

Evaluating Professor Value-added: Evidence from Professor and Student Matching in Physics

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Abstract

In this study, we present an empirical model to quantify the effectiveness of professor's mentorship in science research. Given a perspective that a good mentor would be the one who enhances the research performance of his or her mentee, we can estimate professor "value-added" by associating it with graduate student's research achievement gain. In order to control for the endogenous sorting of students across professors, we focus on professor's turnover. A unique matched panel data of graduate students and professors of a graduate school will allow us to estimate the within-school variance in professors' mentoring qualities, relying on the idea that professor turnovers increase the variance in graduate student's outcomes across degree courses and cohorts.

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