**Teacher Licensing Standards, Teacher Quality, and Student Achievement in Urban Schools**

**An invited written statement submitted to the**
**New Jersey State Advisory Committee to the U.S. Commission on Civil Rights**
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**PURPOSE OF THIS WRITTEN STATEMENT:** Although the academic quality of our teachers is the chief school-based factor influencing student achievement, academic quality is not evenly distributed across our public schools. According to recent research, urban students tend to be taught by academically less able teachers than are their suburban peers. The purpose of this written statement is to show that the use of academically weak licensure tests for assessing prospective teachers' academic knowledge, as well as the use of instructionally biased licensure tests for assessing their knowledge of useful teaching practices, in effect, discriminates against urban students, who depend far more than do suburban students on the academic quality and effectiveness of their teachers for fostering their academic growth. Federal and state policies must ensure that teacher licensure tests of subject area knowledge are sufficiently demanding academically, and that licensure tests of teaching practices are sufficiently evidence-based, so that urban teachers *begin* their teaching careers with more adequate academic backgrounds than they now do and with a familiarity with teaching practices that are supported by evidence from high quality research.

**BACKGROUND:** It is useful to note first that today's teachers as a whole were weaker college students than their undergraduate peers. According to a U.S. Department of Education report (2007), scores on college entrance examinations (the SAT or ACT) for those who received a bachelor's degree in 1992-1993 were inversely related to the subsequent likelihood of these graduates teaching in 2003. In other words, those with weaker scores were more likely to be teachers in 2003 than those with stronger scores. Other studies indicate that there has been a steady decline in the number of high-achieving women seeking to become elementary teachers or teachers of other subjects (e.g., Hoxby & Leigh, 2005). Moreover, this country has an academically weaker teacher corps than other countries permit today. For example, Finland draws its teachers from the top 10% of high school graduates--those who pass demanding tests to enter a university and complete a university degree program. In contrast, according to the 2006 Program for International Student Assessment (PISA) report, this country draws its elementary teachers from the bottom 30% of high school graduates who go to college.

The fact that all students are being taught today by academically weaker teachers than were students years ago, by academically weaker teachers than those in other countries, and by college graduates who were academically weaker than their undergraduate peers, is compounded by the fact that urban students tend to be taught by academically weaker teachers than are their suburban peers. Miller & Chait (2008) found that students in high poverty schools are less likely than those in low poverty schools to be assigned a teacher deemed "highly qualified" under the provisions of the No Child Left Behind Act. Miller & Chait also found that the "attrition and mobility of effective teachers exacerbate inequity in the distribution of

teacher quality." In other words, although all public schools must hire certified (or soon-to-be certified) teachers, those who move to or choose to teach in suburban schools tend to be stronger in academic quality than those who teach in urban schools.

We also know from other research studies that *academic* quality is the key component of teacher quality. Teachers' command of the subject matter they teach is the only characteristic of effective teachers that has been identified by high quality research (USDE, 2008). This does not mean that other teacher traits might not be related to gains in student achievement; it simply means that high quality research studies have not yet identified these other teacher traits.

Thus, it is important to ask what is intended to assure the public that prospective teachers have an adequate grasp of their subject matter for the grade levels covered by the license they seek. Assurance is institutionalized in two ways, by a process known as "program approval," and by teacher licensure tests now mandated by Title II of the Higher Education Act. Each state must send an annual report to the U.S. Department of Education of the pass scores for each cohort of prospective teachers in each of the state's own teacher training institutions. Unfortunately, neither way has proven to be effective.

**MECHANISMS FOR QUALITY CONTROL AND THEIR LIMITATIONS:** "Program approval" is a process in which teams established by state departments of education or other state agencies review a state's teacher preparation programs every five to ten years to determine if they prepare prospective teachers according to state requirements. However, program approval reviews do not and cannot guarantee that prospective teachers admitted to, or exiting from, a teacher preparation program have an adequate academic knowledge base for what they will teach. That is because, even if carried out by private agencies such as the National Council on the Accreditation of Teacher Education (NCATE) or the Teacher Education Accreditation Council (TEAC), review teams typically do not include academic subject matter experts who can evaluate the rigor of required academic coursework for a program. Most, if not all, reviewers come from other education schools. Moreover, they are unlikely to recommend stronger academic requirements for the program they review than those required by their own program. Indeed, they are unlikely to recommend strong academic requirements at all. Strong academic requirements for prospective teachers are viewed by most of our education schools as "elitist" (unlike expectations and requirements in most other countries in the world), as if teachers' grasp of their subject matter was far less important than any other quality one might desire in a teacher. There may also be financial interests inhibiting a concern for strong academic requirements, as I explain later.

