Understanding teacher effectiveness to raise pupil attainment

Teacher effectiveness has a dramatic effect on student outcomes—how can it be increased?

Keywords: teacher effectiveness, teacher selection, teacher training

ELEVATOR PITCH

Teacher effectiveness is the most important component of the education process within schools for pupil attainment. One estimate suggests that, in the US, replacing the least effective 8% of teachers with average teachers has a present value of $100 trillion. Researchers have a reasonable understanding of how to measure teacher effectiveness; but the next step, understanding the best ways to raise it, is where the research frontier now lies. Two areas in particular appear to hold the greatest promise: reforming hiring practices and contracts, and reforming teacher training and development.

KEY FINDINGS

Pros

- Pupils taught by highly effective teachers get significantly higher grades; the effect is substantial and enduring.
- Teacher effectiveness improves long-term outcomes such as earnings.
- There are robust and persistent measures of teacher effectiveness that are supported by expert observation and pupil feedback.
- Standard estimates of teacher effectiveness seem reliable and not to suffer from bias related to pupil selection.

Cons

- Research shows that teacher effectiveness is largely uncorrelated with the teacher’s own educational qualifications.
- Teacher selection and hiring can be problematic because there is little useful information available pre-hire.
- Some studies suggest that schools would benefit from a high optimal level of turnover among junior teachers, though recent research is re-opening the debate on the role of experience.
- Tracking the persistent effects of training, mentoring, and development is difficult due to a general lack of longitudinal data.

AUTHOR’S MAIN MESSAGE

A number of studies from different countries have produced similar estimates of the impact of teacher effectiveness. These estimates have been shown to be robust and are supported by studies using experimental assignment of teachers to classes. The results show that variations in teacher effectiveness are extremely important in understanding pupils’ attainment. Studies of optimal contract structure for teachers show that probationary periods should be much longer than is common in the US and the UK. Additionally, informal learning and mentoring represent potentially very useful alternative routes for improving average teacher effectiveness.