

The Comparative Study on Distant Learning Implementation Between Universitas Negeri Semarang and Kasetsart University

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Abstract - Universitas Negeri Semarang is really committed to becoming a University with an international reputation. One of the ways to achieve that is to conduct distant learning with its students during the work from home process in COVID 19 prevention. Universitas Negeri Semarang has developed *ELENA* (*elena.unnes.ac.id*) as its learning platform provided for both lecturers and students to interact within the context of learning process. Therefore, this study is aimed at comparing the distant learning system between Universitas Negeri Semarnag with its partnering university to develop *ELENA* to obtain a better distant learning system in Universitas Negeri Semarang.

Keywords: Distant learning, Higher education, Internationalization,

1. INTRODUCTION

Universitas Negeri Semarang is really committed to becoming a University with an international reputation. One of the ways to achieve that is to conduct distant learning with its students during the work from home process in COVID 19 prevention. Universitas Negeri Semarang has developed ELENA (*elena.unnes.ac.id*) as its learning platform provided for both lecturers and students to interact within the context of learning process. ELENA is designed based on Moodle as the course management system. Moodle is a free and open- source learning management system written in PHP and distributed under the GNU General Public License. Moodle was chosen as the engine for ELENA because it is a free and open sources platform. In addition, it is very customizable based on the needs of Universitas Negeri Semarang.

The lecturers and the students of Universitas Negeri Semarang have started using ELENA for various purposes such as facilitating learning process, assignment, quiz, midterm and final term assessment. The distant learning process by using ELENA is still relatively new for both most of the lecturers and students. Therefore, ELENA still requires further

development to make a better course management system to facilitate distant learning in Universitas Negeri Semarang.

2. ONLINE LEARNING

Online learning and training are increasing used globally to reduce the temporal and spatial problems found on offline or classical form of education (Panigrahi Et al, 2018). Online learning is conducted in two modes—in synchronous and asynchronous environments (Jolliffe, Ritter, & Stevens, 2012). There are several advantages related those two modes. The asynchronous modehas the primary benefits of accessing instructional content at their own pace, having large scale reach, and content standardization. Online learning is also advantageous for students as they can learn at their own pace with the availability of online materials. In addition to those benefits of online learning, there are several challenges related to online learning. One of the primary challenges is the high attrition rate (Perna et al., 2014). Keeping users registered and involved in the online learning is achallenging job because of the missing or limited personal touch by the instructor. The learning involvement which is an important precursor for learning achievement is lower for technology-assisted learning than direct learning (Hu & Hui, 2012). The achievement of the distant learning depends on whether it has helped the pre - defined results. The factors affecting learning outcome in online environment are important for the organizations implementing online learning because once the factors are determined, they can be used to achieve optimized outcomes. The factors affecting the learning outcomes in online class are categorized based on individual and environmental, and the background differences.

3. STUDENTS' ENGAGEMENT

Student engagement consists of the period and endeavor of the students on the online learning activities to accomplish the pre - defined instructional achievement and is believed as a representation for instructional achievement (Pye, Holt, Salzman, Bellucci, & Lombardi, 2015). Therefore, students' learning efficiency and satisfaction must be considered when planning systems and providing approaches that enable, inspire, and incentivize their engagement (Hu & Hui, 2012). Various personal and environmental factors contribute to the learning engagement. They are: motivation, focus, and design intervention. The purposes of this present study are as follows:

1. To describe the implementation of the implementation of the distant learning system in Universitas Negeri Semarang
2. To describe students' responses on the usage of distant learning system in Universitas Negeri Semarang
3. To describe students' responses in the usage of distant learning system in its partnering university

4. METHOD

This study uses a mix method research approach with a survey research design described by Sugiyono (2015) and a case study. According to Gay & Diehl (1992), survey research methods are a general method of research that uses questionnaires and interviews as instruments to collect data. Zikmund (1997) added that the survey research method is one of the research techniques in which information is collected from a number of samples in the form of people, through questions. Bailey (1982) argues that the survey research method is a research method in which the data collection technique is done through questions - written or oral. Survey research is divided into two based on its purpose; 1) descriptive survey that aims to provide an overview / explanation of something and 2) analytic survey that aims to conduct an analysis (Soehartono, 2000, 54). Descriptive survey is carried out with the aim to present a picture of a phenomenon. Descriptive surveys use data collection techniques such as interviews, questionnaires, or observations. Statistics used to analyze data in descriptive surveys are descriptive statistics (central tendency, size of distribution, and size of correlation). Second, an analytical survey that aims to conduct an analysis of a phenomenon. Data generated by analytic survey methods in the form of quantitative data. The purpose of the analytic survey method is to draw conclusions and interpret data or test hypotheses. Thus, the

statistics used are inferential statistics. This present study uses descriptive survey to explain the implementation of distant learning in Universitas Negeri Semarang and its partnering university.

