



Implementation of E-learning in Satya Wacana Christian Senior High School

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Abstract

E-learning is a form of technology implementation that is intended to assist the learning process which is packaged in digital electronic form in hopes that learning objectives are achieved. This research was conducted to find out the implementation of e-learning through lesson plan, learning implementation and evaluation. In addition, this study analyzes the level of perception of the use of e-learning through the analysis of technology acceptance models and objectives as well as analyzes the constraints of e-learning implementation. This type of research is a mixed method research. The population of this research is the Satya Wacana Christian high school teachers. Sampling using a saturated sample technique. Data collection techniques using documentation techniques, interviews and questionnaires. The analysis method uses Miles and Huberman model analysis and percentage descriptive. The results of the study show that the implementation of e-learning in Christian Satya Wacana senior high schools includes three stages, namely learning planning, learning implementation, and learning evaluation. The perception of e-learning learning in Satya Wacana Christian senior high school is very useful with the category of "strongly agree" and the implementation of e-learning in Satya Wacana Christian senior high school very easy to use is within the category of "strongly agree" so the purpose of e-learning in Satya Discourse Christian high school has achieved the desired goal. There are several hindrances to e-learning in Satya Wacana Christian senior high school, namely internal and external.

INTRODUCTION

Education is an effort that is consciously carried out in a planned and careful manner in order to create a healthy learning activities, process, and environment, so that students can actively develop the potential that exists within themselves.

To develop the existing potential, learning media is needed, namely e-learning media. E-learning is a system or concept of education that utilizes information technology in the teaching and learning process. Utilization of E-learning is expected so that learning is achieved better despite it being done remotely. Various types of e-learning platforms include googleclass, zoom room, and webex.

Based on initial observations at the Satya Wacana Christian High School, every teacher uses e-learning as a learning medium by using platforms such as googleclass and googlemeet. The reason for choosing said platforms is because it is easy to use, therefore, it is hoped that the learning process can run smoothly. However, in reality, evidenced by the fact that student learning achievement is still not good based on the average value of semester 1 of the 2020/2021 academic year and semester 2 of 2020/2021, it's clear that online learning platforms is not yet used optimally. In addition, there is a lack of human resources related to the use of technology and computers, and a lack of details in assignment announcements, often resulted in miscommunication between teachers and students, which resulted in unconducive learning process and learning objectives not being met.

Implementation of learning includes lesson planning, lesson implementation and learning evaluation. Planning includes making syllabus and lesson plans (Rencana Pelaksanaan Pembelajaran/ RPP) while the learning process is a process in which there are interaction activities between teacher-students and reciprocal communication that takes place in educational situations to achieve learning goals (Rustaman, 2010:461). In the learning process, teachers and students are two components that cannot be separated. Between the two components, mutually supportive interactions

must be established so that students' learning outcomes can be achieved optimally.

There are several components of the implementation of learning, namely learning objectives, learning materials, learning activities, learning methods used and learning media used. In this case, the media used is, of course, e-learning platforms by utilizing the internet as the main factor in the implementation of learning. After that, an evaluation will be carried out to determine the extent of students' knowledge and abilities about the material that has been studied. Evaluation is carried out on all aspects of education which includes tests and measurements. In addition to analyzing the implementation of e-learning in this study, it also analyzes the level of perception of learning, namely from the benefits, uses and objectives. The benefits and uses of e-learning are analyzed through the Technology Acceptance Model (TAM), which consists of two factors, namely TAM can explain that user perceptions of a system will affect the user's attitudes. In addition, it is also clearly illustrated that the acceptance of a technology is strongly influenced by its usefulness and ease of use. Both have a high determinant and validity that has been tested empirically (Davis, 1989).

Perceived usefulness is the level of individual belief that the use of one technology will improve their performance (Venkatesh and Davis, 2000 in Wijayanti). According to Davis (1989) a system is said to be useful by its users if the indicators are as follows: 1) Accelerate Work, 2) Improve Job Performance, 3) Increase Productivity, 4) Effectiveness, 5) Makes job easier, 6) Useful.

Meanwhile, perceived ease is the level of individual belief that the use of technology will be easier to complete the job (Venkatesh and Davis, 2000). The factors that influence the perceived ease of a system are: 1) Easy to learn, 2) Controllable, 3) Clear and understandable, 4) Flexible, 5) Easy to master, 6) Easy to use.

