This Brief is based on the following CTP Research Report:

A Case of Successful Teaching Policy: Connecticut’s Long-Term Efforts to Improve Teaching and Learning

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Suzanne M. Wilson
Michigan State University
Linda Darling-Hammond
Stanford University
Barnett Berry
University of North Carolina

The full report can be downloaded at the CTP web site, http://www.ctpweb.org

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An insistence on greater teacher quality currently permeates education reform discussions and policymaking. It took more than a decade for reform efforts to finally focus on the quality of teaching as the most important influence on student learning, but during all that time one state—Connecticut—began and continued to center its policy reforms on improving teaching. As a result, its students have made large achievement gains, even though the percentages of students who are poor and/or minority is increasing. Connecticut has an envious pool of well-qualified teachers. Most important, its commitment to investing in resources and efforts that link good teaching with student learning is embedded in the state’s policy environment. Rather than a silver-bullet approach to improving teaching, Connecticut is an exemplar of thoughtful, consistent policies that, over time, are achieving the goal envisioned in all reforms—higher student learning and an invigorated teaching force.

How Connecticut Began Its Comprehensive Policies

Each state’s context for making education policy is unique, but opportunities to create an environment for change exist everywhere. For Connecticut, a visionary state commissioner of education seized the opportunities created by a mid-1970’s state court decision that mandated greater school funding equity. The court decision emphasized the importance of teachers and other resources, especially for the most needy school districts. About the same time, greater teacher professionalism was emerging as an issue nationally.

A committee appointed by the commissioner, Mark Shed, reviewed teacher professional development and targeted four critical areas: recruitment, initial preparation, induction, and on-going professional development. These areas still provide the framework for teacher quality policies. Subsequent commissioners, the state legislature, and other leaders built upon the early work, added student performance goals, and continued to support the transformation started by
Shedd—that of a state "bureaucracy" turned into a learning organization.

Several legislative actions in 1986 established much of the framework, including:

- An increase in and equalization of teacher salaries across the state, with supplementary grants that enable poorer districts to be more competitive in the market for high-quality teachers.
- Higher licensing standards that required teachers to have an academic major in their assignments, more focused study of pedagogy, stricter preparation for the teaching of students with special needs, and passing scores on basic skills and content tests.
- Incentives to attract high-ability candidates into teaching.
- Elimination of emergency licensing and tougher requirements for temporary licenses.
- A tiered teacher certification system that provides mentors and other support for beginning teachers and requires teachers to participate in professional development in order to renew their professional certificate.

An Education Enhancement Trust Fund raised teachers' salaries gradually, and even when it was depleted in the early 1990s the public and state legislature kept the teacher reforms going because of the progress being made. Within three years of the enactment of the reforms, Connecticut had gone from a teacher shortage to a teacher surplus, and evidence of teacher quality was growing. Connecticut continues to rank first or second nationally in average teachers' salaries.

A Closer Look at the Initial Efforts

Higher salaries and scholarship incentives drew more people into the teaching profession in Connecticut. At the same time, state policies ensured that the teaching force would be well prepared. First, the Connecticut State Department of Education created three, aligned assessment initiatives:

- Basic skills tests in reading, writing, and mathematics (Connecticut Competency Examination for Prospective Teachers, or CONNECEPT). Originally given to applicants for teacher education programs, it later was required of everyone applying for a teaching certificate.
- Subject matter testing to make sure prospective teachers have adequate content knowledge, as well. In 1990, the system also instituted a content proficiency exam for elementary teachers (Connecticut Elementary Certification Test, or CONNECT). According to a state department report, these two tests (CONNECEPT and CONNECT) have acted as gatekeepers to prevent "the least-skilled candidates from becoming certified teachers."
- Performance-based assessments, credited with having the greatest direct effect on teaching practice. State department staff developed alternative assessments, drawing from national efforts to define competency and excellence in teaching and to create performance-assessment strategies. Because of habits of the organization instilled many years earlier, department staff were encouraged to learn as much as they could by interacting with similar projects nationwide and volunteering to pilot test new assessments.

