Emerging Issues in Educational Technology

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Abstract: The world of education is greatly influenced by advances in information and communication technology. (ICT). In recent decades, educational technology has developed rapidly, transforming various levels of education and learning methods. This article examines the latest educational technology issues, including innovations in software and learning platforms, ethical issues, the difficulties of implementing technology in schools, and how it can it has an impact on education policy. This study aims to identify problems, opportunities and consequences for future digital education using a more in-depth approach.

Keywords: Technology Education, Innovation, Merger Technology, Moral, Education Policy.

1. INTRODUCTION

Technology has become an important part of everyday life, including in education. The way we access and manage data has been transformed by technologies such as computers, tablets, and learning apps. These developments open up new opportunities to improve the quality of learning, access to education, and the effectiveness of teaching in education. Although educational technology has many advantages, there are also problems, such as limited access and social and psychological effects.

In this article, we will talk about emerging or emerging educational technology issues. We will concentrate on three main topics: how learning tools and platforms are evolving, how to use technology morally, and how it impacts educational policy.

2. REVIEW LIBRARY

Innovation in Tools and Platform Learning

Throughout human life, technological advances have brought about major changes, including in education. The education system that is different from before, which only relies on books and digital technology, has shifted. on vocabulary that is too monotonous. so that students consider learning to be boring. Teacher is center main learning. With use current technology, student learning outcomes can improve because learning can utilize the senses they in a way wide And accommodate various ability student (Tege, 2017, p. 185). Matter This in line with study Which state that utilization Technology can improve students' learning conditions because it can simplify and speed up work and improve students' ability to use technology (Suryadi, 2007, p.92).

Innovative learning technologies must be tailored to needs local and educational structures. In order for learning to take place well, policy makers Also must responsive. Maker policy see education as providers of goods and services to schools, often technology-based. They often   facing the fact that the school environment is also changing due to educational innovation.

New technology allows schools to reopen to learn about the world outside Which can bother environment social And physique. On moment that is the same when they include new stakeholders and actors into the education system, at least the education industry can include their own aspirations for a better future of education. Therefore, educational innovation should be considered as a change that includes all students, as well as the role of government (Suryadi, 2007, p.98).

Issue Ethics In Educational Technology

Various problems have emerged in the Islamic education system along with the progress of the world, especially the progress of technology. One of them is the emergence of complaints about ethical decline, such as individualistic, materialistic, and pragmatic traits. This is considered to be the result of a modern education system that only pursues material gain and ignores the principles of Islamic education (Muflihin & Madrah, 2019).

Technological innovations that are continuously created and updated, especially in the field of education, aim to function as a mediator in conveying knowledge to students through learning media. Educators can use this media to make materials more interactive and not monotonous, making students interested and remain enthusiastic about learning (Salsabila & Agustian, 2021).

Challenge In Integration Technology in School

Some problems that often arise in the field when using information communication technology (ICT) are as follows: First, lack of human resources.   (HR) Teacher Which proficient in use   ICT. The use of information and communication technology (ICT) in this place is certainly more than just having a laptop or computer. However, how can a teacher use these ICT devices as best as possible in the learning process? Studies show that teachers still use technology in schools.

Second, lack of awareness of the role of ICT in learning. Some teachers still believe that ICT is simply a choice to use or not. They claim that the use of information and communication technology (ICT) does not have a significant impact on the quality of classroom learning. The lack of use of ICT in school learning may be due to the lack of support from schools and the government for improving teachers' ability to use technology in their learning. Because improving the quality of education cannot only be achieved

through improving physical development infrastructure, high-quality teachers are an important part of human resources.

It is clear that increasing teacher capacity is not only achieved through the provision of curriculum and syllabus; increasing teacher skills in learning technology is also an important indicator. Currently, teachers must become technology-literate educators. If currently most teachers are still focused on using PowerPoint, for example, now is the time for teachers to upgrade to a higher level. One of the things that is currently being debated is the use of Google Apps for Education, which has proven to be very helpful in the learning process. Various schools and universities in Indonesia have used it.

Impact Technology Education to Policy Education

Challenges must be accompanied by solutions to overcome problems. Currently, the world's focus education is prepare generation Which capable compete in era industry four. According to the Minister of Research, Technology and Higher Education (2018), several things that must be prepared to face the industrial revolution 4.0 are as follows:

a) Planning a more innovative learning system to produce graduates who competitive and skilled, especially in matter literacy data, literacy technology, and human literacy;

b) Reconstruction of higher education institution policies that are flexible and responsive to the industrial revolution 4.0 to develop disciplines and study programs that cross disciplines.

c) Providing responsive, flexible and reliable human resources to face the fourth industrial revolution.

d) To improve the quality of education, research and innovation, it is also necessary to improve and develop education, research and innovation infrastructure.

