Match Quality, Worker Productivity, and Worker Mobility

Purpose: The article presents evidence on the educational importance of the match between teachers and schools by examining student achievement after teachers switch jobs.

Research Questions
1. Does teacher effectiveness, as measured by student test scores, change depending on the schooling environment?
2. How does the match between schools and teachers effect student achievement?
3. What is the relationship between match quality and teacher mobility?
4. What are the observable characteristics of high match quality between teacher and school?

Data: The data set was derived from the North Carolina Education Research Data Center. The analysis included the math and reading tests scores of third through fifth grade students, matched to their teachers, yielding 1.3 million student-year observations. The students were racially and socioeconomically diverse. The teachers were 92% female with an average of 13 years of teaching experience.

Research Methods: The researcher built equations using ordinary least squares to depict the manner in which teacher effectiveness varied year-by-year, accounting for differences that develop over time in terms of how the teacher-, school-, and match-level variables affected that effectiveness value. The equations were built to compare a teacher’s outcomes before and after she or he switches schools, or the match effect.

Findings: Teachers perform in the classroom better after a move to another school compared with before the move. Match quality between teachers and schools is an important determinant of student achievement. With increased teaching experience, match quality increases and school switching decreases monotonically. Certain kinds of teacher-school combinations are associated with better outcomes. For schools that offer a wider range of specializations, teachers tend to have higher match quality. Based on the empirical evidences, the study concludes that teachers prioritize match quality over monetary considerations when they decide whether or not to switch schools.

Implications: The idea that teachers move to reach a higher level of match between themselves and the schools in which they work is one that is vital for policymakers and practitioners to understand. From a research and policy perspective, these results cast doubt on the view that financial incentives alone can solve the inequities and the shortages that some areas of the teaching profession face. For practitioners, this study illuminates the motivations of teachers that have switched jobs over the course of their career, thereby helping principals and district administrators to recruit based on match quality. Rather than being viewed as a negative, teacher turnover may represent a positive progression towards an optimal allocation of teachers to schools.