Acknowledging that preliminary testing is only one tool for assessing and supporting new teachers, Connecticut then developed an induction system, the Beginning Educator Support and Training Program (BEST). This moved teacher policies closer to performance-based assessments. In its first iteration, BEST used trained assessors to observe and evaluate new teachers' generic teaching skills. State department staff, teacher educators, and experienced teachers developed the instrument used in observations—the Connecticut Competency Instrument (CCI). It included 15 teaching competencies, such as facility in basic skills, knowledge of human growth and development,

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knowledge of subject matter, and effective classroom organization. Furthermore, the indicators of the competencies are grouped into three categories—management, instruction, and assessment. Because these competencies also are used to approve teacher preparation programs, they led to the alignment of pre-service experiences with expectations for teachers in their first years of teaching.

Under the CCI system, observers made up to six visits to new teachers’ classrooms, fewer if the scores from the first three or four visits were very high. Beginning teachers had two years to complete the CCI requirements; from 10 to 15 percent required a second year, according to one study. BEST was more than testing, however. Each first-year teacher was assigned a mentor (or a mentor team), who did not conduct evaluations but, rather, provided coaching and guidance. New teachers also could attend clinics designed to help them prepare for the CCI assessment All first- and second-year teachers attended a 15-hour, year-long seminar conducted by exemplary teachers and focused on helping them reflect on their practice and prepare for their assessments.

Connecticut’s approach to teaching policies has always been one of evolution. Consequently, the various assessment instruments and programs used for beginning teachers are now different from the original versions. Their purposes remain the same.

Refining the System

As the Educational Testing Service developed more sophisticated teacher assessments, Connecticut changed its initial testing of teacher candidates. It

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<th>Year</th>
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<tr>
<td>1974</td>
<td>A state court decision on school finance emphasized importance of teaching resources; state commissioner of education uses this as catalyst to focus state department of education on teacher quality and to create an environment of inquiry and informed policymaking among staff.</td>
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<td>1983</td>
<td>Next commissioner continues the emphasis, persuades governor to create new commission that recommends incentives and standards for teacher quality; governor also directs some of state surplus into fund for educational excellence.</td>
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<td>1985</td>
<td>State department of education develops a basic skills test for prospective teachers in collaboration with a national testing group; later uses PRAXIS I instead.</td>
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<td>1986</td>
<td>Legislature passes Education Enhancement Act that equalizes teacher salaries across the state, using the state fund; toughens requirements for licensing, including a major in the field to be taught and elimination of emergency licensing; funds incentives to attract quality candidates into teaching; upgrades professional development; and provides for a three-tiered certification system that includes the Beginning Educator Support and Training Program (BEST), which provides mentors, state-funded professional development, and frequent observations by trained assessors.</td>
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<td>1987</td>
<td>State introduces common core of learning standards and low-stakes assessments in grades 4, 6, and 8.</td>
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<td>1987</td>
<td>State begins using National Teacher Exams in content areas; later changes to PRAXIS II exams.</td>
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<td>1993</td>
<td>Student assessments redesigned to reflect higher teaching standards and a low-stakes tenth-grade assessment is added; local and regional boards are required to submit school plans to raise student achievement on the assessments.</td>
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<td>1996</td>
<td>State department of education, drawing from national initiatives, pilots portfolio assessment of beginning teachers to replace evaluation by classroom observations that used teaching competencies guide; competencies are folded into portfolio process.</td>
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<td>1996</td>
<td>State supreme court decision speeds up attention to high-minority districts; a year later a governor-appointed panel’s recommendations lead to a mandate to the state department of education to develop professional standards for teachers and administrators; the standards, which put more emphasis on assessment and diagnosis of student needs than the previous competencies, are to be used in teacher preparation programs, initial licensure of beginning teachers, and professional development.</td>
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<td>1997</td>
<td>Common core of learning for students is revised to redefine a vision for student learning that sets expectations for foundational skills, understanding and applications, and character; a curriculum framework sets content and performance standards for 10 subject areas.</td>
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<td>1999</td>
<td>State adopts a new common core of teaching that describes the professional knowledge and skills teachers need to assure students meet the new standards; new state board plan aligns teacher professional development and evaluation with the teaching and learning standards, curriculum framework, and BEST; state adopts standards and assessments for school principals developed by a national consortium.</td>
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<td>2000</td>
<td>BEST program requires all second-year teachers to complete portfolio assessment; teachers who fail to meet standards are given a third year to pass the assessment and receive a provisional certificate.</td>
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<td>2003</td>
<td>Teacher candidates must have field experience in the areas for which they want endorsements; all teacher preparation institutions must conform to standards of the National Council for the Accreditation of Teacher Education, which are aligned with Connecticut’s Common Core of Teaching and with those of the National Board for Professional Teaching Standards, which is included in the career continuum for teachers.</td>
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adopted ETS' PRAXIS I CBT as the state's basic skills test and the PRAXIS II for content-area examinations.