5. RESEARCH DATA

The data of this study consists of qualitative and quantitative data. The qualitative data are in the form of the text as the results of the face – to – face interview the stakeholders of distant learning in Universitas Negeri Semarang and its partnering university. The quantitative data are the responses from the survey or the questionnaire which will be analysed by using descriptive statistics data. The data are gathered using questionnaire, focus group discussion, and observation on the implementation of the distant learning in Universitas Negeri Semarang. The questionnaire is mailed to the universities and the university is given one month to complete the questionnaire. To review and recheck the answers given on the questionnaire, a live focus discussion group is held between the researchers and the university. The results of the questionnaire and the recording and notes from the focus group discussion are then analyzed to perform a triangulation on the data to increase its trustworthiness.

6. DATA COLLECTION TECHNIQUE

The data in this study are gathered in these following steps: Observation will be conducted at the Universitas Negeri Semarang and its partnering university. The observation will focus on how the universities implement the distant learning process. Interview The instructor, curriculum designer, and the head of international class program will be interviewed. The aim of the interview to the curriculum designer and the head of international class program is to gather the data on the distant learning process. Questionnaire These following questionnaires will be used in this study: 1) closed ended questionnaire using Likert Scale, and 2) open – ended questionnaire to explore deeper regarding the nature conservation in its learning process. The data from those instruments will be triangulated to get authentic data.

Research Process

The research process can be described as follows:

1. The researchers design a research proposal including research plan
2. The researchers review the related literature.
3. The researchers design questionnaire for the six fields.
4. The researchers design template and protocols for focus group discussion.

5. The researchers distribute the questionnaire to the universities
6. The researchers conduct FGD in two universities.
7. The researchers analyze the results of questionnaire and FGD
8. The researchers report the results and the analysis of the study

Results of the study The Implementation of the distant learning system in Universitas Negeri Semarang To accommodate the distant learning in Universitas Negeri Semarang, ELENA (elena.unnes.ac.id) is developed to accommodate the needs of learning process for both teaching faculties and the students. Since ELENA was developed by using Moodle as its course management system, it has all features in Moodle such as lesson. The following figure illustrates the lesson features in ELENA.

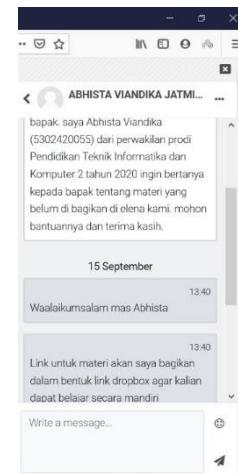
The screenshot shows a Moodle course page for 'Komunikasi Rekayasa dan Etika'. The main content area displays a lesson titled 'Ethics in Engineering'. Below the title, there is a brief description: 'Here is the presentation in Ethics in Engineering which covers: 1. system of moral principles; 2. Principles of conduct.' A note says, 'Please download the presentation and read it carefully.' At the bottom, there is a 'Best regards' message. The top navigation bar includes links for 'My courses', 'Bookmarks', 'Participate Electronically', 'PKKMB 2020', 'Dashboard', 'Courses', 'Task list', and 'Logout'.

The lesson feature allows the teaching features to summarize the lesson for the students. The following figure shows the file figure for ELENA.

