

Raising the Quality of Instruction: Policy Choices and Challenges

Steven Rivkin

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Central Research Findings on Teacher Quality

- Most observed characteristics explain little of the variation in achievement scores, school attainment or future wages
 - Master's Degree (v Bachelors degree)
 - Years of teaching experience other than the first year or two (3 v 10 years experience)
 - Teacher scores on licensing tests
 - Selectivity of teacher training program
 - Certification (v not certified teacher)

Large Variation in Teacher Effectiveness

- Outcomes-based methods find substantial variation in teacher effectiveness as measured by value-added (contribution) to achievement
- Recent U.S. evidence shows that teacher quality can have a substantial effect on future earnings and presumably labor force productivity and GDP

Key finding for policy

- Typical difference between two 40 year old teachers from same teacher preparation program is larger than the average difference between teachers with 5 and 20 years of experience or between teachers with and without masters degrees
- Effectiveness must be measured based on classroom outcomes

Policies to raise the quality of instruction

- Provide effective in-service training
- Provide stronger incentives for high quality instruction that raises achievement
- Improve hiring practices
- Improve promotion and dismissal practices
- Increase teacher compensation

Provide effective in-service training

- Evidence suggests that most professional development programs are not effective in raising the quality of instruction
- Evidence also suggests that informative teacher evaluation based on classroom observations and student outcomes can raise the quality of instruction
 - Cincinnati, Ohio has such a program

Increase teacher effort through incentives such as merit pay and accountability

- Benefit likely to be modest if this is ONLY reform
- Systems must be fair to teachers in high-poverty schools
 - Achievement growth better than just test scores
- Systems should not introduce incentives to teach narrowly to a test or small group
 - Evidence that teachers reallocate effort to reach specific incentives such as a minimum pass rate in mathematics or reading

Improve hiring practices

- Adopt more stringent entry requirements (part of proposed Chilean Reforms)
- Education or test score requirements reduce the pool of potential teachers, particularly in schools serving disadvantaged students
- Would the proposed Chilean regulations remove mostly ineffective teachers from the applicant pool?
- Expand pool of potentially strong teachers such as programs like Enseña Chile

Credentials and hiring

- Regardless of the presence of rules, hiring is likely to be quite imprecise
- Evidence indicates that questioning teachers about knowledge and requiring applicants to teach a sample class is likely to provide better information on future classroom effectiveness
- Nonetheless, many new teachers will not be very effective teachers

Dismiss ineffective teachers that do not improve over time

- Retention of effective teachers and removal of ineffective teachers can improve quality of instruction over time
- What is the appropriate role of measures of test-score value added in this process?
 - Some propose the removal of bottom 5 or 10 percent of teachers based only on measures of test-score value added

Fundamental problem is the unwillingness of administrators to provide honest feedback and to dismiss ineffective teachers

- U.S. Evidence that principals can identify most effective and least effective teachers BUT
- Existing U.S. evidence shows the vast majority of teachers receive high evaluation ratings

- Ratings of teachers and administrators based on observations of work must be confirmed by evidence of student learning
 - Cannot just state that teacher is doing a good job without supporting evidence
 - standardized tests provide one form of evidence, but other types of student work are also needed
 - Measures of student growth or learning are far more accurate and fair than just test scores
 - Should not hold teachers responsible for factors not under their control

Alternative approaches to good management

- Specify performance measures and let schools figure out how to raise quality
 - Some evidence that test score based accountability systems raise achievement
 - Provide information on achievement, graduation rates, absenteeism, etc.
 - Set standards for sanctions and rewards
 - Little evidence on whether accountability systems alone improve management practices

Impose specific teacher management systems along with accountability

- Base teacher reward and employment decisions solely on statistical estimates of teacher value added
 - avoid administrator judgments entirely
 - However, tests provide incomplete and noisy measures of teacher performance
 - Many teachers do not teach in tested subjects or grades

Combine Observations of teaching with information on student performance

- Most promising approach
- Increasing number of school districts and states now require teacher evaluations based on the combination of observations of teaching and student work including test scores
 - Washington, DC, State of Massachusetts

Vouchers solve management problem through competition and market forces

- Does competition lead schools to engage in behavior conducive to highly effective teaching in Chile?
 - Are market forces strong enough in high poverty areas?
 - Are parents effective advocates for children?
 - Are the voucher amounts adequate?
 - Is there adequate information on education outcomes for parents to judge school quality?

Compensation, another crucial component of reform

- Is the level of compensation high enough to induce talented graduates to enter teaching and administration IF the new policies make these jobs more risky?
- Is the level of compensation in schools that have difficulty attracting teachers and administrators high enough?
- Is any reward system or method for measuring teacher effectiveness fair to teachers and administrators in high poverty schools?

Final Thought

- Raising the quality of instruction requires a strong, ongoing commitment to children
 - It is much more difficult to foster an environment of rigorous performance monitoring and evidence-based decision-making than to impose a regulation that requires additional training for teachers