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New Studies Find That, for Teachers, Experience Really Does Matter

Studies Cite Gains by Veterans

By [Stephen Sawchuk](#)

The notion that teachers improve over their first three or so years in the classroom and plateau thereafter is deeply ingrained in K-12 policy discussions, coming up in debate after debate about pay, professional development, and teacher seniority, among other topics.

But findings from a handful of recently released studies are raising questions about that proposition. In fact, they suggest the average teacher's ability to boost student achievement increases for at least the first decade of his or her career—and likely longer.

Moreover, teachers' deepening experience appears to translate into other student benefits as well. One of the new studies, for example, links years on the job to declining rates of student absenteeism.

Although the studies raise numerous questions for follow-up, the researchers say it may be time to retire the received—and somewhat counterintuitive—wisdom that teachers can't or don't improve much after their first few years on the job.

"For some reason, you hear this all the time, from all sorts of people, Bill Gates on down," said John P. Papay, an assistant professor of education and economics at Brown University, in Providence, R.I. He is the co-author of [one of two new studies](#) on the topic. "But teacher quality is not something that's fixed. It does develop, and if you're making a decision about a teacher's career, you should be looking at that dynamic."

Better With Age

Investigating the connection between a teacher's experience and his or her teaching quality has long proved methodologically challenging, largely because of the difficulty in comparing cohorts of students taught by teachers of varied experience levels with different training and backgrounds. Studies based on such cross-sectional comparisons have tended to find few performance differences between early- and later-career teachers.

Beginning in the early 2000s, scholars began to track the same teachers over time, linking them to their students' test scores. But there are pitfalls to that type of statistical modeling, too. For one, it requires researchers to make assumptions about a typical teacher's growth trajectory over time in order to disentangle the effects of each year of experience from other possible influences, such as a change in class size or curriculum that might have occurred.

[In their new study](#), Mr. Papay and his co-author, Matthew A. Kraft, also of Brown University,

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show that some assumptions in prior research have had a tendency to depress the effect of teachers' experience on student achievement.

For their study, forthcoming in the *Journal of Public Economics*, the researchers looked at a set of some 200,000 student test scores linked to about 3,500 different teachers from an unnamed urban district. They analyzed those data using three different methods, each of which relies on different baseline assumptions about how to capture growth in teacher effectiveness as teachers gain experience.

Under all three of the models studied, the researchers found teachers' ability to improve student achievement persisted well beyond the three- to five-year mark. While the teachers did make the most progress during their first few years in the classroom, teachers improved their ability to boost student test scores on average by 40 percent between their 10th and their 30th year on the job, the study shows.

