

Using Data Analytics to Determine the Efficacy of Student Support at a Higher Education Institution

Authors

Mr. Zayne Mintoor

Teaching and Learning Coordinator (University of the Free State)

Dr Rosaline Sebolao

Teaching and Learning Manager (University of the Free State)

Abstract

Higher education institutions (HEIs) have sought to enhance academic success through data analytics especially in the current South African context. The primary aim of such analytics is to identify, among other things, at-risk modules with a high rate of failure, the challenges for learning and teaching, in order to inform learning and teaching interventions. According to Rienties, Cross and Zdraha (2017), such analytics provide opportunities for personalized learning and teaching support. Furthermore, there is a correlation between various factors that need to be considered during data analytics. For instance, Nguyen, Gardener and Sheridan (2020) refer to aspects such as learning and academic analytics, as well as educational data mining which are also critical aspects in data analytics. It is therefore vital to take into account factors that impact on a student's academic attainment, achievement, and development. This study aims to utilize several data sets from the University of the Free State (UFS), within the Faculty of The Humanities across its three campuses, namely Bloemfontein, South campus, and the QwaQwa campus. The study analyses the two main student support programmes namely, the First Year Success Programme (FYSP) and Academic Student Tutorial and Excellence Programme (A_STEP); as well as online activity data obtained from the Learning Management System (LMS) Blackboard; student performance and data obtained from evaluation reports conducted within the two mentioned programmes. The following questions will guide the study: What are the attitudes of students towards the support mechanisms within the faculty? What is the level of interaction between students and members of the faculty in relation to learning and teaching?

The results of the study will serve to inform the faculty, departments and instructors about the variables influencing student success in order to implement effective improvement strategies enabling them to achieve the desired academic success.

Keywords: Academic success, data analytics, learning and teaching, student support.