H. Smith Risser* (hrisser@twu.edu), Dept. of Mathematics and Computer Science, PO Box 425886, Denton, TX 76204-5886. Evaluating the effectiveness of remediation: Longitudinal effects of developmental coursework on mathematics achievement.

Whereas many studies have focused on long term outcomes like retention rates and time to degree completion for students with developmental coursework, few studies have analyzed student outcomes like course grades and final exams in later courses. This study investigated the affects of experiences in developmental coursework (e.g. grades in developmental courses and pre- and post-test scores) on outcomes in later post-secondary mathematics coursework. Participants were 319 students enrolled in four introductory mathematics courses. Approximately 38% of the participants had taken developmental mathematics coursework. Results indicated that students who had previously taken developmental mathematics courses had lower grades on later mathematics course finals and had lower overall post-secondary mathematics GPAs than students who had not taken such coursework. In regression models outcomes in developmental courses (post-test grades and grades in developmental coursework) were not significant predictors of grades in later coursework while factors concerning experiences in secondary mathematics (high school math GPA and standardized test scores) were significant. Implications and suggestions for regular assessment/evaluation of developmental coursework will be discussed. (Received September 19, 2007)