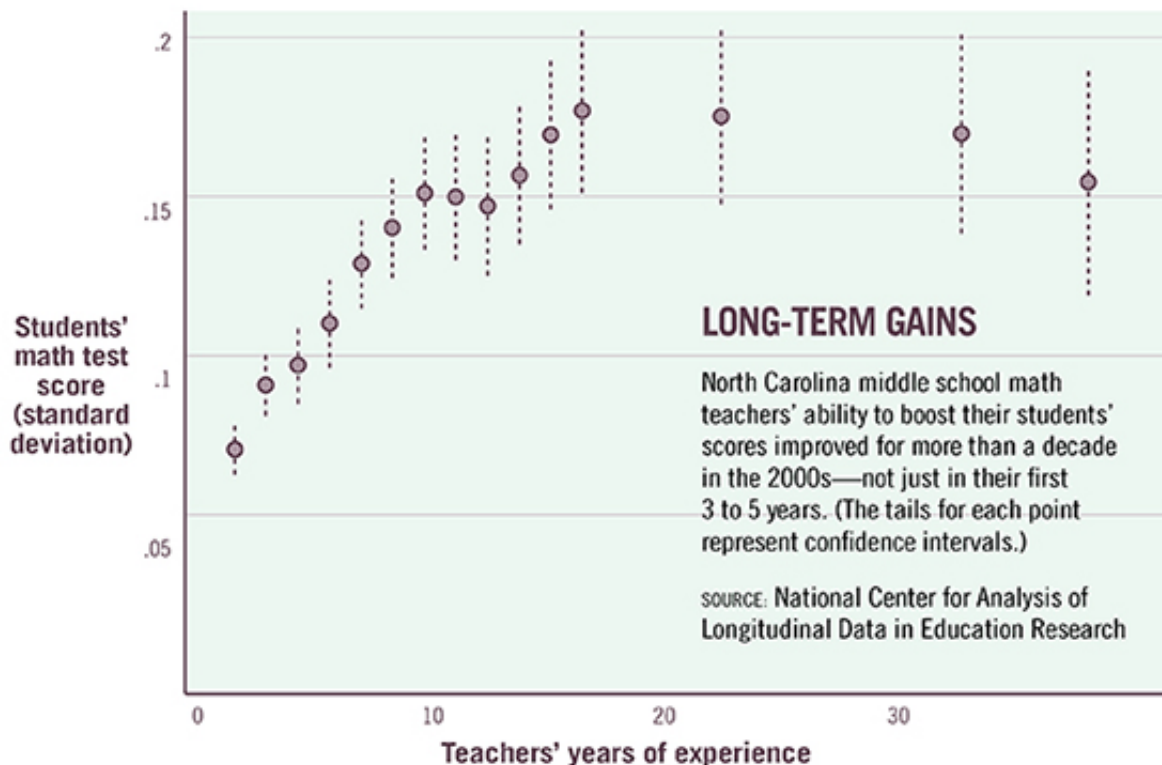
The improvements were seen in both reading and math teachers, but were stronger in mathematics.

Beyond Test Scores

What's more, teachers with more years of experience are better equipped to boost more than just test scores, according to a second new study, [released as a working paper](#) by the Washington-based National Center for Analysis of Longitudinal Data in Education Research.

Researchers Helen F. Ladd and Lucy C. Sorenson, both of Duke University, in Durham, N.C., analyzed records from about 1.2 million middle school students in North Carolina from 2007 to 2011, including absences, reported disciplinary offenses, and test scores. The data also contain responses from 6th through 8th graders about time spent on homework and their reading habits.

Using a value-added method similar to that of the Brown University scholars, Ms. Ladd and Ms. Sorenson similarly found that, on average, the students' teachers continued to improve their effectiveness in boosting academic outcomes for at least 12 years.



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Regarding nontest outcomes, the data show that as teachers gained experience, they were linked to lower rates of student absenteeism. The researchers postulate that more experienced teachers got better at motivating students and in classroom management, resulting in better attendance and fewer infractions.

The study also found suggestive evidence of benefits to time spent on reading and homework completion. But because of statistical "noise" surrounding those findings, they are not as precise.

The nontest findings were most marked for reading teachers rather than for math teachers, in contrast to the student-achievement findings, which were stronger for the math teachers.

Unions Respond

In all, the new studies paint teacher quality as a mutable characteristic that can be developed, rather than a static one that's formed in the first few years on the job.

That's a welcome change for the 3 million-member National Education Association, which has long maintained that teacher experience matters and should be considered in determining pay and promotions.

"These are incredibly important studies, and I think we'd make a big mistake if we didn't look at them carefully and re-examine some assumptions," said Segun Eubanks, the director of teacher quality for the NEA. "The idea of teachers maxing out in five years was so contradictory to what we know about other professions."

Mr. Eubanks said that the findings suggest policymakers redouble efforts to improve teacher retention and evaluating teachers on factors beyond test scores.

"It isn't that you scrap all reforms and go back to the good old days, but it's time to look at a

third way—career ladders, shortened salary schedules, hybrid teaching roles," he said.

Both sets of researchers stressed that their findings concern the average teacher's rate of improvement over his or her career. They shouldn't be interpreted to mean that experienced teachers are always better than novices.

The studies also dovetail with a small but growing body of research suggesting that **high-quality coaching** and **professional development can improve teacher effectiveness**.

"My policy conclusion from this is that we have to help teachers grow. They have the potential," said Ms. Ladd, a professor of economics. "You want to get high-quality teachers in the first place and then you want to stick with them."

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