

Developing and Improving the Quality of Learning Process in Higher Education By E-Learning (Moodle – Forum Software)

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Abstract: - Information technology eliminates the limitation of space and time that restricts the implementation of education, especially in higher education. One of the methods used to eliminate the problem is software of Moodle for Forum program. In Moodle – Forum a lecturer and students can teach, learn, and discuss the material of course without face to face. The purposes of the research are to understand the implementation of Moodle – Forum tried in STIE Perbanas Surabaya in accounting theory and accounting ethic courses and to know opinions of students attending courses on the implementation of the software. Methodologies used in the study are observation and involvement in the courses using the software and investigating students' opinions by questionnaire about the implementation of the software in courses. Students as respondents are one hundred and eight. The result of the study indicates that the learning process in higher education using Moodle – Forum software will develop and improve, especially in eliminating the limitation of space and time. The result also suggests that the minimal implementation in the course is twice in a semester and an advanced server is needed for a good implementation of the software.

Keywords: Information Technology, Moodle – Forum, asynchronous, accounting courses, student participation

I. INTRODUCTION

Now the information technology is an important tool in learning process. Almost all learning processes have used the information technology. Besides simplifying the implementation of learning process, the information technology is also a tool used to eliminate the limitation of space and time that restricts the implementation of education, especially in higher education. The information technology can help the implementation of the learning process without face to face interaction. One of the soft wares of the information technology used to help the learning process without face to face is Moodle – Forum soft ware. Now this soft ware begins to be offered to the lecturers to be implemented in courses.

The study is the development of the author's previous study on the implementation of learning process in higher education curriculum. The research purposes to understand the effectiveness of the implementation of Moodle – Forum soft ware to help the learning process of the higher education. The study wants to know opinions of students attending the courses on the implementation of the software.

II. LITERATURE REVIEW

A. Electronic technology as a learning tool and source

Globalization era has forced nations to see to information technology. For the nations, information technology is an important tool to improve international relationship. Especially, electronic technology can be used to accelerate the education improvement [1]. The evolution of modern information technology used in learning process has developed the traditional learning system. In the conventional learning process, the education is implemented in a special space and time. The traditional learning process doesn't be implemented if the lecturer can't be present in the class. It's a big problem in the conventional learning process.

But now the problem can be overcome. The information technology eliminates obstacles and difficulties of the learning process if the lecturer don't present in the class. By the information technology, the learning process can be performed without face to face interaction. Distance learning is now a growth industry in higher education. As new and more sophisticated educational technologies are developed, universities and colleges have the opportunity to expand the scale and scope of their operations [2].

Now, students also can look for knowledge without lecturer. By an information technology, students can obtain it from internet. Learning orientation is moved from teacher oriented learning to student centered learning. Shifting the paradigm changes educational orientation so can deliver high educational graduate to compete in globalization era. Students much use anything in their around as a learning source. Teaching is about providing opportunities for students to learn [3]. The electronic technology is also changing how we learn. Essentially, the human brain learns by processing information received through sensory channels from a vast array of sources [4].

B. Learning Process in Higher Education without face – to – face interaction

Now with the information technology, the learning process in higher education institution can be performed without face – to – face interaction. The learning process by face – to – face interaction is often expensive and not efficient, even ineffective.

One of the technologies preparing a tool or software for learning process without face – face interaction is Moodle – Forum software. The forum module is an activity where students and teachers can exchange ideas by posting comments. Forum posts can be graded by the teacher or other students. A forum can contribute significantly to successful communication and community building in an online environment. The education institution can use forums for many innovative purposes in educational settings, but teaching forums and student forums are arguably the two more significant distinctions [5].

Moodle – Forum is media where a lecturer can send his/her learning message by on line and students can ask or provide responses to the lecturer about learning materials. If the learning process concentrates in students, students or student groups having a task to present their presentation can use Moodle – Forum as a tool to deliver learning outcomes and other students or students' groups can ask questions and provide feedback or opinion. The lecturer can also give an explanation about the material discussed by students. By Moodle – Forum software the learning process can be performed without face – to – face interaction.

Moodle – Forum software is a kind of asynchronous communication tool. It's means that the implementation of Moodle – Forum doesn't be performed in the same time. Because Moodle – Forum is asynchronous, in a discussion students have much time to prepare questions or answers. They can design and rewrite until they are satisfied with the results. Many researches explained that students more willing to participate in asynchronous forum than to speak in synchronous forum in the class. For students not having a good language or shy students Moodle – Forum software gives many times to students to prepare or make their writing or response.

C. The advantages of Moodle – Forum as learning

Different from other information technology systems like Yahoo Groups, Gmail Groups, Moodle software is specific software for learning. This software can be free downloaded. Moodle software has some programs among others is Moodle – Forum. Moodle – Forum is designed for learning without face to face interaction. Moodle – Forum is not just e-mail media. Moodle – Forum display is shown in the picture below.