Although the academic requirements for secondary school subject area teachers are usually set by academic departments in the arts and sciences as part of a required major or minor, education schools may set all or most of the requirements for generalist teachers (e.g., elementary, middle school, and special education teachers) with respect to what academic coursework should be taken for admission into or exiting from their teacher training programs. This academic coursework may be either in required educational methods courses or in required arts and sciences designed for prospective elementary or special education teachers (courses which majors in that subject area cannot take for credit). Greenberg & Walsh's 2008 report found enormous variation in the quality of the mathematics coursework that education schools require for prospective elementary teachers, while the National Council on Teacher

Quality's 2006 report found generally low quality in the reading instructional coursework required for prospective elementary teachers. Overall, our education schools have not ensured that their graduates have an adequate academic background for the subjects they teach. Lack of reasonable admission standards is one reason why Arthur Levine, former President of Teachers College, Columbia University, in his 2006 report *Education School Teachers* recommends closing down the bulk of our education schools.

The second way in which the public is supposedly given assurance about prospective teachers' grasp of the academic content of the license they seek is the state requirement that they pass a subject area test for licensure, either an off-the-shelf test developed by Educational Testing Service (ETS), or a test developed for a state by Evaluation Systems group of Pearson (ESP), the two major teacher test developers in the country. However, analyses of many of the current subject area licensure tests for those who teach children from K to Grade 8 indicate that they are academically weak, whether they are part of ETS's PRAXIS series or among the tests ESP has developed for its client states (see Stotsky, 2004; 2006; 2007a; 2007b; 2009a; 2009b). And, the problem of academically weak tests is compounded by the relatively low cut score that most states set, usually for political purposes (see, e.g., Mitchell & Barth, 1999). The political problem is that many prospective teachers admitted to teacher training programs for elementary or special education would not be able to pass a state test with a high cut score and get a license to teach, which would, in turn, raise questions about whether their programs provide adequate support for those they admit or whether they simply admit large numbers of academically weak students as "cash cows" (i.e., tuition-paying bodies to justify the number of education faculty positions or to provide income for other departments/schools at a university).

Research on the academic content of teacher tests of subject area knowledge is consistent. Regardless of where the cut score is set, the academic knowledge expected of prospective K-8 teachers is minimal in states using ETS's PRAXIS II tests and in many states using ESP tests. However, the limitations of licensure tests of subject area knowledge are not the only problems with current licensure tests. Not only may subject area licensure tests fail to require an adequate academic background in K-8 teachers, depriving all students of academically adequate teachers students, many states also require licensure tests of pedagogical theories and methods that tend to disparage practices that are actually beneficial to urban students.

**BIAS IN LICENSURE TESTS OF INSTRUCTIONAL KNOWLEDGE:** A case in point are the series of tests offered by ETS called "Principles of Learning and Teaching," which are designed to assess what a beginning teacher should know about teaching and learning. However, according to an analysis of the information ETS provides on these tests on its Web site (Stotsky, 2006; 2009a), they discredit teacher-directed instruction and promote only those practices associated with student-directed learning. And this is despite the fact that the research base for both reading and mathematics instruction supports direct instruction in beginning reading and mathematics for all students, especially low-achieving and special education students, at least for a good part of the school day (NRP, 2000; USDE, 2008). Thus, it is not the case that most prospective K-8 teachers who pass their subject area tests and their tests of principles of learning and teaching necessarily bring either an academically adequate knowledge base or appropriate instructional approaches to their teaching, especially for urban children.

**WHY WEAK OR BIASED LICENSURE TESTS ARE SOURCES OF DISCRIMINATION**: How does this situation constitute, in effect, discrimination by these states? It does so in the sense that states put their urban schools at greater risk than their suburban schools by failing to ensure that the certified teachers urban superintendents hire have passed licensure tests that do not bias new teachers against the instructional needs of low-achieving, special education, or ESL students and are sufficiently academically demanding. Several contextual factors are relevant. First, private schools or charter schools that are legally allowed to hire unlicensed teachers can seek more academically qualified and pedagogically eclectic teachers. Second, more parents in suburban schools, unlike most parents of students in urban schools, can supplement the academic deficiencies of their children's teachers or their curriculum programs with outside tutoring or home support. Third, suburban schools attract academically stronger teachers from the pool of licensed teachers available to both urban and suburban schools, as Miller & Chait (2008) found. Finally, there is no evidence that professional development or in-service workshops provide academically underqualified teachers with the academic content that enables them to raise student achievement (USDE, 2009). On the other hand, there is indirect evidence that better prepared teachers do. For example, the Bay State's academically strong teacher licensing regulations and teacher tests are widely considered to be among the contributing factors to the stellar scores that Massachusetts students have achieved in grade 4 and grade 8 on the 2005 and 2007 reading and mathematics tests given by the National Assessment of Educational Progress and on the 2007 mathematics and science tests given by the Trends in International Mathematics and Science Study (Pioneer, 2009). As a result of these regulations and teacher tests, as well as strong standards and student assessments, minority students and ESL students in Massachusetts do better than their peers in almost every other state on these tests.

