Development Of E-Learning-Based Learning Media At Graha Nusantara University

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ABSTRACT
The rapid development of information technology in the age of globalization has enabled the development of better information services in education. One of the new innovations in the use of educational media and technology-based learning resources and information is e-learning. The term e-learning has a very broad meaning and many experts explain the definition of e-learning from different angles. E-learning, or electronic learning, is learning that uses electronic devices as learning media and the Internet for learning activities. The concept of e-learning has influenced the process of transforming traditional education into digital form, both in terms of content and system. In addition, internet media enables real-time or non-real-time interaction between teachers and students. In the current era of communication technology has experienced rapid development, the internet is one of the technologies that is currently developing very rapidly. The internet seems to have become a basic human need from the top to the bottom, from the elderly to the children, even the internet has also gone global so that this world feels without boundaries. We can get information and communication in an instant, even from parts of the world that are very far from where we are.

Keywords: E-Learning, Learning, Media Based On E-Learning


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INTRODUCTION

With the advent of e-learning as a form of innovation in learning, not only are students being guided through teaching materials, but a wide variety of prospective students are also undergoing change (Abuhmaid & Abood, 2020; W. N. W. Ahmad dkk., 2022; Ahmadipour, 2022). Peseta E-Learning also encourages students to actively engage in observation, demonstration and execution. In addition (Abbasi dkk., 2020; Akbari dkk., 2022; Straatmann, 2020), the materials can also be virtualized in different forms as attractive as possible according to your wishes, in order to make the students more comfortable with the learning process and not get bored easily (Adzifome & Agyei, 2022; Dratch dkk., 2023; Stacey, 2020). In addition, eLearning is also very suitable for use in online learning that does not require personal meetings between teachers and students.

Under the current circumstances, educators should maximize the continuity of student learning by utilizing internet access and e-learning as one of the learning media to maximize distance learning using online/online systems (Z. Ahmad dkk., 2023; Ampatzidis, 2019; Holik, 2021). We must try to take advantage of it. In addition, educators are also being forced to change their learning models, and strategies that are typically implemented in classical ways are becoming digitized (Adzifome & Agyei, 2022; Almujaiwel, 2018; Bhaskaran, 2023).

In general, there are several benefits of e-learning for the world education include:
1. Changes in learning culture and improving the quality of learning activities teach Improving Brand Image
2. Availability of extensive learning materials, which are easily accessible
3. Independent learning
4. Teaching effectiveness
5. Flexibility of place and time
6. Distribution speed
7. Cost savings
8. On-Demand Availability
9. Standardization of teaching
10. Flexibility of learning speed.
In essence, learning will shape learning and produce knowledge. The learning process is the attribution of several elements have a relationship to get a maximum result according to the purpose planned (Pane and Dasopang, 2017) in (Rosita Rahmawati, Eva Rosida, & Imam Kholidin, 2020). The use of internet technology in learning needs to be encouraged as one of the new innovations in the use of learning media and learning resources (Alabdulmohsin, 2020; Al-Qatawneh, 2020; Asif dkk., 2022). Various forms of applications and facilities available on the internet can be utilized optimally to improve the quality and quality of learning (Castro, 2020; Ertl dkk., 2021). Besides that, it can also facilitate learning activities when viewed from the aspect of media use. One of them is learning with e-learning.

Learning with e-learning is actually also a form of using IT-based or internet-based learning media. This means that e-learning will be one of the factors that can affect the quality and quality of student learning outcomes. Besides the advantages of the learning media aspect, the use of e-learning can simultaneously increase the quantity of interaction in learning activities between teachers and students, lecturers and students, because it is not limited by a strict time schedule. E-learning can be used as an alternative that can provide non-formal distance interactions to carry out learning activities by carrying out activities including obtaining learning materials, learning resources, guides or guidance or tutorials in stages.

