

1077-M1-2034 **Marina Kogan***, 3100 Marine St, Boulder, CO 80309, and **Sandra Laursen**, 3100 Marine St, Boulder, CO 80309. *Assessing Suitability of Grades and Course-Taking Patterns as Measures of Long-term Student Outcomes following Inquiry-Based Learning Experiences.*

Grades are a traditional and standard way of measuring academic achievement. While instructor standards for assigning grades may differ, grades are still widely seen to hold a stable meaning across institutional contexts. Moreover, grades may reflect long-term changes in achievement, when improved learning habits and analytical thinking carry over to later courses. Students' course choices may also reflect sustained or lost interest in the discipline. However, are grades and course-taking patterns sensitive enough measures to distinguish the effects of a single semester-long intervention?

We will present findings on the student outcomes of the inquiry-based learning (IBL) courses at two universities. Student academic records allow us to analyze long-term student outcomes for patterns in student grades and course-taking choices. We use grades as a longitudinal proxy for academic achievement, and the number of subsequent math courses as a proxy for student interest in mathematics. On average, all students benefited from the IBL methods as compared with non-IBL peers, but various subgroups reaped different benefits. We will draw conclusions about the suitability of grades and course-taking patterns for pinpointing the effects of such a short intervention as one IBL course. (Received September 21, 2011)