ASSESSING THE IMPACT OF CLASS ATTENDANCE ON STUDENTS'ACADEMIC PERFORMANCE USING DATA MINING

Olufunke Oladipupo, Olawande Daramola, Jelili Oyelade, Ibukun Afolabi
Department of Computer Science and Information Sciences, Covenant University, Nigeria
Funke.oladipupo@covenantuniverisity.edu.ng
Olawande.daramola@covenantuniverisity.edu.ng
Jelili.oyelade@covenantuniverisity.edu.ng
Ibukun.fatudimu@covenantuniverisity.edu.ng

Abstract

Many institutions of learning encourage students to have good lecture attendance records. The belief is that an above average attendance rate will enhance students' academic performance. However, very few studies have attempted to answer questions that relate to: i) the actual impact of good attendance record on students' academic performance; ii) the extent, in quantitative terms, of the effect of good attendance record on students' academic performance. This paper reports the findings from an experimental analysis of students' attendance record and corresponding academic performance results using Association Rule Mining. Based on the extracted patterns in rules from the five course assessed, it was discovered that the impact of class attendance on academic performance is very low. A student with greater than 70 % attendance score, can still fall into any grade between "A-F". This indicates that class attendance is not the major factor that determines student academic performance but other key factors such as the student participation in the class, personal study, and group study. The result of this case study and the recommendations is expected to provide useful information for the managements of higher institutions of learning on appropriate perspective to adopt on class attendance policies and good motivation for distance and online learning programmes.

Keywords: - Association rule mining, student academic performance, class attendance, data mining