**RESEARCH METHODOLOGY**

In the Method section, you explain clearly how you conducted your research order to: (1) enable readers to evaluate the work performed and (2) permit others to replicate your research. You must describe exactly what you did: what and how experiments were run, what, how much, how often, where, when, and why equipment and materials were used (Aliakbari & Mardani, 2022; Maheshwari dkk., 2022; Shrestha, 2019). The main consideration is to ensure that enough detail is provided to verify your findings and to enable the replication of the research. You should maintain a balance between brevity (you cannot describe every technical issue) and completeness (you need to give adequate detail so that readers know what happened).

Tips:
1. Define the population and the methods of sampling;
2. Describe the instrumentation;
3. Describe the procedures and if relevant, the time frame;
4. Describe the analysis plan;
5. Describe any approaches to ensure validity and reliability;
6. Describe statistical tests and the comparisons made; ordinary statistical methods should be used without comment; advanced or unusual methods may require a literature citation, and;
7. Describe the scope and/or limitations of the methodology you used.

In the social and behavioral sciences, it is important to always provide sufficient information to allow other researchers to adopt or replicate your methodology. This information is particularly important when a new method has been developed or innovative use of an existing method is utilized. Last, please avoid making a subsection in Method.

RESULT AND DISCUSSION

E-learning or electronic learning is learning that is carried out by utilizing the internet function in learning activities by making electronic facilities as learning media. Several definitions of e-learning can be put forward, including the definition of Jaya Kumar C. Koran (2002) e-learning as learning that uses electronic circuits (LAN, WAN, or the internet) to convey learning content, interaction, or guidance. While Dong (in Kamarga, 2002) defines e-learning as asynchronous learning activities through electronic computer devices that obtain learning materials according to their needs. From this definition it can be understood that learning with e-learning besides utilizing internet facilities, also uses hardware such as computers or laptops, networks that can connect between students and teachers. The relationship that is built is an educational relationship or interaction between the teacher and students. From this definition, it can also be understood the meaning of learning with e-learning. This learning requires its own supporting infrastructure, especially an internet connection. So that e-learning cannot be separated from the use of the internet in learning. Romi Satria Wahono stated that e-Learning Infrastructure: can be in the form of a personal computer (PC), computer network, internet and multimedia equipment. In addition to the facilities mentioned above, teleconference equipment is also needed if you want to do face-to-face distance learning via teleconference.
Characteristics of e-learning, among others. First, Utilizing electronic technology services; where teachers and students, students and fellow students or teachers and fellow teachers can communicate relatively easily without being limited by protocol matters. Second, Utilizing the advantages of computers (digital media and computer networks). Third, using self-learning materials stored on a computer so that teachers and students can access them anytime and anywhere if they need them (Al-Said, 2023; Ayaz & Gök, 2022; Burcă-Voicu dkk., 2022). Fourth, Utilizing the learning schedule, curriculum, results of learning progress and matters relating to educational administration can be seen at any time on the computer. In practice, e-learning requires technological assistance. Because of that, the term is known: computer based learning (CBL), namely learning that fully uses a computer; and computer assisted learning (CAL), namely learning that uses the main tools of the computer (Alam, 2023; Alargrami, 2020; Arcoverde dkk., 2022). Learning technology continues to evolve. However, in principle these technologies can be grouped into two, namely: Technology based learning and Technology based web-learning.

Technology based learning principally consists of Audio Information Technologies (radio, audio tape, voice mail telephone) and Video Information Technologies (video tape, video text, video messaging) (~ Lie dkk., 2020; Kurniawan dkk., 2021). While technology based web-learning is basically Data Information Technologies (bulletin boards, Internet, e-mail, tele-collaboration). In the implementation of everyday learning, what is often encountered is a combination of the technologies listed above (audio/data, video/data, audio/video) (Adjei & Behrens, 2023; Gagne dkk., 2018). This technology is also often used in distance education, intended so that communication between students and teachers can occur with the advantages of this e-learning technology.

CONCLUSION

Constraints in learning using e-Learning Constraints in implementing IT in the education sector include:

1. Managerial level capabilities in government, most of which do not have an information technology base, especially Internet technology
2. There is no strong commitment from the government which results in chaotic application of information technology, especially Internet technology in the educational environment.

