. Determine the class of research and observe the class that will be used as the study subject of the blended-learning models development that can improve critical thinking skills in the teaching history.

   b. Have agreement with the collaborators to determine when the study will begin and ask for their willingness to observe the teaching and learning process that use a blended-learning model that can improve critical thinking skills in the teaching history.

   c. Determine the method and steps that will be used in teaching and learning, and develop a course plan.

   d. Develop the observation tools, such as:

      1) Develop a technical syllabus and the Satuan Acara Perkuliahan (Course Units) of blended-learning model that can improve critical thinking skills in the teaching history and individual assignment that must be presented in class.

      2) Develop the evaluation tool

   e. Have discussions with collaborators regarding the observations that have been made on the ongoing learning process, including student activity, teachers activity, and the learning atmosphere or classroom situation.

   f. In case there are deficiencies on the class actions, an improvements plan is made to address the deficiencies found.

2. **Act**

   This study is conducted from September 2012 to December 2012, with activities as follows:

   a. Implementing the e-learning development planning in the teaching history through the activation of the learning management system (LMS) and browse various sources by a variety of techniques (search engine and directory) at the beginning of the cycle.

   b. Implementing the actions, in this regard is the teaching history process in the form of a class discussion which is planned and organized in the lesson plans arranged at the beginning of each cycle.
c. Developing a blended-learning model that can improve critical thinking skills in the teaching history:
   1) Finding a problem for discussion
   2) Sharpen the analysis
   3) Looking for information to develop a controversial issue

d. Observing the history teaching and learning of blended-learning models through student activity in the LMS and in the classroom, by researcher and collaborators.

e. Reflecting the action implementation process to assess the effect, obstacles or problems that arise during the history learning process using the e-learning approach.

3. observe

The observations are conducted during the action in the classroom, in collaboration between the researcher and collaborators. The role of the collaborator is helping researcher to observe and record all the events occurred in the classroom during the learning process. What is observed and recorded are as follows:

a. Observation of the teacher’s teaching process.

b. Observations of the student’s learning activities.

c. Observation of the teaching and learning process.

4. reflect

This stage is to discuss the results of the actions implementation. The teacher’s and students’ activities during the learning process observed and recorded by is discussed in the reflection stage. This stage aims to address the deficiencies found, to be improved on the next action. In addition, this phase also used to talk about the success achieved in order to improve the next action quality.

Operational Definition

To avoid confusion or misinterpretation in this study, the following are the explanation of some terms used in this study:

1. Blended-Learning Model

   In this study blended-learning is the application that combines face-to-face learning and online learning. As explained by Watson (2008: 6): “The integration of face-to-face and online learning to help enhance the classroom experience and extend learning through the innovative use of information and communications technology.”

   The blended learning developed in this study is to combine online-based assignment method and face-to-face discussion. The success of the application is marked by the achievement of learning objectives, as well as the fulfillment of critical thinking indicators.

2. Critical Thinking Skill

   The critical thinking skill is a part of the analytical thinking skill in Bloom’s cognitive introduced in 1956 which consists of the memory skill, comprehension, application, analysis, synthesis, and evaluation. This indicates that the critical thinking skills is to analyze the ideas to a more specific, sharply distinguish, select, identify, assess, and develop it into a more perfect way. Ennis argues: “Critical thinking is reasonable reflective thinking that is focused on Deciding what to believe or do ...” (Fisher, 2001:7)
This is explained further by the Ennis in Mutafqin (2004: 41) that “critical thinking is the idea analyzing activity to a more specific, sharply distinguish, select, identify, assess, and develop it into a more perfect way.”

In this study, as adapted from Ennis (1998:17-18) opinion, the indicators of critical thinking is shown through the following behaviors:

a. Provide simple explanations (elementary clarification)
b. Build basic skills (basic support)
c. Make inference (inferring)
d. Make further explanation (advanced clarification)
e. Set the strategy and tactics (strategies and tactics)

Due to the funding, time, and effort, it is decided to only use two indicators of critical thinking, which are:

a. Provide simple explanations
b. Make inferences or conclusions

Further, the critical thinking indicators operationalized in this study are described in the following table:

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<tr>
<th>Table 3.1</th>
<th>Critical Thinking Indicators Table</th>
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<tbody>
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<td>INDICATOR</td>
<td>DESCRIPTOR</td>
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<tr>
<td>a. Provide simple explanations</td>
<td>a. Focusing the question</td>
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<td>b. Analizing arguments</td>
<td>1) Identifying conclusion</td>
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<td></td>
<td>2) Identifying reasons</td>
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<td></td>
<td>3) Identifying suitability</td>
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<td></td>
<td>4) Identifying differences</td>
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<tr>
<td></td>
<td>5) Summarizing</td>
</tr>
<tr>
<td>c. Asing and answerung clarification questions</td>
<td>1) Why</td>
</tr>
<tr>
<td></td>
<td>2) What is the core</td>
</tr>
<tr>
<td></td>
<td>3) How to apply it in the contexts</td>
</tr>
<tr>
<td>2. Inferences (concluding)</td>
<td>a. Providing induction and considering it</td>
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<td></td>
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<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Providing conclusion and considering it</td>
</tr>
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</tbody>
</table>

**Study Instruments**

In psychological sense, observation is paying attention to some objects using all the senses. So observing can be done through the sense of sight, smell, hearing, touch, and taste. This is the direct observation (Arikunto, 1998:146).

The observations is conducted to monitor the learning process as a whole. To get an idea of the learning process from the beginning to the end of the history subject, the direct observation of activities in the research subject classroom is conducted. In this observation, anything happens in the classroom during the learning process should be observed throughly.

The observation includes:

a. Observation of the teacher’s activities
b. Observation of the students’ learning activities
c. Observation of the learning process in the classroom
d. Observation of student’s activity in learning management system (LMS).

To be able to observe the four things mentioned above, the following instruments are used and developed:

a. Fieldnotes

By field notes a variety of information about the learning process that takes place during the action can be collected. This open record is done by the researcher and partners in order to get a complete picture for consideration at the reflection stage.

b. Critical thinking

The checklist developed from the critical thinking indicators of Ennis (1998:17), which include: elementary clarification, basic support, inferring, advanced
clarification, and strategies and tactics. Through a variety of considerations relating to the effectiveness and efficiency, researchers and partners decided to use two indicators.

**Data Collection Techniques**

Basically, the data analysis of the class action study result is based on a qualitative design known as inductive analysis. According to Mc Millan and Schumacher (2010:367): “Inductive analysis is the process through qualitative roommates Researchers synthesize and make-meaning from the data with the specific starting and ending with the data categories and patterns.”

At this stage data are collected from a variety of data collection methods (observation, documentation, reflection), which is written in a data format. The data are collected, and interpreted to construct a number of categorization. Categorization in this study is based on three aspects, which are:

a. Background or context of the classroom (learning process). This is the general and specific information about the physical settings inside and outside classroom and the background actors (teachers and students)

b. The learning process is in the form of information about social interactions between teachers and students, between students and the changes occurred during the learning process after using the blended-learning models.

c. The activities in the form of information about the actors actions, the teacher’s action and and the student’s actions.

The analysis of the data collected is implemented by collecting the data and testing the data validation by triangulation, member check and audit trail.

**Data Validation**

Data validation is one of the important requirements of all research, including the classroom action research. The data validation used is in this classroom action is a practical validity which require all members of the action research group recognizes and believes that the tools used in this PTK is proper (Wiriaatmadja. 2005: 161-171). The validation carried out are:

a. Triangulation, the data obtained are compared with the results of the research partners that were present and witnessed the situation where the study occured. By comparing the analysis result of the researcher and the partners, the researcher has the opportunity to make changes based on new and complete data.

b. Member Check, researcher re-examine the all informations obtained during observations or interviews by confirming it with the respondent (in this case is the students) on every end of the proposed action by the conveying the condition or the quantity student’s activiness during the learning process.

c. Audit Trail, researcher check the truth of data collected by talking and discussing it with lecturers or experts.

d. Expert opinion. Expert opinion, researcher consult to the research supervisor who will examine all phases of the research activities carried out by the researcher. Moreover, the supervisor also provide direction to the problems raised by the researcher.
Discussion

1. Implementation steps of Blended Learning Model

This discussion is based on the author's concerns of the deficiencies of the assignment method and the discussion method. For the assignment method, as revealed by Djamarah and Zain (2002:98), that deficiency is “... difficult to monitor whether the task is done by himself or anyone else.” For the discussion method deficient, Djamarah and Zain (2002:99-100) opinions are as follow:

a. The discussion is sometimes distorted, so it takes longer time
b. Not suitable on large groups
c. Participants received limited information
d. Probably controlled by the talkative people of the show off people

Of course, these methods also have strengths, as disclosed by Djamarah and Zain (2002:98):

a. Stimulating students in conducting individual and group learning activities
b. Students can develop independence outside of the teacher’s supervision
c. Can develop a student's responsibility and discipline

While the strengths of discussion method, as presented by Djamarah and Zain (2002:99) are:

a. Develop respect for other people’s opinions
b. Expanding knowledge
c. Getting used to deliberation and concessus in solving problem.

