



RESEARCH REVIEW

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HIGH-QUALITY MENTORING INCREASES TEACHER EFFECTIVENESS

► **THE STUDY**
Goldhaber, D., Krieg, J., & Theobald, R. (2018, November). *Effective like me? Does having a more productive mentor improve the productivity of mentees?* (Working Paper No. 208-1118-1). CALDER. caldercenter.org/sites/default/files/CALDER%20WP%20208-1118-1.pdf

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Mentoring is a popular strategy for building the capacity of new teachers, as evident in articles throughout this issue. Qualitative research describes how mentors serve as models of good instruction, provide feedback, and offer support for new teachers as they learn and grow in the profession. There is also evidence that mentors in the teacher preparation setting help orient prospective teachers to the realities of teaching in ways that coursework cannot.

But what about quantitative evidence about the impact mentors have on their mentees and the mentees' students in the long-term? Researchers Dan Goldhaber, John Krieg, and Roddy Theobald addressed the lack of empirical data on this question. Their findings have valuable implications for whether and how to design mentoring initiatives.

RESEARCH QUESTIONS AND METHODS

At the heart of the study is this question: Does working with a more effective mentor during preservice training improve mentees' later effectiveness in their own classrooms?

To address this question, the researchers undertook a complex analysis that combined data from two datasets. One was from the Washington State Office of the Superintendent of Public Instruction on in-service public school teachers and their students' achievement. The other contained nine years of longitudinal data on student teaching apprenticeships from 15 teacher education programs in Washington. The researchers used unique teacher IDs to link mentors and mentees and examine the achievement of their students over time.

To measure both mentor and mentees' effectiveness, the study used value-added models, which estimate the extent to which a student's academic growth can be attributed to a specific teacher. The researchers calculated mentors' effectiveness using student data from the years before the mentee assignment to account for the possibility that the mentor-mentee relationship could affect student outcomes. They calculated mentees' effectiveness for the years after entering the workforce. The researchers used a number of controls to eliminate bias.

FINDINGS

The study found a strong, positive relationship between the effectiveness of a student teacher's mentor and the student teacher's later effectiveness, especially in math and, to a lesser extent, in English language arts. In fact, in math, "the value added associated with a one standard deviation increase in mentor quality is roughly equivalent to the difference in average value added between a second-year and novice teacher" (p. 2).

Furthermore, teachers who had student taught with a highly effective mentor could be predicted to be as effective in their first year in the workforce as a third-year teacher who had worked with an average mentor.

This relationship was strongest early in a teacher's career but declined significantly over time.

POTENTIAL LIMITATIONS

One challenge that the researchers did not fully untangle was the fact that teachers in some locations are more likely to be assigned to an effective mentor and more likely to be assigned to a classroom with high-performing students than teachers in other districts or locations, which would complicate the measure of effectiveness.

Furthermore, the authors acknowledge that mentees may not be assigned randomly to mentors. Student teachers who have already demonstrated effective teaching practices (for



example, during a teaching practicum course) could be assigned to certain schools and mentors because of their demonstrated effectiveness.

The authors also acknowledged that value-added measures are controversial, but they believe they were able to eliminate most sources of bias with methodological and statistical controls.

IMPLICATIONS

The fact that high-quality mentoring in preservice training was associated with future teachers' impact on student outcomes reinforces a growing belief that mentoring is a lever for improvement and potentially a high-impact investment.

The key words, though, are "high-quality." This study suggests that selecting mentors should start with identifying teachers whose students are doing well because the researchers found that the teachers who have a positive impact on student learning also

appear to be more effective mentors to beginning teachers.

This research offers guidance for district and school leaders, as well as teacher preparation program leaders, about identifying and selecting mentors and offers questions to consider about where to assign high-impact mentors to have a broad impact on the system. Strategic assignment of student teachers to high-quality mentors appears to be worth the time and effort.

There may be additional benefits to mentoring that this study didn't examine. Although the authors did not extend their analysis past the impact of the mentoring relationship on an individual beginning teacher, given what we know about healthy **Learning Communities**, it is easy to see how individual learning and growth could positively impact a team or even a school.

In addition, support for beginning teachers is a well-documented and

promising retention strategy, meaning that attention to this aspect of a beginning teacher's experience could have long-term benefits for the field. Thinking about an effective system, the effects of strategic mentor-mentee could therefore have an exponential impact on both teacher and student outcomes.

Another implication to note is that quantitative and qualitative research can complement each other in important ways. The combination of an impact study like this one and a case study about what mentoring relationships look like in the ecosystem of a classroom and school would be the most compelling in making a case for supporting funding or resources for a mentoring program. This combination could be foundational in further bolstering the rationale for mentoring as a **Learning Design** that supports school and district capacity and goals. ■