

## Utilization of Blended Learning Methods Among Informatics Education Students of Citra Bangsa University

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### Abstract

*This study aims to disseminate Blended Learning among students of the Informatics Education Study Program, Citra Bangsa University. This study was conducted on students in semesters 2, 4, and 6 of the Informatics Education Study Program. The approach used is descriptive qualitative with a Likert scale as an instrument to measure the extent to which the Blended Learning method can be beneficial. The results of this study indicate that most responded positively to this method, especially in terms of ease of access to digital lectures and marriage, although some students still experience technical problems.*

**Keywords:** Utilization, Blended Learning, Informatics Education

### INTRODUCTION

Digital transformation in education has encouraged higher education institutions to adapt to various learning approaches, one of which is *blended learning*. This method combines face-to-face learning with online learning in an integrated and flexible manner, which is considered capable of answering the challenges of education in the current digital era (Garrison & Vaughan, 2008).

In the context of higher education, *blended learning* has become an increasingly common approach because it provides flexibility, time efficiency, and access to wider learning resources (He, 2025). In Indonesia, the implementation of blended learning is also increasingly encouraged, especially since the COVID-19 pandemic accelerated the adoption of educational technology (Hoerudin, 2021).

Various studies have shown the effectiveness of blended learning in improving students' conceptual understanding and learning independence (Huda et al., 2024; Zainuddin & Perera, 2019). On the other hand, blended learning requires students to be ready to manage time, master technology, and have high motivation to learn independently (Fabito et al., 2020).

Setiawan (2020) noted that blended learning is a relevant strategy in the industry 4.0 era, where digital literacy is a basic skill. In addition, the integration of local contexts in the blended learning model is also considered effective, as developed by Hermawan (2022)

through the BE-RAISE model based on Balinese culture.

However, challenges in its implementation are still found, such as the need for infrastructure, lecturer training, and management of digital learning management (Wahyuningsih et al., 2016; Putri et al., 2020). Therefore, mapping student perceptions of the implementation of blended learning is important to do so that this learning model is truly effective and adaptive.

Based on this background, this study aims to evaluate the utilization of blended learning methods among Informatics Education students at Citra Bangsa University. The main focus of this study is to determine students' perceptions and responses to the effectiveness, obstacles, and benefits of implementing blended learning through a descriptive qualitative approach with a Likert scale.

### METHOD

This study uses a descriptive qualitative approach to describe students' perceptions of the implementation of the blended learning method in the Informatics Education Study Program, Citra Bangsa University. This method was chosen because it allows researchers to explore descriptive data obtained from respondents systematically and in depth.

The main data collection technique in this study was a closed questionnaire, which was compiled based on blended learning indicators.

The questionnaire was distributed to active students through a digital platform. Each question item uses a 4-point Likert scale, consisting of:

- (1) Disagree,
- (2) Quite Agree,
- (3) Agree, and
- (4) Strongly Agree.

The questionnaire instrument consists of several main indicators that reflect the implementation of blended learning, such as time flexibility, access to materials, involvement in the learning process, effectiveness of technology use, and learning motivation. The collected data were then analyzed descriptively by calculating the average value and distribution of scores on each indicator.

To improve the validity of the content, the questionnaire was validated by experts in the field of educational technology. As for data reliability, researchers conducted cross-confirmation with observations and limited interviews with several respondents. The results of the questionnaire analysis were used as a basis for drawing conclusions about the effectiveness and challenges of implementing blended learning.

## RESULTS AND DISCUSSION

Respondents showed a fairly good understanding of the Blended Learning concept (mean score 3.24). The majority of students felt that this method helped them understand the material (3.12) and made the learning process easier through digital media (3.20). However, there were obstacles in terms of access to online materials (mean score 2.84) and an imbalance between face-to-face and online schedules (3.00).

Table 1. Average Score of Student Responses to Blended Learning Statements

Statement	Rate-rate
Understanding the concept <i>Blended Learning</i>	3,24
Helps understand the material compared to conventional methods	3,12

The use of digital media makes the learning process easier	3,20
Increase learning motivation	3,08
Interaction with lecturers/friends is maintained	3,24
Having difficulty accessing online materials/assignments	2,84
Balanced online and face-to-face schedule	3,00
More independent in learning	3,04
Requires good technology mastery	3,20
Satisfaction with implementation <i>Blended Learning</i>	3,08

## CONCLUSION

The above results show that although Blended Learning provides significant benefits in flexibility and understanding of the material, technological readiness and learning independence are major challenges. This is in line with research by Massie & Nababan which states that technological support and digital literacy greatly determine the success of online

learning. Social interaction and lecturer support also play a role in the success of this blended learning system.

### **SUGGESTION**

Institutions need to improve technological infrastructure support and training for students and lecturers in utilizing online learning platforms. It is hoped that in the future, blended learning can be optimized as a sustainable learning model.

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