The Effectiveness of History Learning Using a Learning Model E-Learning

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Abstract

The results of preliminary observations about the learning process at SMA 9 Semarang reveal that the school must utilize model-based learning or e-learning facilities to procure models. Despite having adequate e-learning resources such as hotspot areas, LAN, projectors, and computers, these tools must be employed more effectively in the learning process. The many advantages of the e-learning model, including enhanced engagement and accessibility of materials, have led the authors to be interested in experimenting with implementing e-learning in teaching methods at the school. This study aims to address several fundamental problems: (1) how the application of learning models on the lecture material of Colonialism and Imperialism in Indonesian West is implemented in Class XI Social at High School 9 Semarang, (2) how the implementation of e-learning materials on Colonialism and Imperialism in Indonesian West is carried out in Class XI social education at High School 9 Semarang, and (3) how effective is the use of e-learning materials on Colonialism and Western Imperialism in Indonesia in enhancing the learning of history in Class XI Social at High School 9 Semarang. These questions will guide the research to explore the potential benefits and challenges of integrating e-learning into the traditional teaching methods at the school. Through this study, the authors hope to provide insights into the effectiveness of e-learning in improving the educational experience and outcomes for students and identify best practices for its implementation in similar educational settings.

Keywords: Effectiveness, E-Learning, Colonialism, and Western Imperialism In Indonesia.

Introduction

Information technology (IT) is one of the rapidly developing technology sub-sectors, and its application is widespread today (Silfi, Arwin, & Rini, 2015). IT applications, such as multimedia and the web, in education have given birth to many breakthroughs in improving the efficiency and effectiveness of the learning process. Therefore, many countries are quick to invest in developing infrastructure for the use of IT in education. One of the breakthroughs that can be used to improve the quality of learning is e-learning. Many people use different terms for e-learning, but e-learning is learning that uses electronic services as a tool (Azhar. 2011; Mohamad. 2012). E-learning is a relatively new learning technology in Indonesia. Soekartawi (2003) stated that learning means learning with the assistance of electronic devices. So, in its implementation, e-learning uses writing, audio, video, or computer devices or a combination of the three. The rapid development of information and communication

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technology has encouraged various educational institutions to utilize e-learning systems to increase the effectiveness and flexibility of learning. Soekartawi (2003) stated in his research that the effectiveness of learning using the e-learning system tends to be the same. With conventional or classical learning, the advantages of e-learning are its flexibility (Kadek. 2015; Muslikhin. 2013). Through e-learning, learning materials can be accessed anytime and anywhere. In addition, materials that can be enriched with various learning resources, including multimedia, can be quickly updated by teachers.

The development of e-learning is still relatively new, resulting in the definition and implementation of e-learning systems being very varied, and there has yet to be a standard. Based on observations from various internet-based learning systems, the implementation of e-learning systems varies from simple ones, namely just a collection of learning materials placed on a web server with additional communication forums via e-mail separately, to integrated, namely in the form of an e-learning portal that contains various learning objects enriched with multimedia and combined with academic information systems. Evaluation, communication, discussion, and various other educational tools.

In this regard, teachers must have a broader and more comprehensive view so that the history learning process becomes more meaningful and enriches historical knowledge for students (Yudiono. 2010; Encep. 2011). Students are expected not only to have cognitive expertise but also to have assertiveness and psychomotor skills. One of the learning models that can realize this goal is the electronic-based learning model or e-learning. In this learning model, students are required to think critically, creatively, actively, and participatory (Nur, Supartono, & Sri. 2015; Yani. 2016).

As a result of initial observations regarding the learning process, SMA Negeri 9 Semarang has yet to use e-learning even though the facilities for the procurement of e-learning are adequate, such as a hotspot area, LAN, projector, computer, and so on. The many advantages of e-learning have caused the author to be interested in experimenting with this learning model at school. In applying this learning model, the researcher took the theme of the subject matter of Colonialism and Western Imperialism in Indonesia. The subject matter is taught in high school grade XI social studies semester II. The subject matter has much historical information obtained from the internet, attracting students to multiply information about the material; indirectly, students will learn and understand the subject matter. Based on the description above, the researcher is interested in conducting a study titled: The Effectiveness of History Learning by Using E-learning Materials on Colonialism and Western Imperialism in Indonesia in Class XI Social Sciences Students of SMA Negeri 9 Semarang.

Method

This study's research type is quasi-experimental design research, a methodology that allows for examining cause-and-effect relationships among variables. Unlike accurate experimental research, quasi-experimental designs lack random assignment but involve an experimental intervention and a control group to observe potential changes. Specifically, this study employs a Control Group Pretest-Posttest design, wherein measurements are taken before and after the intervention to compare the outcomes between the experimental and control groups.

The research was conducted at SMA Negeri 9 Semarang, a prominent public high school in the heart of Semarang City. This school is well-regarded in the community for its academic excellence and diverse student body. The precise location of SMA Negeri 9 Semarang is on Jalan Cemara Raya, in the Padangsari Village of the Banyumanik District. This area is known for its educational institutions and residential neighborhoods, providing a conducive environment for academic research. The choice of this location was strategic, ensuring accessibility and relevance to the study's objectives.