**CONCLUDING REMARKS**: Federal and state policies must ensure that teacher licensure tests of subject area knowledge are sufficiently demanding academically, and that licensure tests of teaching practices are sufficiently evidence-based, so that urban teachers *begin* their teaching careers with more adequate academic backgrounds than they now do and with a familiarity with teaching practices that are supported (not contra-indicated) by evidence from high quality research. New teachers should be able to use a more diverse range of strategies than prospective teachers are now taught. To that end, I make two recommendations:

**RECOMMENDATION**: That the New Jersey State Advisory Committee recommend that the U.S. Civil Rights Commission vote to ask the U.S. Department of Education to require all states to use common sets of academically demanding standards drawn up by academic discipline-based organizations as the basis for their subject area licensure tests for prospective teachers. The scores on these tests should be annually reported to the U.S.D.E. for Title II of the Higher Education Act. Academic discipline-based organizations are such organizations as the Mathematics Association of America (MAA) and the Association of Literary Scholars and Critics (ALSC).

**RECOMMENDATION:** That the New Jersey State Advisory Committee recommend that the U.S. Civil Rights Commission vote to ask the U.S. Department of Education to require all states to use a common set of pedagogical standards/competencies that are based on a body of high quality research evidence for the tests of pedagogical methods and practices that states may require of all prospective teachers. States that require such tests of prospective teachers should also be required to report their scores annually to the U.S.D.E. for Title II of the Higher Education Act. Among the reports that the

U.S.D.E. should draw on for delineating a research-based set of instructional standards are those by the National Reading Panel (2000) and the National Mathematics Advisory Panel (2008).

**References**


Greenberg, J., & Walsh, K. (2008). *No Common Denominator: The Preparation of Elementary Teachers in Mathematics by America's Education Schools*. Washington, DC: National Council on Teacher Quality.

Hoxby, C. & Leigh, A. (2005). Wage Distortion: Why America's Top Women College Graduates Aren't Teaching. Education Next, Spring. www.**educationnext**.org/20052/50.html

Levine, A. (2006). *Educating school teachers*. Washington, DC: The Education Schools Project.

Massachusetts Department of Education. (2007). *Guidelines for the mathematical preparation of elementary teachers*. Author. http://www.doe.mass.edu/mtel/MathGuidance.pdf

Mitchell, R. & Barth, P. (Spring, 1999). How Teacher Licensing Tests Fall Short. *Thinking K-16. Education Trust, 3*.

Miller, R. & Chait, R. (December 2008). *Teacher Turnover, Tenure Policies, and the Distribution of Teacher Quality: Can High-Poverty Schools Catch a Break?* Washington, D.C.: Center for American Progress.

National Reading Panel. (2000). *Teaching Children to Read*. Washington, D.C., U.S. Department of Education.

National Council on Teacher Quality. (2006). *What teacher preparation programs aren't teaching about reading--and what elementary teachers aren't learning*. Washington, DC: National Council on Teacher Quality.

Pioneer Institute. (2009). *Why a Switch to PRAXIS Tests Would Likely Lead to Weaker Teachers and Lower Student Achievement*. Policy Brief. Center for Education Reform. Boston: Pioneer Institute.

Stotsky, S., & Haverty, L. (2004). Can a state department of education increase teacher quality? Lessons learned in Massachusetts. In D. Ravitch (Ed.), Brookings papers on education policy, (pp. 131-180). Washington, DC: Brookings Institution.

Stotsky, S. (2006). Why American students do not learn to read very well: The unintended consequences of Title II and teacher testing. *Nonpartisan Education Review / Articles, 2*.1 Retrieved on October 21, http://nonpartisaneducation.org/Review/Articles/v2n1.htm

Stotsky, S. (2007a). How state boards of education can upgrade math teaching in the elementary school. National Association of State Boards of Education. *Commentaries,13*.
http://www.nasbe.org/new_resources_section/commentary/Comm_Upgrade_Math_Teaching_Elementary_Schools_02.07.pdf

Stotsky, S. (2007b). Teacher licensure tests: Their relationship to mathematics teachers' academic competence and student achievement in mathematics. *Education Working Paper Archive*, Department of Education Reform, University of Arkansas. Retrieved October 21, 2007 from http://www.uark.edu/ua/der/EWPA/Research/Teacher_Quality/1798.html.

Stotsky, S. (2009a). Licensure tests for special education teachers: How well they assess knowledge of reading instruction and mathematics. *Journal of Learning Disabilities, in press*.

Stotsky, S. (2009b). "Suggested Indices of Teacher Quality for Arkansas: A Position Paper." Paper to be presented at a Conference on The State of Teacher Quality in Arkansas, 2009, Little Rock, Arkansas, April 28, 2009.

U.S. Department of Education. (2007). *To Teach or Not to Teach? Teaching Experience and Preparation Among 1992–93 Bachelor's Degree Recipients 10 Years After College.* Statistical Analysis Report. U.S. Department of Education, NCES 2007–163.

U.S. Department of Education. (2008). *Foundations for Success: The Final Report of the National Mathematics Advisory Panel*. U.S. Department of Education.