The most important of these methods is to encourage critical thinking skills.

As revealed by Davies (1981:302), “As an instructional strategy, discussion serves the following purposes. It ... encourages critical analysis of Assumptions and attitudes. “

Based on this ans various method of learning, two methods is combined in the Blended-learning model. In addition Dwiyogo also explain that “blended learning generate stronger feelings of communion among students than the traditional or fully online learning methods (Rovai and Jordan, 2004 dalam http://id.wikibooks.org/wiki/Pembelajaran_Berbasis_Blended_Learning [26 Februari 20113])”

In this model, e-learning based assignment method and the face-to-face discussion are combined and developed as follows:

a. Assignment Phase (cycle-1 act 1 on 4 September 2012)

1) Through the course’s teachers blog (Tarunasena2010’Blogs), each student is individually managed to get various problematic topic in Teaching History designed for each student (the topic details attached). Some students experiencing technical problems will get the topic by short messages services (SMS) in a communications network.

2) Most of the essays collected are in accordance with the requirements. Some of them are even more than five pages.

3) It must be made comprehensively based on resources from the library and accountable online resources. Six of the essay assignments collected are not equipped with literature sources.

4) In general, the assignment is successfully collected one day before the 3rd weeks meeting in softfile to the course teacher’s email address; six essays are collected via the teacher's email.
At this stage of this assignment a process online learning is occurred, through the teacher’s blogs and the assignment is collected by email to teacher’s email address. Sukarno (jurnal.fkip.uns.ac.id/index.php/pgsdsolo/article/download/77/52 [February 26 2013]) explained: “... the blended learning model refers to the integration or a mixture of the so-called e-learning, tools and delivery techniques to the traditional face-to-face teaching...”

b. Presentation/Discussion Phase

1) This phase is divided into three cycles with four action, which include:
   a) Cycle-1 action 2 (September 23, 2012)
   b) Cycle 2 action 1 (October 23, 2012)
   c) Cycle 2 action 2 (October 30, 2012)
   d) Cycle 3 action 1 (November 13, 2012)

2) The discussion duration is based on a growing issue. The more prepared and attractively presented essay, the more time the discussion process is.

3) The discussion assessment is based on the critical thinking skills criteria that are developed from Ennis opinion about Critical Thinking.

c. Final Evaluation Phase

1) At this stage, each student is tested to make essays questions through the Learning Management System (LMS) facilities at a specified time.

2) Partisipasi mahasiswa dalam proses ini meliputi kegiatan:

3) The student participation in this process includes:
   - Registration of course participants through LMS, which successfully enrolled 35 students.
   - Online communication among fellow students and with teacher.
   - Individual work and upload of the essays’ answer through LMS at a specified time. As many as 28 students were successfully uploaded the essays’ answers on the designated time. Seven students were failed to upload the essays’ answer, but handed in the answer in CD. All answers collected were in compliance with the criteria, including the references.

2. The Result of this (Three Cycles) Application of Blended Learning

Table 1.2
Development of Critical Thinking Skill Improvement.

<table>
<thead>
<tr>
<th>NO</th>
<th>CYCLE</th>
<th>ACTION</th>
<th>MEETIBF</th>
<th>ASSIGNMENT</th>
<th>SUBDESCRRIPTOR ACHIEVEMENT OF CRITICAL THINKING SKILL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0 0 0 0 13-15</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>0</td>
<td>9 2 0</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>0</td>
<td>11 2 0</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>9 4 0</td>
</tr>
<tr>
<td>5</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>7 3 1</td>
</tr>
<tr>
<td>6</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>33</td>
<td>5 0 0</td>
</tr>
</tbody>
</table>

Table 1.3
Critical thinking scoring level

<table>
<thead>
<tr>
<th>Critical Thinking Level</th>
<th>Subdescriptor or achievement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>13-15</td>
</tr>
<tr>
<td>Good</td>
<td>9-12</td>
</tr>
<tr>
<td>Enough</td>
<td>5-8</td>
</tr>
<tr>
<td>Poor</td>
<td>1-4</td>
</tr>
</tbody>
</table>
In the implementation, the actions undertaken result in increased achievement scores of critical thinking skills to the right as shown in Table 4.8. In the act 2 cycle 1, of the 13 students who actively discuss shows there are two students (15%) at the level of poor, nine students (69%) at enough levels, as well as two students (15%) at the level of good. At this level there are no students reached the excellent level of critical thinking.