Use of the CCI, or generic teaching skills in classroom observations, gradually was replaced by subject-specific portfolios. By the year 2000, almost all new teachers in Connecticut were preparing portfolios to show they were meeting standards for teaching in separate content fields. Focused on second-year teachers, the portfolio assessment draws from the work of the National Board for Professional Teaching Standards, the Interstate New Teacher Assessment and Support Consortium, and research on effective teaching.

While the generic teaching skills were rather straightforward and technical, the skills teachers must show in their portfolios are more nuanced. The portfolios reveal if teachers' instructional decisions are appropriate for the students in their classrooms. They tell if the range of strategies used by teachers are effective and if the curriculum has logic and coherence. They show the quality of work teachers assign and the capacity of teachers to evaluate their own teaching and make adjustments.

Trained assessors carefully examine the portfolio evidence and assign a score, based on a scoring rubric. The scores determine who is immediately eligible for the provisional educator certificate; teachers with low scores are eligible for a third year in the BEST program. The mentoring and other support systems remain in place, and the state provides extra coaching sessions for teachers who must remain in the BEST program for a third year. The CCI competencies are now part of the portfolio requirements, so a separate CCI evaluation no longer is needed except in a limited way.

**Concurrent Efforts to Set Standards for Student Learning**

Improvement in teacher quality would be an empty policy without equal attention to higher expectations for students. When Connecticut instituted major reforms in teacher selection, preparation, and induction, it also adopted a common core of learning, which was reflected in statewide, standardized achievement tests.

As teacher assessment became more sophisticated, so did the tests for students. Problem solving and essay questions were added to the Connecticut Mastery Tests for grades 4, 6, and 8. The 10th-grade Connecticut Academic Performance Test now emphasizes higher order thinking and performance skills more than many state testing programs. These are low-stakes tests, however, and the state has used communication about the tests' objectives and dissemination of test results data to foster student and school improvement rather than to reward and sanction. The state also provides supplemental tests to districts wanting to assess their progress on state standards in the grades not being tested (grades 3, 5, and 7). The lowest performing schools receive extra state resources, such as funds for professional development, preschools and all-day kindergarten, and smaller pupil-teacher ratios.

According to a study by the National Education Goals Panel, the state's very visible system for reporting assessment results encouraged districts to focus on reading instruction. This was an important lever in the neediest districts, which used their extra resources almost exclusively to close the reading achievement gap. The comprehensive teacher policy system developed over time in Connecticut proved invaluable to these districts. They had highly qualified teachers prepared to use different strategies with low-performing students, good data on which to base improvements, and the BEST supports for new teachers. These assets enabled the districts to use well-informed approaches to improving reading achievement.

Administrators of the districts making the most reading achievement progress credited the coherence of state policies for their success. The state assessments measured reading and writing in authentic ways, the teacher preparation and professional development programs supported the same approaches, and beginning teachers were better prepared each passing year. A large core of veteran teachers also was becoming even better qualified. Those chosen for leadership roles participated in exemplary professional development themselves, learning from their experiences as assessors and mentors.

**Fine-Tuning Teacher Policy and Other Reforms**

A 1996 Connecticut Supreme Court decision focused even more attention on districts with high enrollments of minority and/or low-income students. This led to a new reform package that
reinforced initiatives already underway in the state department. Added to the teacher policy framework were new efforts to recruit well-qualified candidates, especially through alternate certification routes at the graduate level and among minority populations; revised standards for approval of teacher preparation programs; and a strong emphasis on professional development and teacher evaluation.

The framework also now includes the preparation and support needs of school administrators. Connecticut actively participated in the development of standards for school principals through the Interstate School Leadership Licensure Consortium. These standards emphasize instructional leadership rather than management skills.

