THE DEVELOPMENT OF PREDICTIVE LEARNING ANALYTICS ON STUDENT PERFORMANCE IN UNIVERSITY COURSE

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ABSTRACT

Education is inevitably the best way to improve every aspect in human life. The involvement of data analytics for learning purpose could potentially giving even massive impact toward education field, as it is a crucial phase in human development process. This research aims to develop a web-based dashboard with the predictive learning analytics as well as assuring the quality of its performance. Predictive learning analytics is a set of methods used to predict future students' outcomes by identifying patterns and trends in students' performance in the past. This research will collect data by applying and measuring performance of the system in a university course from its LMS (Learning Management System) and will involve lecturer or instructor and students. The measurement of its performance will focus on few aspects in standard of Web Quality Evaluation Method (WebQEM): functionality, usability, efficiency, and reliability. The result of this research is expected to be a decision support for teaching and learning process, as well as a milestone for further study regarding for continuous improvement in education science.

Kata Kunci: education, dashboard, predictive learning, data analytics