In the cycle 2 action 1, there is an increase of the students active in the discussion, as many as 21 people. However in terms of the achievement of critical thinking skills, there are eight students (38%) at the level of poor, 11 students (52%) at the level enough, and two students (10%) at the good level.

In the cycle 2 action 2, there is a decline in the number of students who are active in the discussion, 13 students. In terms of the achievement of critical thinking skills, there are nine students (69%) on enough level, and four students (31%) at the good level. No students in the category of poor and excellent level.

In the cycle 3 action 1, the active student in the discussion is decline to 11 students. But the individual activities increased, because there are students who ask or expressing opinion more than once (marked with thick v mark on the checklist table). In terms of the achievement of critical thinking skills, there are seven students (64%) on enough level, three students (27%) on good level, and a student (9%) on the excellent level.

Thus it appears that the blended learning models developed in this study can enhance students’ critical thinking skills. This is in accordance with the opinion Jarkey (2012) about the beneficial of blended-learning:

This type of blended learning has the advantages of:
- encouraging students to work together and learn from each other outside of class.
- allowing you to assess any key misunderstandings and focus on addressing these in class time.
- ensuring that face-to-face time can be used for developing deeper understandings and higher order thinking about the topic, rather than ‘covering’ basic content.

3. The Obstacles and the solution

a. Some of the assignments, six of them, were not equipped literature sources. The solution was to remind all students attending the course to not forget to include the list of the literature on any upcoming assignments.

b. Approximately six essays were not successfully collected via the teacher’s email. The solution was using CD.

c. The essay questions producing through the Learning Management System (LMS) at a specified time span.

1) Registering the course participant via LMS that successfully enrolled 35 students from 36 college students participating in Problematika dalam Pembelajaran Sejarah (Learning Problems in History) course.

2) In the process of uploading essay answers through LMS, 28 of 36 students them managed to upload the softfile. Seven of them failed to upload due to Internet network.
technical problem. One person did not attend since the beginning of the term. For seven students who experience difficulty to upload the file were allowed to handed it in by CD.

3) In the discussion activity, although the quality critical thinking skills have increased, but the quantity tends to decrease. This is due to the course time which only two credits (2 x 50 minutes), and the most students only focused on their essay. This the obstacle that could not be resolved.

Conclusion

The classroom action research regarding the implementation of blended learning models to improve critical thinking skills in the teaching history in three cycles has produced several conclusions as follows:

First, during the planning phase the researcher had a discussion with the collaborators about the learning process plan that will be held, with regard to the application of blended learning to improve critical thinking skills in the teaching history. In addition, syllabus, teaching events unit, format field notes, observation checklist, as well as the learning management system (LMS) are prepared by using Moodle software provided by the Directorate of TIK UPI. LMS, in addition to the function as an evaluation tool, also serves as an observation tool of the learning process through e-learning.

Second, after going through three cycles, the implementation of blended learning model have succeeded in increasing the critical thinking skills in the Problematika dalam pembelajaran sejarah (Problems in the teaching history).

Third, the obstacle emerged in this study, especially the technical obstacles on the essay assignment that must be collected online, has been solved by using CD. While the obstacle of time allocation could not be resolved.

Below are some suggestions for some parties relating to the research result of the application of blended-learning to improve critical thinking skills in the teaching history in the Problematika dalam pembelajaran sejarah (Problems in the teaching history).

First, for the History Education Department) to make the TIK course in Teaching History as a compulsory subject. This is to enhance the students’ ability for an effective and efficient access to resources. This will support the student in other courses, and their future working world.

Second, students should use e-learning as an alternative source and learning media that will develop their critical thinking skills, and also the students in schools where he works.

Third, the lecture of Problematika dalam Pembelajaran Sejarah (Problems in Teaching History) should use this blended learning for the teaching process as an alternative learning model that can develop students thinking skills.

REFERENCES

Ahmad, K. Hj. (2002). *Tahap pemahaman konsep dalam pembelajaran Sejarah*. Tesis Sarjana: UKM


