

Research Statement and Agenda – Andrew Ewing

My primary research interests are in the Economics of Education with applications for higher education and the teaching of economics. My current research revolves around measurements of instructional quality in higher education, specifically grades as a measurement of student learning and students' evaluations of their instructors as measurements of teaching quality. My future research will involve a more traditional labor economics/returns to graduate school paper that allows for an endogenous choice of time between undergraduate and graduate education, a paper discussing students' choices of college major when the college admissions process offers "Optional SAT" admissions, and a paper discussing the choice of career by NCAA Division III athletes. I discuss each of these working papers and works in progress in more detail below.

Measuring Instructional Quality in Higher Education Using Students' Evaluations of Teachers and Students' Grades

“Estimating the Impact of Relative Expected Grade on Student Evaluations of Teachers” (Job Market Paper)—*This paper will be presented at the 2008 Southern Economics Association Conference.*

Abstract: Grade inflation over the past few decades has been a concern for many universities. Course evaluation scores are known to be positively correlated with students' expected grades, and this paper tests whether or not there is an incentive for the instructor to “buy” higher evaluation scores by inflating grades. To test this hypothesis, I use unique data from the University of Washington's Office of Educational Assessment that includes a measure of each student's relative expected grade in the course. I find that there is an incentive to inflate grades even after accounting for the potential endogeneity of the relative expected grade variable due to unobserved teacher productivity and after accounting for the unobserved heterogeneity of instructors and departments by using a fixed effects estimation. In my estimations, department and instructor fixed effects account for a significant part of the measured effect of relative expected grade on evaluations, and by not including them, the resulting estimated impact of relative expected grade on evaluations is biased upwards. This suggests that adjustments to evaluations for possible grade inflation need to be done on a departmental basis, and not by a university-wide average.

“Learning, Grades, and Students' Evaluations of Teaching in an Economics Course Sequence” (with Levis Kochin)

Abstract: One of the major arguments against adjustment mechanisms to students' evaluations of teaching based on actual or expected course grades is that better teachers should impart more knowledge on a given group of students than a not-so-good teacher. The group of students in the better teacher's class should expect higher *earned* grades not only in that class but in future related classes. This paper follows students through a sequence of economics classes (Principles of Micro/Macro and Intermediate Micro/Macro) with controls for ability, alternative measures of teacher quality when available, and course characteristics. Using instructor fixed effects estimations, we find that a student's Principles of Microeconomics instructor has a significant impact on their grade in Intermediate Microeconomics. However, the principles instructors' rank based on their “learning” impact has virtually no correlation to their rank based on evaluation scores. This

suggests that colleges using evaluation scores as the only measure of instructional quality may be coming to incorrect conclusions about their instructors' relative impact on the learning of their students.

Future Research

“Returns to Graduate Schooling with Endogenous Enrollment Choice”

Traditional estimates of the returns to schooling from a standard Mincerian wage equation use the overall number of years of education and the overall number of years of experience as independent variables. This neglects the fact that for graduate degrees, in particular, a person's experience that occurs in between her graduation from an undergraduate institution and her enrollment in graduate school is often an endogenous choice that may depend on the type of graduate degree pursued. In other words, the earnings streams of two individuals with the same years of experience and the same graduate degree may differ due to the number of years between graduation and graduate school enrollment, and the average number of years in between graduation and enrollment may depend on the graduate degree field. I hope to use the Baccalaureate and Beyond Longitudinal Study, which follows a sample of students who obtained their bachelor's degrees in 1993 with three follow-up surveys through 2003, to estimate the rates of return to pre-graduate school enrollment experience by graduate degree field.

“Optional SAT Admissions Practices and Choice of Major”

“Optional SAT” college admissions policies are relatively new in the world of higher education and have been primarily instituted at liberal arts colleges that focus on looking at the "whole" student rather than just a number. The institution of such policies is usually aimed at increasing applicant pools and/or increasing socioeconomic, ethnic, and gender diversity. However, most of the colleges that have this policy require that the student pass some threshold in high school GPA or meet some other requirement to be eligible for this option. At colleges where an alternative measure is required, three pools of students emerge: (i) students who do not qualify for optional SAT admissions and must reveal their SAT scores, (ii) students who do qualify to omit their SAT scores but strategically decide to include their SAT scores nevertheless, and (iii) students who do qualify to omit their SAT scores and exercise the option by not revealing their SAT scores. I would like to examine the choices of college major made by students from before and after the adoption of the optional SAT admissions policy. I hypothesize that in addition to attracting larger and more diverse applicant pools, optional SAT admissions policies may be attracting diversity in the sets of skills that entering students possess. In particular, I hypothesize that colleges may be attracting a disproportionate amount of students in the third group and that students in that group may be less likely to pursue math and science degrees.

“NCAA Division III Athletes and Career Choice” (with Erin Vernon)

Much research has been done with Division I and II athletes with regards to the athletic scholarships they receive and the choices they make in college (e.g., major) and after college. However, Division III schools are not allowed to offer athletic scholarships. This offers an interesting sample of students that choose to invest a significant amount of time in an activity that will most likely not turn out to be their career and for which they receive no financial remuneration in the form of scholarships. We plan on using alumni databases to determine if students engaging in athletic activity at Division III schools are doing so at the detriment of

investing more time in their education or if there are possibly network/peer effects created through athletics that actually help them advance their careers in areas other than that particular sport or athletic activity.