Question:

What is known about the relationship between teacher licensure examination scores and teacher effectiveness as measured by student achievement?

Response:

Thank you for the question you submitted to our REL Reference Desk. We have prepared the following memo with research references to help answer your question. For each reference, we provide an abstract, excerpt, or summary written by the study’s author or publisher. Following an established Regional Educational Laboratory (REL) Southwest research protocol, we conducted a search for research reports as well as descriptive study articles on the relationship between teacher licensure test scores and teacher effectiveness.

We have not evaluated the quality of references and the resources provided in this response. We offer them only for your reference. Also, we searched the references in the response from the most commonly used resources of research, but they are not comprehensive, and other relevant references and resources may exist. References provided are listed in alphabetical order, not necessarily in order of relevance. We do not include sources that are not freely available to the requestor.

Research References


From the abstract: “We use data on statewide end-of-course tests in North Carolina to examine the relationship between teacher credentials and student achievement at the high school level. The availability of test scores in multiple subjects for each student permits us to estimate a model with student fixed effects, which helps minimize any bias associated with the non-random distribution of teachers and students among classrooms within schools. We find compelling evidence that teacher credentials affect student achievement in systematic ways and that the magnitudes are large enough to be policy relevant. As a result, the uneven distribution of teacher credentials by race and socio-economic status of high school students—a pattern we also document—contributes to achievement gaps in high school.”
Note: This working paper was subsequently published in a peer-reviewed journal with the following reference:


*From the ERIC abstract:* “This paper explores the relationship between teacher testing and teacher effectiveness using a unique dataset that links teachers to their individual students. My findings show a positive relationship between some teacher licensure tests and student achievement. But they also suggest that states face significant tradeoffs when they require particular performance levels as a precondition to becoming a teacher: some teachers whom we might wish were not in the teacher workforce based on their contribution toward student achievement are eligible to teach based on their performance on these tests, while other individuals who would be effective teachers are ineligible.”

Note: This working paper was subsequently published in a peer-reviewed journal with the following reference:


Note: The link provides a PDF version of the article first published online in December 2013. The publication year for the print version of the article is 2015, as indicated in the reference.

*From the abstract:* “Historically, the government has sought to improve the quality of the teacher workforce by requiring certification. Teachers are among the most licensed public personnel employees in the United States. Traditionally, an education degree with a student teaching experience and passage of licensure exams were necessary for licensure. In the 1980s, alternative paths to certification developed. In this article, we evaluated the impact of licensure screens and licensure routes on student achievement. Our findings from an analysis of Arkansas data suggest that there is little difference in terms of quality between traditionally and alternatively certified teachers. However, licensure exams do have some predictive power.”
Additional Organization to Consult

Center on Great Teachers and Leaders at American Institutes for Research – http://www.gtlcenter.org/

*From the website:* “The Center on Great Teachers and Leaders (GTL Center) is dedicated to supporting state education leaders in their efforts to grow, respect, and retain great teachers and leaders for all students. The GTL Center continues the work of the National Comprehensive Center for Teacher Quality (TQ Center) and expands its focus to provide technical assistance and online resources designed to build systems that:

- Support the implementation of college and career standards.
- Ensure the equitable access of effective teachers and leaders.
- Recruit, retain, reward, and support effective educators.
- Develop coherent human capital management systems.
- Create safe academic environments that increase student learning through positive behavior management and appropriate discipline.
- Use data to guide professional development and improve instruction.”

National Council on Teacher Quality (NCTQ) – http://www.nctq.org/siteHome.do

*From the website:* “The National Council on Teacher Quality is led by this vision: every child deserves effective teachers and every teacher deserves the opportunity to become effective.”

“For far too many children and teachers, this vision is not the reality. That’s because all too often the policies and practices of those institutions with the most authority and influence over teachers and schools—45; be they state governments, teacher preparation programs, school districts, or teachers unions—fall short. NCTQ focuses on the changes these institutions must make to return the teaching profession to strong health, delivering to every child the education needed to ensure a bright and successful future.”

National Center for Teacher Effectiveness—https://cepr.harvard.edu/ncte

*From the website:* “With the goal of positioning ourselves as a national resource on teacher effectiveness research, we have partnered with four school districts on the east coast to conduct rigorous research, develop tools, and share best practices and lessons learned in teacher evaluation and professional development.

The National Center for Teacher Effectiveness is supported by the Institute of Education Sciences, U.S. Department of Education, through [a grant] to the Center for Education Policy Research at Harvard University.”
Methods

Keywords and Search Strings

The following keywords and search strings were used to search the reference databases and other sources:

• Teacher licensure and teacher effectiveness
• Teacher licensure and student achievement
• Teacher certification and student achievement
• Teacher certification and teacher effectiveness
• Teacher qualifications

Databases and Resources

We searched ERIC for relevant, peer-reviewed research references. ERIC is a free online library of more than 1.6 million citations of education research sponsored by the Institute of Education Sciences (IES). In addition, we searched the What Works Clearinghouse.

Reference Search and Selection Criteria

When we were searching and reviewing resources, we considered the following criteria:

• Date of the publication: References and resources published from 2003 to present were included in the search and review.
• Search priorities of reference sources: Search priority is given to study reports, briefs, and other documents that are published and/or reviewed by IES and other federal or federally funded organizations and academic databases, including ERIC, EBSCO databases, JSTOR database, PsychInfo, PsychArticle, and Google Scholar.
• Methodology: The following methodological priorities/considerations were given in the review and selection of the references: (a) study types—randomized control trials, quasi-experiments, correlational studies, descriptive data analyses, literature reviews, mixed methods analyses, and so forth; (b) target population, samples (representativeness of the target population, sample size, volunteered or randomly selected, and so forth), study duration, and so forth; and (c) limitations, generalizability of the findings and conclusions, and so forth.