This is in line with Carolina Lita Permatasari's research (2018) on "*Acceptance of Financial Accounting Information System at Schools: Technology Acceptance Model.*" The results obtained from this study are the significant influence of perceived ease of use to perceived usefulness,

perceived usefulness to attitudes towards use; perceived ease of use to attitudes towards use; perceived ease of use to behavioral intention to use; and attitudes on behavioral intentions to use.

While the objectives could be found through the Minimum Completeness Criteria (Kriteria Ketuntasan Minimal/ KKM), in e-learning there are several obstacles that must be faced by teachers and students, namely internal constraints and external constraints. Internal constraint is in the form of inner barriers that the implementers feel, while external constraints are obstacles coming from outside environment of the e-learning users.

RESEARCH METHODS

This type of research uses a Mixed Method approach which is a mixed qualitative and quantitative research. The type of data used is primary data and secondary data. The population in this study is the Satya Wacana Christian senior high school teachers who carry out e-learning learning activities, totaling 35 teachers. The sample used is a saturated sample. Data collection technique uses observation, interviews, questionnaires, and documentation. The qualitative data analysis technique uses data analysis techniques on the Miles and Huberman model in Sugiyono (2017:334) and the quantitative approach used in this study is descriptive percentage.

For the purposes of quantitative analysis of research, the researchers used a linkert scale analysis, which provides five alternative answers to respondents from a scale of 1 to 5.

RESULTS AND DISCUSSION

Implementation of E-Learning Lessons

Implementation of learning includes lesson planning, implementation of learning, and evaluation of learning. Therefore, Ati Suparman (1997: 33) describes a cycle of learning activities; designing and developing learning systems, implementing learning system designs, and learning evaluation. In addition, according to research by Dian Kurniati (2014) on "*The Development of A Web-based Real Analysis Learning*

Model in the Form of E-learning", it shows that there are three stages of developing E-learning models in the Real Analysis course. It includes: (1) preparation, (2) implementation, and (3) analysis of the results of publication activities and implementation of electronic learning models in e-learning.

Based on the results of interviews with Satya Wacana Senior High School teachers and Figure 4.2, it can be concluded that subject teachers have done a planned e-learning lessons, through making syllabus and lesson plans (RPP). The syllabus includes several important sub-competencies, namely core competencies, basic competencies, indicators of competency achievement, subject matter, learning activities, assessment, time allocation, and learning resources. The learning implementation plan includes basic competencies, learning objectives, learning steps, and assessment of learning processes and outcomes.

In addition to planning, there is the implementation of learning and learning evaluation. Lesson plans at Satya Wacana Christian Senior High School includes learning materials, learning processes, learning methods, learning media, and learning assessments. Evaluation includes evaluation methods, namely providing oral and written evaluations, providing assessments of student behavior, providing assessments of students' mastery of knowledge, and providing assessments of participants' abilities in applying certain knowledge and tasks.

E-Learning Perception

The perception of e-learning is analyzed through the Technology Acceptance Model that the acceptance of a technology is strongly influenced by its usefulness and ease of use. Both have a high determinant and validity that has been tested empirically (Davis, 1989). This is in accordance with the research that is according to Carolina Lita Permatasari (2018) about "*Acceptance of Financial Accounting Information System at Schools: Technology Acceptance Model*." The results obtained from this study are a significant influence from perceived ease of use to perceived usefulness, perceived usefulness to attitudes towards use; perceived ease of use to attitudes towards use; perceived ease of use to behavioral intention to use;

and attitudes toward using on behavioral intentions to use. Supported by research conducted by Nurmaini et al, with the title “*Analysis of Acceptance of the Pekanbaru Labor Vocational High School E-learning system using the Technology Acceptance Model (TAM)*,” it shows that the acceptance of the Pekanbaru Labor Vocational High School E-learning system for the perception of Ease of Use is included in the “Very Satisfied” category with a percentage of 97,45%, and the perception of usefulness is included in the category of “Very Satisfied” with a percentage of 97,45%. It can be seen from the results of the study that for the acceptance of the E-learning system from the perception of ease of use and the perception of usefulness are in the “Very Satisfied” category.