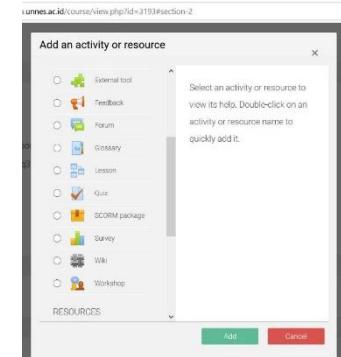
The screenshot shows a Moodle course page for 'Komunikasi Rekayasa dan Etika'. The main content area displays a file titled 'Ethics in Engineering'. Below the file name, there is a note: 'Dear students, Please download the learning materials for ethics in Engineering. Please read it carefully and independently discuss it with your friends.' A link 'Click BA_Komunikasi Rekayasa.pdf' is provided to view the file. The top navigation bar includes links for 'My courses', 'Bookmarks', 'Participate Electronically', 'PKKMB 2020', 'Dashboard', 'Courses', 'Task list', and 'Logout'.

The file feature allows the teaching faculty to upload the learning materials for the students. The students are also able to download the learning materials for their independent learning. By providing the learning materials for the students, the students are given opportunities to learn at their own pace, time, and space. The characteristics of ELENA is not only one – way communication. It also enables the two – way communication via chat feature. The students could ask the teaching faculty about the lesson that they find it difficult to understand via chat. Therefore,

the reciprocal communication is stil maintained between teacher and students. The chat feature is illustrated below:



In addition to those features, there are many features of ELENA that can be used to facilitate learning:



1. **External tool**
External tool is used whenever the teaching faculty wants to use external facilities such Zoom and it is integrated with the lesson on the ELENA
2. **Forum**
The forum features gives a *Facebook* like features that the teaching create a thread about the lesson of the day and the students can comment on it
3. **Quiz**
Quiz is a one of the most useful features in ELENA. It enables the teaching faculty to assess students' understanding in the lesson. This feature also gives automatic feedback or scores to the students and give the recapitulation of the scores to the teaching faculty. The quiz also has many choices of assessment format such as: 1) multiple choices, 2) short essay, 3) long essay, and 4) mix and match.

4. survey

survey is used to assist the teaching faculty to create an online questionnaire with wide arrays of topics starting from the content of the course, the delivery of the learning content, and such.

7. CONCLUSION

To examine the students' response to distant learning, three kinds of interaction during distance learning program as postulated by Moore (1989) were examined in this study: students' interaction with their peers, student and teacher interaction, and student and learning materials interaction. This study employed the revision of Zhang's scale of transactional distance (Zhang, 2003) by Paul., et al (2015) to collect the data. The instrument used 5 – point likert scale that the students fill in. The instrument was delivered by using Google forms.122 students were sampled to fill in the questionnaire above. Based on the results of the first item, 23,8 % really disagree, 41.8% disagree, 23.8% somewhat agree, 9% agree, 1.6% really disagree. On the 2nd item, 13.9% of the students really agree, 45.9% agree, 29.5% somewhat agree, 8.2% disagree, and only 2.5% really disagree. On the 3rd item, 23.8% really agree, 43.4% agree, 24.6% somewhat agree, 6.6% disagree, and 1.6% really agree. On the 4th item, 18% of the students really agree, 41.8% agree, 31.1% somewhat agree, 7.4% disagree, 1.6% really disagree. On this 1st item in Transactional distance between student and content, 11.5% of the students really agree, 45.1% agree, 39.3% somewhat agree, 3.3% disagree, and 0.8% really disagree. On this 2nd item in Transactional distance between student and content, 10.7% of the students really agree, 49.2% agree, 34.4% somewhat agree, 4.9% disagree, and 0.8% really disagree. On this 3rd item in Transactional distance between student and content, 18% of the students really agree, 46.7% agree, 29.5% somewhat agree, 4.1% disagree, and 1.6% really disagree. On this 1st item in Transactional distance between student and student, 19.7% of the students really agree, 39.3% agree, 24.6% somewhat agree, 13.9% disagree, and 2.5% really disagree. On this 2nd item in Transactional distance between student and student, 21.3% of the students really agree, 47.5% agree, 23% somewhat agree, 6.6% disagree, and 1.6% really disagree. On this 3rd item in Transactional distance between student and student, 23.8% of the students really agree, 51.6% agree, 20.5% somewhat agree, 2.5% disagree, and 1.6% really disagree. On this 4th item in Transactional distance between student and student, 23.8% of the students really agree, 51.6% agree, 20.5% somewhat agree, 2.5% disagree, and 1.6% really disagree. On this 5th item in Transactional

distance between student and student, 20.5% of the students really agree, 49.2% agree, 25.4% somewhat agree, 3.3% disagree, and 1.6% really disagree.

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