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The Ability of Lecturers to Use Online Learning Approach Based on LMS Moodle

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***Abstract*—This paper aims to reveal information regarding the results of research on the ability of lecturers to use the online learning approach based on LMS Moodle that is reviewed from the stages of learning, namely: (1) pre-instructional or preliminary stages, (2) instructional stages, (3) evaluation and feedback . The population of this study is all lecturers who teached MKDK courses at Padang State University, while the sample of this study using the proposionaterandome sampling method. The research data was collected using a Likert scale model questionnaire with 5 alternative respondents' answered, then the data were analyzed using the average formula. The results showed that in general the lecturers were less able to use the online learning approach based on LMS Moodle. So that it takes effort to improve the ability of lecturers to use the elearning approach based on LMS Moodle.**

Key Words: Elearning, Online Learning, Learning Stages, LMS Moodle

I. INTRODUCTION

The our education era currently is facing various challenges to anticipate the development of globalization in the education area. The development of globalization was triggered by the massive development of information and communication technology (ICT), so that the world of education must prepare its human resources who are able to face the globalization of education that can change drastically.

The paradigm shift of learning from conventional or traditional learning (face to face) to online learning (non-face to face) is inseparable from the influence of globalization of education triggered by the development of information and communication technology. Learning that should only be doing in the classroom with the set time, now the learning service can be doing without being bound by space and time and the acquisition of unlimited learning material. A teacher can provide subject matter from anywhere. Likewise, a student can take part in learning from anywhere.

The reality of online lectures or e-learning which has recently become a national conversation and entered into the executive realm, this indicates that the paradigm of learning innovation is getting very serious attention by the government as evidenced by the launch of an online learning system program (SPADA) by The Ministry of Research, Technology and Higher Education in 2013.

This policy certainly affected the system of education at the grassroots level, namely universities, which are now also trying to implement this learning innovation. Efforts to optimalize the use of elearning at Padang State University were also manifested in the 2015 UNP Academic Regulation book. The results of [1] show that there are still a few UNP lecturers who utilize e-learning in learning activity. The e-learning feature used is still limited to uploading lecture material, syllabus only. In line with the results of observations made by the UNP Information and Communication Technology Center (PTIK) unit about the use of e-learning, only a portion of lecturers used e-learning in the lecture process. Some of that even in using e-learning there are still many who only post lecture material in ms. word format or pdf then students are told to download and study the material. This is nothing wrong but actually deviates from the naturalism of online lectures where ideally there should be interactions that occur between students with lecture material, interactions between students and students and the interaction between lecturers and students.

In designing innovative learning activities, lecturers must have an understanding of the stages of learning, namely: preinstrucsional (introduction), instructional (core learning activities), an evaluation and learning follow-up. In order for the lecture stage to be carried out effectively, the lecturer must also have the ability to use tolls that can be integrated in the UNP e-learning, for example how to provide space to fill attendance lists online as a student administration, delivering interesting subject matter using power point , e-book, video, audio, etc., others how to design evaluation tools such as online examinations, and so on. Thus, it is fitting to conduct an analysis of the ability of lecturers to use UNP's e-learning, which is alleged to be a factor that has not been optimal in the utilization of UNP's e-learning. So that this finding can later be used as input or reference for Universitas Negeri Padang in an effort to improve the learning online system.

The lack of theory about e-learning design and the absence of studies related to how to design learning based on the stages of learning is also one of the factors that weaken the understanding of the UNP MKDK lecturers in utilizing this e-learning Based on LMS Moodle.

Based on these problems, researchers are motivated to analyze the ability of lecturers to use the e-learning approach in

MKDK courses through a research. The formulation of the problem in this study is how the ability of MKDK UNP Lecturers in using the e-learning approach based on LMS Moodle seen from the learning stages, namely: (1) pre-instructional (preliminary), (2) instructional (core learning activity), (3) Evaluation and learning feedback.