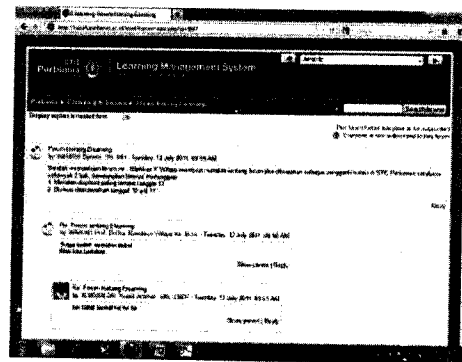


Fig. 1 Example of Moodle – Forum

III. RESEARCH METHOD

The study is an exploratory study. The aim of the study is to get information about the implementation of learning process in higher education by Moodle – Forum. This information can be used to make policy interrelating with the learning process in higher education.

A. Data collecting method

In this study, the observation method is performed to understand the implementation of learning process by Moodle – Forum. Furthermore, to understand the students' opinions and suggestions, the study uses questionnaire. The respondents are students of STIE Perbanas Surabaya attending lectures that using Moodle – Forum as a learning medium. The lectures are Accounting Ethic and Accounting Theory. One hundred and eight students are the respondents in the study. The questionnaire answers are used to know students' opinions and suggestions toward the implementation of Moodle – Forum.

B. Students' Characteristics Data

The study also observes the characteristics of the students' respondents. The students' characteristics observed are about gender, CGPA, comprehension to access to STIE Perbanas web, and how many time and where the students access the e-learning program.

C. Statistical Method

The study uses SPSS program to analysis and know data and information from respondents.

IV. IMPLEMENTATION OF MOODLE – FORUM AND DISCUSSION

A. The Implementation of Moodle Software in Higher Education Learning Process

STIE Perbanas Surabaya as a higher education institution has website named www.perbanas.ac.id. In this website there are some programs: news, web-mail, student information system, e – learning, and e – library.

the use of space and its facilities because the learning process is not performed in the class.

D. Difficulties and Obstacles of Moodle – Forum Implementation

Beside of Moodle – Forum advantages there are some difficulties and obstacles of Moodle – Forum implementation. There are:

1. The difficulties:
 - a. If the server of information technology is trouble in connection, the learning process will be disturbed.
 - b. Because the discussion is carried out only by the chair of student's groups there are many complains of the member's groups that fell excluded in the discussion process.
 - c. Although e-learning software, especially Moodle – Forum, is available in STIE Perbanas Surabaya, many lecturers don't utilize the program.
2. The obstacles:
 - a. The consequence of the trouble in the server, then there is the obstacle or barrier in the fluency of learning process.
 - b. Because the discussion only performs between the group leaders, many group members only act as spectators or watcher.
 - c. Because many lecturers don't utilize Moodle – Forum, then the implementation of e-learning program is overall obstructed

E. Opinions and Suggestions from students

Total of students attending Accounting Ethic and Accounting Theory courses using Moodle – Forum in 12th meeting in even semester 2011 – 2012 are one hundred and seventy five. From one hundred and seventy five students is taken one hundred and eight as research samples.

F. Summary

The research result indicates that the implementation of the learning process in higher education without face – to – face interaction is one of the ways of a successfulness of the learning process. The successfulness depends on the student understanding about the information technology. Beside the student understanding about the information technology, the success of learning process without face – to – face interaction depends on an availability of advance software used for the learning process without face – to – face interaction. One form of software to learn without face – to – face is Moodle – Forum software.

1. Students Character

Table 1 shows the samples' character interrelated with the information technology.

- Seven opinions and suggestions explain that it is better if the lecturer mediates if there is a prolix

discussion, not only he/she gives the explanation in the end of the discussion.

TABLE 1
STUDENTS CHARACTER

Gender	Respondents	%
Male	32	29.6
Female	76	70.4
	108	100
CGPA	Respondents	%
Not answer	27	25.0
2.00 – 2.49	1	0.9
2.50 – 3.00	8	7.4
3.01 – 3.50	45	41.7
3.51 – 4.00	27	25.0.6
	108	100
Knowing web of STIE Perbanas Surabaya	Respondents	%
Yes	108	100
No	0	0
	108	100
Knowing web of e-learning	Respondents	%
Yes	108	100
No	0	0
	108	100
Many times to access e-learning per week	Respondents	%
1 time	1	0.9
2 – 3 times	25	23.1
4 – 5 times	37	34.3
> 5 times	45	41.7
	69	100
Places to access e-learning	Respondents	%
1. House	39	36.1
2. Campus	34	31.5
3. Internet Rentals	3	2.8
4. House & Campus	14	13.0
5. House & Int Rent	1	0.9
6. Campus & Int Rent	3	2.8
7. House, Campus & Int Rents	14	13.0
	108	100

2. Student's Opinion and Suggestion about the implementation of Moodle – Forum

In the last meeting, the students are asked to answer a questionnaire about their opinions and suggestions of the implementation of Moodle – Forum in accounting course. The Opinions and the suggestions of students as followed:

a. Opinions

Students' opinions about Moodle – Forum are tabulated in table 2.