The conclusion is that the implementation of e-learning using the Technology Acceptance Model (TAM) analysis of the perception of usefulness in Satya Wacana Christian Senior High School is included in the category of “Strongly Agree” on Easy to Learn 77%, Controllable 66%, Clear and Understandable 71%, Flexible 68%, Easy to master 74%, Easy to use 80%. This shows that the implementation of e-learning at the Satya Wacana Christian Senior High School is very useful with the category of “Strongly Agree.”

For the perception of ease of use in Satya Wacana Christian Senior High School, it is included in the category of “Strongly Agree” for the category Easy to Learn 57%, Controllable 63%, Clear and Understandable 60%, Flexible 60%, Easy to master 54%, Easy to use 52%. This shows that the implementation of e-learning at the Satya Wacana Christian Senior High School is very easy to use with the category of “Strongly Agree.”

With the data above, it is clear that the purpose of e-learning at the Satya Wacana Christian High School has achieved the desired goal even though there are still classes whose average value fits the Minimum Completeness Criteria (KKM) value with the average grade X BB being 83.52, class X MIPA 1 84 ,98, class XMIPA 2 86.20, class MIPA 3 82.31, class XIPS 1 75.00, class X1 BB 80.43 class XI MIPA 85.321 class XI MIPA 284.22 class XI IPS 78.35. When compared with the Minimum Completeness Criteria (KKM) for both class X 75 and class XI 80, the average

value of the mid-semester 1 of Satya Wacana Christian High School has reached or has been above the KKM value although there are still classes whose average value is exactly at KKM value.

E-Learning Constraints

E-learning constraints include internal and external constraints. Internal constraints include the ability to master technology, preparation of learning materials, and the ability to control classes; while external constraints include students' motivation in participating in learning activities, internet connection, availability of facilities and infrastructure, internet quota, training in using technology, and the availability of adequate equipment.

According to previous research by Shobich Ulil Albab (2020: 2) about their study about “*The Analysis of E-learning Constraints in the Era of Disruption at the Al-Islahiyah Singosari Integrated Vocational School, Malang*”, the educational obstacles in the era of disruption with online/online learning alternatives (e-learning) cannot be avoided because the obstacles that occur are mainly technical. These obstacles are mainly internet connection, quota owned, devices used, as well as an understanding of the material from the students' side. This is generally an obstacle in the online learning process at Al-Ishlahiyah Integrated Vocational School. This is in line with Lia Titi Prawanti's research (2020) on her study about “*The Constraints of Online Learning during the Covid-19 Pandemic*” which shows results that online learning in elementary schools experienced many problems. This problem is experienced by students, parents, and teachers, mainly caused by the lack of knowledge about information technology by students and parents of students. It caused the lesson to become boring and learning assessments that should be done directly cannot be done. The learning process became less effective because of these obstacles.

Based on the results of the analysis of internal constraints, which include the ability to master technology, preparation of learning materials, the ability to control the class, and external constraints such as student motivation in participating in learning, internet connection,

availability of facilities and infrastructure, internet quota, training in the use of technology, the presence of adequate equipment is a major obstacle faced by the Satya Wacana Christian Senior High School in a "Very High" category.

In conclusion, internal constraints, which include the ability to master technology, preparation of learning materials, the ability to control the class, and external constraints such as student motivation in participating in learning, internet connection, availability of facilities and infrastructure, internet quota, training in the use of technology, and the existence of adequate equipment are the current hindrances faced during implementation of e-learning in Satya Wacana Christian Senior High School.

CONCLUSION

Based on the results of the research and discussion that have been described, it can be concluded that the implementation of E-learning in Satya Wacana Christian Senior High School includes three stages; namely lesson planning, learning implementation, and learning evaluation. The perception of e-learning lessons at the Satya Wacana Christian Senior High School is very useful with the category of "Strongly Agree" and the implementation of e-learning at the Satya Wacana Christian High School is very easy to use with the category of "Strongly Agree". Therefore, it is concluded that the purpose of e-learning at the Satya Wacana Christian High School has achieved the desired goal.

There are several constraints to E-learning at the Satya Wacana Christian Senior High School, namely internal and external. Internal constraints consist of the ability to master technology, preparation of learning materials, ability to control the class, and motivation of students in participating in learning. While external obstacles include internet connection, availability of facilities

and infrastructure, internet quota, training on the use of technology, and the existence of adequate equipment. Some of the constraints mentioned above have been supported by descriptive analysis data which confirms that these constraints are very high obstacles to the implementation of e-learning.

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