

1056-M1-703

P. Gavin LaRose* (glarose@umich.edu), University of Michigan, Department of Mathematics, East Hall, 530 Church St., Ann Arbor, MI 48109-1043. *The Impact of Implementing Web Homework in Calculus II.*

In this study we examine the introduction of on-line homework to a Calculus II course as a replacement for ungraded pencil-and-paper homework assignments. The on-line homework is considered in both “graded” form (in which it was counted as a small part of the students’ grades) and when it is “ungraded.” We examine how this had an impact on students’ performance in the course, on student behavior in completing the assigned work, and on student attitudes toward the homework. We find that students working homework on-line appear to do no worse in the course than those with pencil-and-paper homework, and may do better. More significant, as expected, is counting the homework in the course grade, which results in students paying greater attention to the homework. In addition, there is some evidence that this greater attention results in students’ better understanding of what they are doing on the homework and the benefit they accrue by completing it. There is also evidence that the on-line homework affords instructors greater flexibility in their management of in-class time. (Received September 16, 2009)