Never satisfied with the status quo, the state department marshaled participation by many stakeholders in creating new Common Core of Learning standards for students. These incorporate research knowledge about how students learn with high expectations for core content knowledge and for character, such as integrity, persistence, respect and citizenship. Rather than mandates, these are described as "an integrated and interdependent set of expectations" that can generate discussion and stimulate changes in school programs. An accompanying curriculum framework spells out content and performance standards for 10 subject areas.

A year later, in 1999, Connecticut adopted a Common Core of Teaching, which describes the professional knowledge and skill needed by teachers to help students meet the new standards. Drawing from research and national group efforts, it is essentially a definition of the accomplished teacher. It moves from generic skills to subject-specific ones. It cares little about teaching routines, much more about teachers’ skills in assessing and diagnosing student needs and learning as the basis for making decisions.

Changes in licensing requirements required teacher preparation programs to change, also. Beginning in July 2003, beginning teachers must have field experiences in all areas where they are applying for endorsements. Stricter preparation will be needed by specialists in special education and bilingual education; other new requirements focus on improving the quality of bilingual teachers. A demonstration of competencies will replace the accumulation of "seat time" through semester hours and course requirements. The unifying action by the State Board of Education was the adoption of standards of the National Council for the Accreditation of Teacher Education, also effective in July 2003. This makes sure that Connecticut's efforts are aligned with standards developed by national groups.

Finally, professional development and evaluation became part of the teacher policy framework. Since the teacher policy reforms began in 1986, schools had been required to offer 18 hours of "high quality" professional development each year for teachers or Continuing Education Units (CEU). However, districts received no guidance about what quality meant. As the teaching force became significantly influenced by teachers who had been through the BEST program, state department staff realized that teachers’ ongoing professional development should be consistent with state policies. In 1999, the state board adopted a plan to align the CEUs, other professional development, and teacher evaluation with the student and teaching standards.

The Results of the Teacher Policy Initiatives

Like the policies themselves, the impact of Connecticut's investment in teacher quality is still evolving, but the results so far for both teachers and students are more than hopeful. They are quite confirming.

Connecticut increased the flow of qualified teachers for its schools. Within three years of the initial reforms in 1986, urban areas went from teacher shortages to teacher surpluses, and the pool of qualified teachers has remained robust. Higher standards attracted, rather than discouraged, the kind of candidates most wanted by the profession. More teacher candidates came from very selective colleges, three-fourths of the candidates averaged a B or better in undergraduate work.

The teacher policy framework built a high level of professionalism in Connecticut. The percentage of teachers with master's degrees is almost double the national average, and because of changes in teacher preparation programs, graduate-level work by teachers is more closely aligned with state priorities. The BEST program's tight coupling with the most advanced knowledge available about teaching quality set the standards not only for new teachers but also for thousands of other educators.
involved in the program. By 2004, about 80 percent of all the state’s teachers will have felt the influence of BEST—as new teachers, assessors, mentors, or scorers.

Surveys and focus groups organized by the state education department revealed just how deep the focus on teacher quality has affected educators throughout the state. Almost all of the assessors and mentors, for example, reported that their experience had positively influenced their collegial relationships, professional knowledge, and development of a common language around teaching and learning. State department staff report similar impacts, especially on their capacity to analyze data.

Connecticut was the first state to require beginning teachers to participate in a portfolio assessment. This aspect of the teacher policy reform has been particularly beneficial. Mentors, assessors, and beginning teachers overwhelmingly agree that the process helped them to develop a common language, to improve their professional knowledge and skill, and to deepen their capacities to reflect on their practice.

Ultimately, the true measure of Connecticut’s efforts must be with student achievement. Logic would predict that the state could not make much progress because during the years of teacher policy reform, the demographics of the state changed considerably. During the 1990s, for example, the poverty index grew by nearly 50 percent. The percentages of minority students increased, especially among new English-language learners.

Achievement gaps still exist between white and minority students (Connecticut has some of the wealthiest and some of the poorest districts in the country), but the gaps narrowed during the 1990s. Achievement rose for students in all sub-groups and in all types of districts. For example:

- Fourth graders outscored all other students in the United States on the 1998 National Assessment of Educational Progress reading test. The proportion of students at or above the proficient level—considered the goal for all students—increased from 34 percent to 46 percent, compared to a national average of 29 percent. Eighth graders also met or surpassed student performance in all other states.

