

# **PREDICTING STUDENTS' ACADEMIC PERFORMANCE IN BLENDED LEARNING (CASE STUDY: DIGITAL TRANSFORMATION COURSE)**

**by Herman Dwi Surjono, Akhsin Nurlyli, Moh Alif Hidayat Sofyan**

## **ABSTRACT**

Predicting and classifying student performance is very important to increase student learning success. Especially to identify students who are at risk, so that teachers can provide early intervention in increasing students' success in meeting Course Learning Outcomes (CPMK). It is very possible to use educational big data and Learning Analytics (LA) in predicting student learning performance in blended learning activities. One of the courses that applies blended learning at Yogyakarta State University is MKU Digital Transformation, where lectures are carried out offline in class and online via BeSmart. More than 8,000 students took this course, and more than 30% of students did not pass the course. Seeing this fact, researchers will use educational big data in the form of student online activity data in BeSmart courses and apply LA to find out what variables are most correlated with student performance, to what extent analysis of student online activity can be used to predict student grades and identify potential student risks. failed in college. So that the research results can later be used by teachers to predict student grades and performance earlier, provide early intervention to students who have the potential to fail lectures, and improve the quality of learning. This research includes TKT 6 research, by formulating existing concepts and applying them to the MKU Digital Transformation case study. The results of the research show that several variables can be used to predict student graduation, namely the frequency of access to BeSmart, quiz 1, quiz 2, quiz 3, and quiz 4. Thus, at the 6th meeting, students can be given an early warning regarding their graduation in MKU Transformasi Digital.

Kata Kunci: *analytics, big data, blended, learning, prediction*