Field and Areas of Interest

My field of research is public economics. Within this field, I am interested in education economics, welfare economics, urban economics, labor economics, and gender studies. Additionally, I have experience in health economics from coursework and my work with the Institute for Health, Health Care Policy and Aging Research. While these interests cover a broad range of topics, I draw on insights from each in my research. Currently, my focus is the economics of education. My research examines the effect of two distinct areas of education: charter schools and community colleges. Both have the mission to increase access to quality education, but whether either has been successful remains an open question.

Current Research

My dissertation consists of three papers on education economics. In the first paper I examine the effect of school competition on student achievement using data from Massachusetts. In the second and third papers I make use of the Education Longitudinal Study of 2002 (ELS: 2002) to examine community college outcomes. The second paper, which is my job market paper, looks at the impact of community colleges on baccalaureate completion, while the third paper considers labor market impacts.

In the first chapter of my dissertation, I examine the effect competition has within school districts in Massachusetts. While increased competition leads to lower prices in profit-maximizing industries, it is not clear that increased competition has a beneficial effect in the education sector. Competition among schools might raise average school quality and with it, academic achievement. Alternatively, increased competition could leave public schools with more difficult students and tighter budgets. Using a fixed effects model, I consider the impact of the prevalence of charter and private schools on MCAS exam scores in public schools. Districts with more students in private and charter schools are considered to have a greater impact on public schools. I find evidence of positive effects of competition from charter schools on public school student test performance in urban districts. However, I find that in suburban districts, such competition has adverse effects. That is, public school test scores are lower in suburban locations with greater charter school enrollments. Private schools, however, have no impact on exam scores in either urban or suburban districts. Unfortunately, fixed effects models might not adequately control for the endogeneity of
alternative school enrollments if the bias from the fixed effect estimate outweighs the bias of the ordinary least squares estimate. Since there is not a lot of variation in alternative school enrollments between 2007 and 2014, even a small correlation between the error and demeaned enrollments might lead to a large bias. As an alternative, I employ a control function approach in which the first stage equation is a Tobit model. This allows for the estimation of a model in which there are many zeros, or districts in which there is no impact. The control function approach utilizes the heteroskedasticity of the errors to identify the model. Preliminary results indicate a positive impact of alternative schools on public school test performance, suggesting a positive effect of increasing schooling options on overall school quality, as measured by MCAS exam scores.

In my second and third chapters, I make use of the Education Longitudinal Study of 2002 (ELS: 2002) dataset to analyze the effect of attending two year colleges on eventual educational attainment and labor market outcomes. Community colleges are often seen as a strategy for increasing access to higher education for at-risk students and were most recently endorsed by President Obama as a way to make higher education affordable for all. Students who choose community college may be seeking a cheaper option on their path to an undergraduate degree. Alternatively, students may enroll in community colleges because their high school credentials do not support an institution with greater selectivity, but their desired career requires higher education. Compared to students who began at four year colleges, students who started at two year colleges earned about 30 fewer credits, one less year of education, and were 25% less likely to earn a bachelor’s degree. Further, I examine whether this gap is driven by racial or socio-economic differences. I find mixed results by racial groups, although African American and Hispanic students seem to drive the racial gap. Additionally, low income students who start at two year colleges are less likely to earn a baccalaureate degree. Finally, students from higher academic backgrounds are disproportionately hurt by attending community colleges as they are less likely to earn a bachelor’s degree. That a gap still exists is troubling, but identifying subgroups most impacted allows for policies to target those most at risk.

Finally, I consider the effects of these choices in the labor market. It is possible that while students are less likely to earn a bachelor’s degree, they might still be better off than students who attempt a bachelor’s degree. With the changing tide of job growth, it is possible that having an associate degree is preferable for some students. Further, if the alternative is not earning a degree, the additional years of experience in the labor market might be optimal. By 2012, almost a third of students had completed some college but had not earned a degree. I find no significant difference in wages or employment status in 2012 between students with high school credentials only and
students with high school credentials as well as some postsecondary attendance but no degree. This seems to suggest wasted resources in the form of foregone earnings and debt. Community colleges offer higher education opportunities to many who might not otherwise pursue it. However, if postsecondary attendance alone is not enough to increase wages, policies must be implemented to increase the incentive to complete a degree, whether it is an associate or bachelor’s degree.

**Future Research**

I would like to continue working with the National Center for Education Statistics (NCES) and their rich data sets. From early interventions through collegiate persistence, there are many dimensions to education that have yet to be analyzed. For example, I would like to continue research on postsecondary education by considering students who attend, but do not complete degrees. It might be the case that these students realize positive indirect, if not direct, returns to attending college. For example, students may make social contacts by attending that they would not otherwise have. Another area of research I would like to consider is the low participation of females in STEM fields. In my current data set, women are more likely to take classes and have higher GPA’s in STEM fields but are still less likely to earn STEM field degrees.

An alternative data set I would like to explore comes from North Carolina Education Research Center [NCERDC](http://example.com). This data set is rich with information on North Carolina students and schools and would be an excellent resource for analyzing minority gaps in elementary and secondary education as well as the impact of the No Child Left Behind Act. One consideration might be the quality of teachers within schools. Job opportunities have been expanding for women in the last several decades and it would be interesting to examine that effect on teacher quality. On a national scale, with Common Core standards now in place in most states, it is a prime time to start analyzing the effect these standards have had on instruction, learning outcomes, and student perceptions.

Finally, I would like to further investigate the impact of community colleges by examining the Tennessee Promise program, which began Fall 2015. High school graduates in Tennessee schools are now able to apply for a scholarship that provides free tuition and fees to community or technical schools for two years. This program also provides mentoring services to help facilitate difficult decisions regarding higher education. To maintain eligibility, students must perform community service and maintain a 2.0 GPA during the semesters in which they accept the scholarship. With many politicians now advocating free college tuition, it will be intriguing to see how Tennessee Promise impacts collegiate attendance, education goals, and student outcomes for Tennessee students.