II. RESEARCH METHOD

This research is a quantitative research with a descriptive approach. This study will describe the ability of lecturers to use the e-learning learning approach based on LMS Moodle. The population of this study were 104 lecturers, while the sample of this study was 64 people taken by the proposionate stratified random sampling method. The research data was collected using a Likert scale model questionnaire with 5 alternative answers to respondents who had tested their validity and reliability, then the data were analyzed using the average formula.

III. RESEARCH RESULT

The results showed that the ability of lecturers to use elearning at the pre-instructional stages in learning was categorized as under previllage with an average score of 2.96. Meanwhile, the ability of lecturers to use elearning at the instructional stage in learning is also categorized as low with the average score of 3.34. While the ability of lecturers to use elearning at the stage of evaluation and feedback in learning is categorized as being able to use the elearning-based learning approach with the acquisition of an average score of 3.63.

It can be seen that in the learning stage (pre-instructional, instructional and evaluation and feedback), lecturers are categorized as less capable in using the elearning-based learning approach with an average score of 3.34. However, if viewed further based on the acquisition of the results of the above research, it can be seen that in the evaluation learning phase and the follow-up the highest score from the other stages was 3.63. While the lowest is in the pre-instructional stage with a score of 2.94.

IV. DISCUSSION

Conceptual approach in managing the teaching and learning process is closely related to the preparation of learning designs. The design of the learning should consist of stages of learning. [2] mentions "in general there are three stages in the learning strategy, namely the preliminary stage (pre-instructional), the stage of delivery of learning (instructional) and the stage of assessment and follow-up." The description of the three stages is:

In this pre-instructional stage there were several activities carried out and needed a design. This stage is the initial stage of the teaching and learning process, serves to direct students to follow the teaching and learning process. The learning design at this stage starts from attendance, apperception, and exploration.

Instructional stage is the core stage in learning activities, where this activity is in the form of delivery of subject matter that leads to the achievement of specific instructional objectives optimally. The activities carried out at this stage include the formulation of specific instructional objectives by taking into account the syllabus and curriculum as well as the basic competencies of students who are expected to of course expect the quality or quality of a design. Learning objectives that are oriented towards achieving optimal learning outcomes are of course supported by other learning components that will be involved in presenting learning material, for example subject matter, media / tools used, methods, other learning resources and design time provided. In order for the learning design to have optimal usability for the achievement of learning objectives, the selection and determination of these components must be adjusted to the characteristics of the objectives to be achieved. In designing of instructional online learning using UNP's e-learning based on LMS Moodle, that needed the ability of lecturers that can be support the presentation of lecture material in digital learning format. For example, using the features that have been provided in the e-learning application or using various other tools and applications in making lecture material that can be integrated into the UNP's e-learning paltform so that the learning objectives can be accepted and understood by the students, so that the objectives expected learning. Bases on [3] "Having explored the nature of instructional design and of e-learning, and examined some associated terminology and concepts, we can now take a practical look at an instructional design process for e-learning. This process will consider everything from determining the context and curriculum, to preparing assessment tasks, topic design, and media preparation".

While the assessment and follow-up stages were carried out to determine the level of success of students in lectures. This assessment always plays an important role in all forms of effective teaching through the evaluation process. Aside from being a tool to find out the achievement of predetermined learning goals with the evaluation, it is expected that feedback will be obtained to improve and revise the teaching material or method. In line with opinion [4]Assessment that has been carried out will not be of much use without reflection on what has happened to improve the next steps.

In online learning, lecturers also need the ability to design this evaluation activity. Both for formative or summative evaluation. For example, how to design assessments so that the lecturer knows the level of student participation in online learning and the implementation of quizzes or tests and even for midterm or final semester examinations. lecturers must pay attention to the quality of the learning evaluation by utilizing features and applications that support online learning based on LMS Moodle.

V. CONCLUSION

Based on the analysis of the data obtained from the results of the study, it can be concluded that from the three stages of learning (pre-instructional, instructional and evaluation and

feedback) the lecturer has not been fully capable of using the elearning based on LMS Moodle.

Starting from the conclusions stated above, the lecturers should need to improve their ability to use elearning based on LMS Moodle so that it is expected to help improve the implementation of learning at UNP.

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