ECON 398 – Professor Underwood

Empirical Project Proposal

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Falling performance and low teacher compensations have been important issues of interest when the issues of the grade-school systems in the United States are concerned. Many reforms have been researched and implemented to help fix these problems such as more standardized educational benchmarks, new curriculums, and incentives, all with mixed results. Economists such as Peter Temin of MIT have argued that the current market for teachers, coupling inflexible union regulations and decreases in funding from the government, is at a static equilibrium that would continue and worsen the educational quality nationwide if there are no radical shifts in how it is organized (Temin 2002).

Concurrent with these trends are the high turnover rates in schools, with 30 percent of new teachers leaving the profession in five years and even higher rates for high-poverty, urban and low-performing schools (Ingersoll, 2001). While it is reasonable to relate teacher turnover rate with student performance, discussions on this topic have different approaches on determining the trends and causes of this correlation. A popular approach is the “compositional” one that points the disparity in performance to the quality of the teachers leaving and coming in, which influence the effect of the change in teacher quality whether it is negative or positive in the same direction. However, an alternative approach is focused on the “disruptive” effect of turnovers that are not necessarily explained by change in quality, such as the decrease in institutional knowledge and relationships, and the costs of replacements and transitions placed on schools, teachers and students (Ronfeldt, 2013). Looking into a sample of more than 1 million grade 4 and 5 students in New York, a study in the American Educational Research Journal showed that even when controlled for indicators of teacher quality, experience, and the outcome of students switching teachers, there are still lingering negative effects of turnover rate that might be related to more structural changes to schools caused by the disruption. This effect is especially salient for low-performance schools, as the students are more deeply affected by the same rate of change, and the schools’ turnover rate is often higher as well (Ronfeldt, 2013).

Consequently, I would like to look further into the aspects of school characteristics that can affect turnover rate and student performance. While teacher turnover has not been widely explored in terms of organizational conditions and traits, employee turnover theory can be applied as schools are often classified as relying on “uncertain and nonroutine technology” that can be disrupted by changes in the dynamics and composition of the working environment, which in turn leads to change in effectiveness (Ingersoll, 2001). Similarly, the environment and fit of teaching and school characteristics are shown to be significantly related to satisfaction and retention rates in a survey of Missouri public elementary teachers while job concerns such as salary and workload are more minor factors (Perrachione, 2008), which is pertinent with the observation in the New York analysis of better teachers being reluctant to transfer even with lower income, lower performance schools (Ronfeldt, 2013). Therefore, an exogenous and statistically sound model to demonstrate the interrelationships between teacher turnover, the educational environment and student performance can bring value to the policy debates on how to improve schools with limited resources and shortage of quality teachers. The teaching environment can be measured by general school conditions, teachers, students and staff’s perceptions.

**Research Question: How does teacher’s turnover rate in a grade school affect the school performance?**

Thesis Statement: Having a favorable teaching environment is negatively correlated with the turnover rate. When controlled for the teachers’ quality and the student’s characteristics, measures of school environment contribute to a significant relationship between low turnover rates and good school performance.

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