

Teachers' Broad Impact

Understanding How Teachers Influence Students They Do Not Teach

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Research suggests that teachers matter most among school-related resources when it comes to student achievement. While most of the research on teacher effectiveness examines how teachers affect their own students, other studies suggest that this focus may be too narrow. Teachers can affect hundreds of students over the course of their careers, and their students in turn can pass these effects on to other people in their lives. Because of this, teachers have the potential to affect students they may have never met.



There are a number of potential ways teachers can affect individuals who they do not directly teach.

While most studies focus on teachers' effects on students in their own classrooms, teachers often interact with students in their school in ways beyond direct instruction, such as coaching or other extracurriculars. There are even a number of channels through which teachers can affect students with whom they never interact. Because students' learning is affected by their peers, a teacher's ability to raise achievement in his or her current class, as one study illustrates, may result in improvements for that teacher's student's future classmates. Another study suggests that similar indirect effects may occur among siblings. Likewise, teachers also learn from one another, so an effective teacher may indirectly affect other students by changing the practice of other teachers.



Research suggests that these channels contribute a large proportion of a teachers' overall value.

While teachers likely have the largest per-person effect on their own students, they affect many more students indirectly than directly. Focusing only on how teachers indirectly affect their students' future peers, one paper found that accounting for these spillovers increases the value of a good teacher by at least 30 percent. Accounting for other ways in which teachers indirectly affect students would increase this number even more.



These findings complicate the measurement of effective teaching.

The fact that teachers indirectly affect students makes the already-complicated task of measuring teacher effectiveness even more complicated. First, it suggests that isolating a teacher's effect on his or her own students is difficult, since these students are simultaneously being affected by other teachers. Creating a full measure of teacher effectiveness would also have to include measures of how a given teacher is indirectly affecting other students. In addition, most current studies assume that teachers' indirect effects are directly proportional to their direct effects (i.e., that two teachers who have the same direct effect on their own students have the same indirect effects). More research is needed to test whether this assumption is true and to explore how teachers' direct and indirect effects might impact the school system in different ways.

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Teachers' indirect effects highlight the importance of having effective teachers in classrooms.

These broader effects have a number of important policy implications, such as changing how districts compare the benefits of teacher-improvement programs against their cost. More than anything else, however, the broad impact of teachers underscores the importance of having effective teachers in schools and emphasizes the importance of policies that can accomplish this.

Related Readings

Jackson, C. Kirabo, and Elias Bruegmann, "Teaching Students and Teaching Each Other: The Importance of Peer Learning for Teachers," *American Economic Journal: Applied Economics*, Vol. 1, No. 4, 2009, pp. 85–108.

Opper, Isaac M., "Does Helping John Help Sue? Evidence of Spillovers in Education," *American Economic Review*, Vol. 109, No. 3, March 2019, pp. 1080–1115.

Qureshi, Javaeria A., "Siblings, Teachers, and Spillovers on Academic Achievement," *Journal of Human Resources*, Vol. 53, Vol. 1, April 5, 2017, pp. 272–297.

About This Research

This document presents potential ways that teachers can affect students whom they do not teach and how research suggests that a teacher's indirect reach could account for a large proportion of his or her overall contribution to student learning. This research in the public interest was supported by RAND, using discretionary funds made possible by the generosity of RAND's donors and the fees earned on client-funded research.

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