

## Effectiveness of Technology-Based Curriculum Development at the State Islamic University Datokarama Palu

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ARTICLE INFO	ABSTRACT
Volume: 3	This study aims to evaluate the effectiveness of technology-based curriculum development at the State Islamic University (UIN) Datokarama Palu. Utilizing a qualitative approach with a case study method, data were collected through interviews, observations, and document analysis. The findings indicate that the implementation of a technology-based curriculum enhances student interaction and participation in the learning process. However, challenges such as limited infrastructure and technological competencies among lecturers still pose obstacles. The study provides recommendations for improving technological support and training for lecturers to maximize the effectiveness of the technology-based curriculum.
<b>KEYWORD</b>	
Technology-Based Curriculum, Effectiveness, Higher Education, UIN Datokarama Palu	

### 1. Introduction

The advancement of information and communication technology has brought significant changes in various aspects of life, including education. In this digital era, developing a technology-based curriculum is crucial to enhancing the quality of education and ensuring its relevance to current needs. UIN Datokarama Palu, as a leading higher education institution in Indonesia, has adopted this approach to improve the quality of learning. This study aims to evaluate the effectiveness of technology-based curriculum development at UIN Datokarama Palu, identify supporting and hindering factors in implementing the curriculum, and provide recommendations for future improvements.

### 2. Literature Review

#### 2.1 Definition of Technology-Based Curriculum

A technology-based curriculum is an educational approach that integrates information and communication technology (ICT) in the planning, implementation, and evaluation of the learning process. Technology is used as a tool to facilitate teaching and learning, enhance interaction, and support independent and collaborative learning. The integration of technology in the curriculum aims to prepare students to face the challenges of an increasingly digital and global workforce. (Voogt et al, 2012). According to Johnson et al. (2016), technology in education enhances accessibility, flexibility, and interactivity in the learning process. Smith (2018) suggests that implementing technology in the curriculum can increase student motivation and learning outcomes. However, challenges such as infrastructure limitations, technological competence, and resistance to change often hinder the successful implementation of technology in the curriculum. (Williams, 2017).

#### 2.2 The Role of Technology in Higher Education

The effectiveness of a technology-based curriculum can be measured through various aspects, including:

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- Online Learning: Provides flexibility in terms of time and place, allowing access to learning materials from anywhere.
- Learning Management Systems (LMS): Assists in managing learning materials, interaction between lecturers and students, and assessments.
- Use of Multimedia: Enhances the appeal and effectiveness of learning through the use of videos, animations, and interactive simulations. (Garrison et al, 2008).

### **2.3 Effectiveness of Technology-Based Curriculum at UIN Datokarama Palu**

The case study on the implementation of a technology-based curriculum at UIN Datokarama Palu includes several steps:

Curriculum Planning: Identifying needs and designing a curriculum that integrates technology.

Lecturer Training: Providing training and support to lecturers to master the technology used in learning.

Facilities and Infrastructure: Providing the necessary hardware and software to support technology-based learning. (Putra, 2021).

## **3. Methodology**

The study employs a qualitative approach with a case study method. Data were collected through in-depth interviews with lecturers and students, direct classroom observations, and analysis of curriculum-related documents and evaluation reports. Data analysis was conducted thematically to identify patterns and key themes emerging from the data.

## **4. Results and Discussion**

### **4.1 Result**

The research was conducted to evaluate the effectiveness of technology-based curriculum development at UIN Datokarama Palu. Data were collected through surveys, interviews, and observations involving lecturers and students from various faculties. The main findings include:

#### **1. Achievement of Learning Objectives:**

Most students reported that they found it easier to understand course materials when using technology, such as educational videos and interactive simulations. Lecturers also observed improvements in students' learning outcomes, especially in courses requiring an understanding of complex concepts.

#### **2. Student and Lecturer Satisfaction:**

A majority of students (85%) expressed satisfaction with the use of technology in learning, feeling more engaged and motivated. Lecturers noted that despite initial challenges in mastering technology, they eventually found it helpful in delivering material more effectively.

#### **3. Improvement in Technological Skills:**

Students reported significant improvements in their technological skills, including using specialized software for learning and presentations. Lecturers also experienced improvements in technological skills, though some indicated a need for more training and technical support.

### **4.2 Discussion**

The findings align with previous studies indicating that using technology in education can enhance student understanding and learning outcomes. Technology provides access to a variety of interactive and engaging learning resources, facilitating deeper understanding. High levels of satisfaction among students and lecturers indicate that technology can make the learning process more engaging and efficient. However, it is important to ensure that all lecturers receive adequate training to effectively utilize technology. The improvement in technological skills among students and lecturers shows that a technology-based curriculum not only enhances learning outcomes but also prepares them for an increasingly digital workforce.

Despite the benefits, several challenges in implementing a technology-based curriculum include limited infrastructure and the need for continuous training. To address these challenges, UIN Datokarama Palu needs to invest in technological infrastructure and offer ongoing training programs for lecturers.

## **5. Conclusion**

The study concludes that technology-based curriculum development at UIN Datokarama Palu effectively enhances the quality of learning, although some obstacles need to be addressed. The recommendations include increasing support for technological infrastructure, providing training and professional development for lecturers, and strengthening the evaluation system to ensure the optimal implementation of the technology-based curriculum.

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