3. The geographical area of Indonesia which is too broad and many islands so that the application of IT is not evenly distributed. There are still many facilities in schools that are inadequate for the application of IT.

4. Lack of awareness of school principals and teachers about the urgency of educational media, especially the internet.

SOLUTIONS

After discussing the many obstacles to implementing IT, Moerita offers several solutions to solving these problems, namely:

1. It takes commitment and seriousness from the government to apply IT in education because the government has a very important role in increasing the use of information technology and computers for the progress of the nation. Indonesia.

2. It is necessary to hold counseling, training and educating the public about the benefits of implementing IT, especially in the education sector, especially for teachers in schools so that they can manage educational media with IT so that they can manage it themselves without special personnel to maintain IT media and of course can save costs incurred by the school.

3. Principals and teachers should be aware of the urgency and benefits of using IT media in education.

4. The government must implement information technology and computer-based learning from an early age so that people of productive age can really take advantage of technology for the advancement of the Indonesian nation as a whole.

5. The government must assist in terms of infrastructure because most of it is the responsibility of the government except for areas that are difficult to reach by information technology, it is necessary to implement the use of alternative technological tools which are currently widely found.
The following is a table of the advantages and disadvantages of e-learning according to Engkos Koswara N, an Expert Staff for the Minister of Research and Technology for ICT.

Table 1. advantages and disadvantages of e-learning

<table>
<thead>
<tr>
<th>No</th>
<th>Media Name</th>
<th>Profit</th>
<th>Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Print</td>
<td>relatively cheap, easy to carry, easily available</td>
<td>no interaction, requires reading ability, no delay time</td>
</tr>
<tr>
<td>2.</td>
<td>Voic email</td>
<td>relatively inexpensive, easy to use; increase interaction</td>
<td>Limited length, no pictures</td>
</tr>
<tr>
<td>3.</td>
<td>Satelite video conference</td>
<td>easy to reproduce, has high realism video conference satellite image and sound elements, can be interactive</td>
<td>relatively expensive hardware, need scheduling</td>
</tr>
<tr>
<td>4.</td>
<td>Cable/broadcasttelevision</td>
<td>easy to use, easy to access, including sound and image</td>
<td>high production costs, requires hardware, no interaction, needs scheduling</td>
</tr>
</tbody>
</table>

These results are also inseparable from the shortcomings in learning implementation identified in Cycle I. These drawbacks include: Students have difficulty accessing websites due to slow internet connection speed, are confused because they are not used to learning, do not pay attention to their friends' answers, do not ask questions, etc. I am busy using it. Based on the results of this reflection, researchers improved several phases carried out in Cycle II, along with teachers' efforts to control and monitor the progress of the learning process, so that learning time management proceeds more effectively. rated student reaction to his development of web-based learning media using ucoz as very interesting, The study was successful in improving student learning outcomes. Of course, research on web-based e-learning learning media in Learning and Learning I degree programs is not without its shortcomings, but we do not intend to deny these shortcomings, but the study nonetheless has strategic value.
Conclusion
These results are also inseparable from the disadvantages in learning implementation identified in Cycle I. These drawbacks include:

1. Students have difficulty accessing websites due to slow internet connection speed, are confused because they are not used for learning, do not pay attention to their friends’ answers, do not ask questions, etc. I'm busy using it. Based on the results of this reflection, researchers improved several phases carried out in Cycle II, along with teachers' efforts to control and monitor the progress of the learning process, so that learning time management proceeds more effectively. need to do it. Survey-based student responses showed that school year, with an average of 76% of students liking her web-based e-learning learning media. It turns out that Through this web-based e-learning study, students can further develop their enthusiasm for learning Course I. However, students still need a teacher for every lesson.

2. Consistent with this study, student reactions to his development of web-based learning media using ucoz as very interesting, with an average rating of 81.62% for him. The study was successful in improving student learning outcomes. Of course, research on web-based e-learning learning media in Learning and Learning I degree programs is not without its drawbacks, but we do not intend to deny these drawbacks, but the study still has strategic value.

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