

# **DEVELOPMENT OF LEARNING ANALYTICS DASHBOARD BASED ON EDUCATIONAL DATA MINING (CASE STUDY: DIGITAL TRANSFORMATION COURSE)**

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## **ABSTRACT**

Learning Analytics (LA) is a growing field in the use of student activity data in a Learning Management System (LMS) to study their online behavior in order to improve and optimize learning outcomes, identify active and inactive students automatically, predict grades and performance students earlier, as well as helping teachers to provide early intervention which has the potential to reduce student failure rates in learning activities. All Yogyakarta State University students must take several General Courses (MKU), including Digital Transformation. MKU was developed to increase student's knowledge about technology and its application in the current era. However, out of more than 8,000 students taking this course, there are still many students who still need to pass the course. This fact is obtained from the value data on the BeSmart UNY Digital Transformation course. Therefore, this research will develop a Learning Analytics Dashboard to analyze student learning activities in the Digital Transformation course. Implementing Educational Data Mining (EDM) in dashboard development is to obtain actionable insights that can assist the MKU Digital Transformation management and teaching team improve the quality of learning to meet the Course Learning Outcomes (CPMK) optimally and reduce the student failure rate in this course. This research includes TKT 6 research by formulating and applying existing concepts to the MKU Digital Transformation case study. The research results show several insights about student activities and academics through accessing data and the grades obtained by students in all quizzes and end-of-semester exams.

Kata Kunci: *analytics, data mining, dashboard, educational, learning*