Perception of Students on Online Homework in Integral Calculus and Its Relation on Their Motivation and Performance

Ma. Theresa Christine C. Valdez and Lea D. Maderal

Mathematics and Statistics Department, De La Salle University-Dasmariñas, Philippines; <u>mcvaldez@dlsud.edu.ph</u>

Abstract: Teachers are always in the search of better teaching and learning techniques to keep students engaged and motivated in class. One emerging technology is the use of online homework whereby students may be given unlimited chances of working on a set of problems that vary in their every attempt for self-practice. These are presented in a set-up perceived as more engaging and appropriate to today's type of learners. This study explored the perception of Integral Calculus students on taking online homework particularly on the topic integration techniques. DLSU-D Schoolbook, the learning management system of the university was utilized to administer the online exercises and learning modules to students. A total of 127 students became part of the study and were asked to answer questionnaires that determined their perception of online homework as well as their motivation level towards engaging in math activities. Their performance was also determined through a comprehensive test. Results showed they had a high positive perception of online homework and they found it useful in studying lessons and in their preparation for exams. It was also found through correlation analysis that perception is significantly correlated with the motivation level of students but not with their performance.

Keywords: Online homework, perception, motivation, mathematics education, technology