

**Predictors of Student Performance in Preparatory Mathematics
Courses at KFUPM**

A Proposal Submitted to

**The Deanship for Academic Development (DAD)
King Fahd University of Petroleum & Minerals,
Dhahran, Saudi Arabia**

by

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November 27, 2005

Abstract

Educators and administrators are highly concerned and interested to know why some students whom are carefully selected for admission into the university are not performing up to expectation. Many variables have been identified as factors contributing to students' achievement in mathematics. These variables were classified as cognitive, affective, and non-intellective by some researchers. Of these, cognitive variables received the most attention in predictive studies of student performance success. Although predictive studies mostly use quantitative research approach to explaining student performance issues, qualitative approach which only looks at within-classroom student performance and which has its own advantages are seldom used and research projects that effectively combine both approaches are very rare. In addition, predictive studies usually use GPA or its variant as outcome measure. This study combines the two scientific inquiries and examines the within- and out-of-classroom variables in predicting the students' summative in-class performance, final exam scores. The main outcome of this study is the search for the most important predictors of students' mathematics performance at the preparatory year. The identification of these key predictors is important to educators since it is hoped that it will add more enhanced information in the quest to improving the learning environment for the students at KFUPM.