- In the 1996 NAEP trial assessment in math, Connecticut was among the five states with the highest scale scores for fourth graders. It was among the top eight states in eighth-grade math.

- Student achievement on Connecticut’s academic performance tests and the high school mastery tests has steadily improved.

**Accounting for All Factors**

Connecticut’s impressive record in improving student achievement probably is due to several factors. The comprehensive teacher policies provided a base of expertise for all other reforms. According to several studies, two other reasons need to be considered. One is Connecticut’s approach to accountability. It uses low-stakes, standards-based reforms that depend on authentic, information-rich assessments. Districts and schools have high-quality data to help them understand where they need to target their efforts. Second, Connecticut has provided consistent funding for statewide education reforms, directing resources to the neediest areas while continuing to support efforts to improve the quality of teaching.

One study discounted other reasons for rising student achievement that often appear in reform scenarios. Neither class size nor total instructional time changed significantly in the past 15 years, which suggests that the quality of teaching might well be credited with much of the progress made by students. Highly effective practices reflected in the best research available, for example, were quite evident in the reading instruction used in Connecticut classrooms.

**What Can Other States Learn from Connecticut’s Experience?**

On the surface, Connecticut’s experience with policymaking for the last 15 years describes multiple initiatives focused on capacity building throughout the educational system. This focus has endured through changes in the governor’s office, the legislature, the leadership of the state education department, and funding sources. Beneath the obvious array of initiatives, however, are important lessons that other states can use to shape their own comprehensive policies for education reform.
Every major effort in Connecticut fits together under an overall commitment to teacher quality. No single strategy could have been sufficient to move professionalism and student progress as far as the state has been able to achieve.

From the beginning, the reform process in Connecticut encouraged all those who participate in shaping it to be learners, themselves. Moreover, the learning expectations have been high. State department staff, teachers, administrators, teacher educators, and elected officials are encouraged to seek out the best research and practice from around the country. State department staff, for example, did not set themselves up as the experts. Instead, they formed a collaborative culture of constant inquiry and found national networks to inform their work. They also relied on data analysis to modify policies as needed.

This same context of a learning organization pervades the policies created to build teacher professionalism. The BEST program, for example, assumes that beginning teachers are continuing to learn. Unlike many ways that policies are implemented, the Connecticut example is one of a state education department that uses inquiry rather than pronouncements.

Often state policymaking and implementation become mired in the complexity of the systems they work with, but the Connecticut state department of education maintained a spirit of entrepreneurship. The staff searched out new ideas, mobilized resources, and developed policy innovation. One study attributes this bureaucratic entrepreneurship to three factors: strong, enabling leadership; capacity building within the agency that allowed new ideas and technologies to shape public policy; and empowerment of all levels of the agency staff to act as leaders.

The state education department was allowed to pursue its "steady work" because of bipartisan support for its efforts and the time given to learn from and reshape them.

Instead of striking in a new direction when different issues arose, Connecticut continued to build on its initial policies, always making sure that experienced educators participated at critical points.

In these many ways, the leadership in Connecticut is fostering policy as an educative process for all participants. Policies are used to create learning communities and as strategies for modifying and continuing what has proven to be the critical component for education reform—teachers who are competent and continuous learners. Connecticut is not through. Its latest reforms need to be studied and refined, as need be, but the state is sure it has laid the groundwork needed for steady progress.
One of the Center’s chief goals is to offer timely and useful information concerning efforts to improve the quality of teaching to national, state, and local policy communities. The Teaching Quality Policy Brief series is one vehicle for accomplishing this purpose. Issued periodically throughout the year, these briefs summarize Center working papers, reports, occasional papers, and other research products. The original publications, as well as the briefs, are available for download from the Center’s web site: www.ctpweb.org

**CTP Teaching Quality Policy Briefs**

#1 *State Action to Improve Teaching*, December 1999

#2 *State Teaching Policies and Student Achievement*, December 1999

#3 *A Different Approach to Solving the Teacher Shortage Problem*, January 2001

#4 *Connecticut’s Story: A Model of Teaching Policy*, May 2001

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