3. METHOD

The purpose of this study is to find the latest issues that arise in educational technology. This study focuses on changes in learning tools and platforms, ethical issues, and how they impact educational policy. The descriptive qualitative method used emphasizes an in-depth understanding of current phenomena by conducting literature analysis, interviews with educational experts, and case studies of technology implementation in schools.

4. RESULTS

Innovation in Tools and Platform Learning

With the continuous development of educational technology, new tools and platforms are emerging, allowing for a more flexible and personalized approach to learning. Some of the key innovations currently under development include:

a. Learning Based on AI And Adaptive Learning

One of the latest trends in learning is the use of artificial intelligence (AI). AI-based learning platforms enable a more personalized learning experience where materials can be tailored to the needs and abilities of each student. Adaptive learning, which uses data to adjust the pace and type of material provided, increases the effectiveness of learning, especially for students with special needs or those with learning disabilities.

b. Augmented Reality (AR) And Virtual Reality (VR)

Augmented reality (AR) and virtual reality (VR) technologies enhance students' learning experiences by allowing them to interact with learning materials in a more immersive and contextual environment. For example, in science learning, students can use VR to conduct virtual experiments or in history learning, they can "visit" historical locations in person.

c. Platform Learning On line And Microlearning

Online learning like Coursera, edX, and Google Classroom have changed the way people learn. But microlearning—also known as bite-sized learning—is gaining popularity among adult learners and professionals because it provides lessons that are easily accessible anytime, anywhere in a short amount of time.

Issue Ethics In Educational Technology

With the rapid advancement in educational technology, many ethical issues have emerged that need to be addressed. Some of these include:

a. Privacy And Security Data

The collection and management of students' personal data, including demographic data and learning behavior, is required by digital-based education platforms. The problem privacy And security data become very important, especially Given the threat of data misuse and cyberattacks, digital education platforms must implement strict regulations to ensure that students' personal data is protected.

b. The Gap Access (Digital Divide)

Despite the fact that technology has a lot of potential to improve the quality of education, limited access to technology remains a major problem. Many schools still lack adequate access to the necessary technological devices, especially in developing countries. This leads to inequities in the learning opportunities that students have. Therefore, policies that aim to reduce these access differences are essential.

c. Attachment on Technology

Although technology can enhance the learning experience, there are concerns about become too depends to him. Studies shows that excessive use of digital devices can reduce students' ability to focus and think critically. In addition, increasingly digital-centric interactions have social effects, which can impact the development of students' social and emotional skills.

Challenge In Integration Technology in School

For maximize benefit education digital, There is a number of problem that need to be addressed when technology is introduced into the school environment.

a. Training Teacher

One of the major barriers to technology integration is the lack of adequate training for educators. Although many teachers have access to technology, they often lack the skills to use it effectively in their teaching. Therefore, ongoing, competency-based training programs are needed to ensure Teacher can use technology with the way that support student learning.

b. The infrastructure that inadequate

Despite increased school investment in technology infrastructure, many areas still face issues such as poor internet connections and inadequate devices. This can lead to inequities among local schools and hinder the effective use of technology.

c. Support Policy Education

Governments and educational institutions must change their policies to support the use of technology in the classroom. This includes policies that support the integration of technology into the curriculum, teacher training, and the provision of low-cost technology tools. In addition, policies related to the use of technology in examinations and learning evaluations must also be adjusted to these advances.

Impact Technology Education to Policy Education

With the development of educational technology, educational policies at various levels of government must be updated. Some elements to consider include:

a. Adjustment Curriculum

The education curriculum must be adjusted to support technology-based learning because of new technologies. Curriculum updates must take digital skills into account. Which must students have, such as the ability to use technological tools, digital literacy, and problem solving.

b. Policy Funding For Technology

Most educational institutions do not have sufficient budget to provide the necessary technology, especially in developing countries. With ensure funds For purchase device And training, the government should increase investment in digital education. In addition, collaboration between the public and private sectors can help lower the cost of technology access.

c. Standardization and Regulations

In addition, governments must create regulations that ensure that digital educational tools meet certain standards. These standards include ensuring that the apps, learning platforms, and devices used meet requirements related to content, interactivity, and accessibility.

5. CONCLUSION

Educational technology has great potential to improve the quality of education. in all over world. However, Despite its benefits, there are some problem that need to be addressed, from moral and accessibility issues to issues of integrating technology into the classroom. It is critical for educators, policymakers, and communities to work together to create a safe, inclusive, and technology-based education ecosystem to maximize the potential of educational technology.

SUGGESTION

Although educational technology has great potential to improve the quality of learning, current challenges This, such as limited access to technology, teacher training, and data protection, must be addressed urgently. To achieve this, policies that support educational technology, investment in infrastructure, and collaboration between various parties are needed.

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