TABLE 2
STUDENTS' OPINION ABOUT MOODLE – FORUM

Statements about Moodle – Forum	Strongly agree and agree
The learning process by Moodle – Forum can help to understand the material course without face – to – face interaction	24.1% strongly agree
	65.7% agree
Preparation for asking or give opinion and feedback by Moodle – Forum is better than learning in a class	38.9% strongly agree
	59.3% agree
The learning process by Moodle – Forum improves coordination in student group	19.4% strongly agree
	44.4% agree
Discussion in learning process by Moodle – Forum is going more deeply than discussion by face – face interaction	13.9% strongly agree
	46.3% agree
The learning process by Moodle – Forum is more efficient than the conventional learning process	39.8% strongly agree
	48.1% agree
We isn't difficult to implement learning process by Moodle - Forum	22.2% strongly agree
	67.6% agree
Now the learning process by Moodle – Forum is most important and useful to support the success of the learning process in higher education institution	37.0% strongly agree
	53.7% agree
It's better if the learning process by Moodle – Forum in STIE Perbanas performs twice in a semester	48.1% strongly agree
	49.1% agree

The TABLE 2 explains that many respondents agree with the implementation of e-learning using Moodle – Forum.

b. Suggestions

The suggestions from students are one hundred and thirty three. There are some students giving more than one suggestion. The suggestions can be grouped as follows:

- Sixty three opinions and suggestions suggest that Moodle – Forum is implemented in every course minimal once in semester, because it can save cost and more efficient. The student understanding about material course is better because the implementation of course by Moodle – Forum is longer than the face – to – face course.
- Thirty four opinions and suggestions explain that the implementation Moodle – Forum is need to be supported by good server and sophisticated system, so the users or the students is comfortable in discussion.
- Twenty nine opinions and suggestions suggest that in discussion all members of group can ask and give opinion, not only the chairman of the group.

From the observation and the answer of questionnaire to the students it is known that 88% - 98% the students agree that:

- a. The learning process by Moodle – Forum can help to understand the material course without face – to – face interaction
- b. Preparation for asking or give opinion and feedback by Moodle – Forum is better than learning in a class
- c. The learning process by Moodle – Forum is more efficient than the conventional learning process
- d. Implementation of learning process by Moodle – Forum is not difficult
- e. Now the learning process by Moodle – Forum is most important and useful to support the success of the learning process in higher education institution
- f. The learning process by Moodle – Forum in STIE Perbanas is performed twice in a semester

Although the students argue that Moodle – Forum is very usefulness in the learning process, there are some difficulties in the implementation. The difficulties are:

1. If the server of information technology is in trouble in connection, the learning process will be disturbed. Because of that it is needed early to prevent problems in connection of information technology.
2. Because the discussion is carried out only by the chair of student's groups there are many complains of the member's groups that fell excluded in the discussion process. The solution of the problem is by displaying the name of member's group asking or giving an opinion through the chairman of the group.
3. Although e-learning software, especially Moodle – Forum, is available in STIE Perbanas Surabaya, but many lecturers don't utilize the program. The management of STIE Perbanas Surabaya must obligate the lecturer to use the Moodle – Forum in his/her learning program.

Based on observation during the implementation of the learning process without face – to – face and accordance with opinions and suggestions of the students, it is expected that:

- Moodle – Forum is implemented in every course minimal once in semester, because it can save cost and more efficient. The student understanding about material course is better because the implementation of course by Moodle – Forum is longer than the face – to – face course.
- The implementation Moodle – Forum is need to be supported by good server and sophisticated system, so the users or the students is comfortable in discussion.
- In discussion all members of group can ask and give opinion, not only the chairman of the group.

- It is better if the lecturer mediates if there is a prolix discussion, not only he/she gives the explanation in the end of the discussion.

V. CONCLUSION

Based on the research result toward the implementation of the learning process in higher education with using Moodle – Forum software, can be concluded that:

- a. Moodle – Forum is an efficient information technology tool for learning process in higher education. The software is cheap because this software can be free downloaded. Then Moodle – Forum can be effectively used in the learning process without face – to – face.
- b. But the learning implementation with Moodle – Forum can be performed well then the students that attend the course with this software must understand the information technology and Moodle - Forum must be supported by server and the advance information technology.
- c. The implementation of the learning process will effectively perform if in discussion all members of group

of the students can ask and give opinion, not only the chairman of the group. It is better if the lecturer mediates if there is a prolix discussion, not only he/she gives the explanation in the end of the discussion.

- d. The higher education institution must obligate the lecturer to use the Moodle – Forum in his/her learning program.

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