Results and Discussion

This study is an experimental research divided into two groups: the experimental and control groups. This research was carried out on February 6-18, 2013, at SMA Negeri 9 Semarang, where students in grade XI social studies performed administrative procedures. This class was taken by purposive sampling, which involves selecting a sample based on specific characteristics or criteria. The samples were obtained from homogeneity tests against the population, ensuring that the chosen participants represented the larger group. The data used for the homogeneity test is the historical report card score in the first semester. This provided a reliable measure of students' prior academic performance, ensuring that the groups were comparable. In addition, the number of students in the class is relatively the same, and other variables such as teachers, curriculum, and lesson times were controlled to ensure uniformity. The same teachers teach students, students get materials based on the same curriculum, and students get the same lesson time. Based on the purposive sampling technique in this study, the experimental groups were selected as class XI IPS 4 and class XI IPS 3 as the control class.

In principle, the experimental and control groups underwent the same two stages: learning and evaluation with tests. However, the learning model used was different between the two groups. The experimental class used e-learning, an innovative approach integrating digital technologies into the educational process, while the control class used a traditional lecture model. The teaching materials used were similar and focused on Colonialism and Western Imperialism in

Indonesia, ensuring that content differences did not influence the outcomes. The learning time for both groups was relatively the same, amounting to 6 hours of lessons with four meetings, including evaluation. Each hour of lessons they had a time allocation of 45 minutes, providing a consistent framework for both groups.

Based on the research conducted at SMA Negeri 9 Semarang on the Effectiveness of History Learning by Using E-learning Materials on Colonialism and Western Imperialism in Indonesia in Grade XI Social Sciences Students of SMA Negeri 9 Semarang, the results of the research are explained below, including the results of population data analysis, the initial stage analysis, and the final stage analysis. The initial stage analysis provided a general overview of the pretest results. The average score in the experimental class was 66.39, with a standard deviation of 6.49, the highest value being 80.00, and the lowest score 54.29. Meanwhile, the control class had an average score of 65.13, a standard deviation of 7.73, the highest score being 77.14, and the lowest score being 48.57.

The analysis of the post-test results showed significant improvements in both groups. The experimental class had an average score of 79.66, a standard deviation of 7.83, the highest score being 94.29, and the lowest score being 65.71. Meanwhile, the control class had an average score of 75.04, a standard deviation of 8.96, the highest score being 97.14, and the lowest score being 60. The results of the two-mean similarity test of the experimental and control groups for the pretest data indicated that the intelligence levels between the two groups were initially the same (t-count value = 0.73 < t-table = 2.033). This similarity in initial conditions was crucial for accurately measuring the learning model's effectiveness.

The similarity test of the two averages of the post-test data using the t-test showed a significant difference between the groups (t-count value = 2.265 > t-table = 2.033). The average learning outcomes of students in the experimental group, who used e-learning, were higher than those in the control group, who used the lecture model. This indicates that the e-learning model improved students' learning outcomes more effectively. This study found that the experimental group had a higher average score than the control group, suggesting that e-learning is an effective method for enhancing student performance in history.

Electronic-based learning fosters greater student motivation and active participation in the learning process. This is because e-learning requires students to be active and critical in sourcing historical information, leading to various positive outcomes: (1) increased critical thinking, (2) higher levels of activity and self-esteem, (3) enhanced self-confidence, (4) more profound understanding, (5) greater motivation, and (6) improved learning outcomes. Pavlik (1963) and Anwas (2003) have highlighted the positive impact of using communication and

information technology in education, noting that it facilitates the learning process for both students and teachers. Sutopo (2011:26-27) also outlined several advantages of e-learning: (1) students become more proactive in seeking learning resources, (2) students' understanding of materials becomes more independent of the teacher, (3) moderating facilities allow for accessible communication between teachers and students via the internet, regardless of time and place, and (4) learning resources can be accessed anytime and anywhere.

The continuation of e-learning research at SMA 9 Semarang is promising due to the available facilities, such as hotspots, LANs, projectors, and computers. However, successful implementation requires teachers to be proficient in using and guiding students with these technologies. During this research, the author faced challenges, such as students' initial reluctance to cooperate and adapt to the e-learning model, which differed from the traditional lecture-based approach they were accustomed to. These obstacles were addressed by explaining the concept and steps of e-learning with practical illustrations and motivating students by highlighting the advantages of being active and critical learners in the e-learning environment.

Conclusion

From the results of the research, data analysis, and discussion, the following conclusions were obtained: (1) History learning using e-learning material on Colonialism and Western Imperialism in Indonesia in grade XI students of Social Sciences High School Negeri 9 Semarang is better than the lecture learning model. The conclusion was drawn based on the post-test results; information was obtained for the experimental group with an average score of post-test = 85.29 and the control group 70.59. (2) Electronic-based learning can improve the learning outcomes of History in class XI of Social Sciences High School Negeri 9 Semarang in the 2012/2013 academic year; the average student learning outcome increased from 66.39 to 79.66 or a percentage increase of 20%. In other words, there is a significant relationship between e-learning and student learning outcomes.

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