

DATA-DRIVEN EDUCATION MANAGEMENT: MORE INFORMED DECISION-MAKING

Mus Mulyadi

Universitas Islam Negeri Fatmawati Sukarno Bengkulu

mus.mulyadi@mail.uinfasbengkulu.ac.id

Abstract

Data-driven education management is an advanced breakthrough that enables educational institutions to collect, analyse and utilise information to improve the decision-making process and the quality of learning. This study was conducted using the literature review method. The results show that data can help educators identify students' strengths and weaknesses and design appropriate interventions for individual needs. In addition, data analysis also makes it easier for educational institutions to manage budget allocations, teacher assignments and curriculum planning based on facts and details. However, the implementation of data-driven education management is not free from obstacles. One of the main obstacles is the lack of adequate technology infrastructure, especially in remote areas or in schools with limited budgets. Many educational institutions do not have the hardware and software needed to collect and analyse data efficiently. In addition, the lack of skills and knowledge of educators and administrative staff in the use of data analysis tools is also a significant obstacle. This often leads to resistance to change due to the added burden of new technology that has not been properly recognised. Another important challenge is the issue of data security and privacy. The collection and storage of sensitive student data requires strict security systems to prevent information leakage and data misuse. Educational institutions must ensure that they adhere to strict data security standards and rules, and utilise advanced encryption technologies to protect students' personal data. In addition, the integration of data from various sources and changes in organisational culture require the adaptation of new work processes and the collaboration of all parties involved. Through effective co-operation between the government, educational institutions and the private sector, these challenges can be overcome so that the implementation of data-driven education management can be more successful and provide optimal benefits in improving the quality of education.

Keywords: Education management, data-driven, more informed decision-making.

Introduction

Education is one of the main pillars in building an advanced and highly competitive society. Good quality education is expected to produce competent, creative and innovative generations. Effective education management is the key to improving the quality of education (Sitopu et al., 2024); (Guna et al., 2024). As a complex system, education requires good management in various aspects ranging from planning, implementation to evaluation. Adequate management ensures that resources, both human and material, are optimally utilised to achieve education goals