



Building on Success: Strengthening Teaching and Learning in New York State

**Recommendations for the Board of Regents
required by Section 305 of State Education Law
as amended by Chapter 57 of the Laws of 2007**

**The University of the State of New York
The New York State Education Department
Office of Higher Education
December 14, 2007**

THE UNIVERSITY OF THE STATE OF NEW YORK

Regents of The University

ROBERT M. BENNETT, <i>Chancellor</i> , B.A., M.S.	Tonawanda
MERRYL H. TISCH, <i>Vice Chancellor</i> , B.A., M.A., Ed.D.	New York
SAUL B. COHEN, B.A., M.A., Ph.D.	New Rochelle
JAMES C. DAWSON, A.A., B.A., M.S., Ph.D.	Peru
ANTHONY S. BOTTAR, B.A., J.D.	Syracuse
GERALDINE D. CHAPEY, B.A., M.A., Ed.D.	Belle Harbor
ARNOLD B. GARDNER, B.A., LL.B.	Buffalo
HARRY PHILLIPS, 3rd, B.A., M.S.F.S.	Hartsdale
JOSEPH E. BOWMAN, JR., B.A., M.L.S., M.A., M.Ed., Ed.D.	Albany
JAMES R. TALLON, JR., B.A., M.A.	Binghamton
MILTON L. COFIELD, B.S., M.B.A., Ph.D.	Rochester
ROGER B. TILLES, B.A., J.D.	Great Neck
KAREN BROOKS HOPKINS, B.A., M.F.A.	Brooklyn
NATALIE M. GOMEZ-VELEZ, B.A., J.D.	Bronx
CHARLES R. BENDIT, B.A.	Manhattan

President of The University and Commissioner of Education

RICHARD P. MILLS

Senior Deputy Commissioner of Education: P-16

JOHANNA DUNCAN-POITIER

Associate Commissioner of Higher Education

JOSEPH P. FREY

Special Projects Coordinator

NANCY WILLIE-SCHIFF

The State Education Department does not discriminate on the basis of age, color, religion, creed, disability, marital status, veteran status, national origin, race, gender, genetic predisposition or carrier status, or sexual orientation in its educational programs, services and activities. Portions of this publication can be made available in a variety of formats, including braille, large print or audio tape, upon request. Inquiries concerning this policy of nondiscrimination should be directed to the Department's Office for Diversity, Ethics, and Access, Room 530, Education Building, Albany, NY 12234. **Requests for additional copies of this publication may be made by contacting the Publications Sales Desk, Room 309, Education Building, Albany, NY 12234.**

Executive Summary

Consistent with the Board of Regents leadership to strengthen the quality of teaching in New York State and to ensure that all students are taught by certified and effective teachers, section 305 of State Education Law was amended in April 2007 to require the Commissioner of Education to conduct a study about evaluating the effectiveness of teacher preparation programs in consultation with institutions of higher education and make recommendations to the Board of Regents, including recommendations for developing or modifying data systems. The law states:

“The Commissioner shall evaluate the effectiveness of all teacher preparation programs in the state, and the timelines and costs of developing or modifying data systems to collect the necessary data. Such study shall consider measuring the effectiveness of such programs based on the academic performance of their students and graduates and through other measures. The commissioner shall consult with the chancellors of the state university of New York and the city university of New York, and other representatives of institutions of higher education. Upon completion of such study, the commissioner shall make recommendations to the board of regents on implementation of such methodologies.”

This report fulfills that requirement and implements the policy of the Board of Regents.

Background. The New York State Board of Regents (Regents) and State Education Department (Department) are responsible for raising student achievement and closing achievement gaps so that all students are prepared for success. To achieve these goals, all students must have effective teachers prepared to teach to high learning standards and all schools must support teaching and learning. In this context, the Regents adopted State Learning Standards in 1996 and a comprehensive teaching policy in 1998 that strengthened college and university teacher preparation programs as well as teacher certification, mentoring, professional development and review and addressed school leadership and resources. The Regents also established a Professional Standards and Practices Board for Teaching (PSPB) to advise policymakers about teaching issues and called for ongoing evaluations of the impact of Regents policy.

The Regents teaching policy led to significant achievements. Two examples are:

- **All teacher preparation programs are aligned with State Learning Standards and accredited.** In 2000-2001, 3,500 modified teacher preparation programs at 110 campuses were approved as being in compliance with new Regents standards requiring all teachers to be prepared to teach all students to State Learning Standards. By the end of 2006, all teacher education programs were required to achieve accreditation from NCATE, TEAC or the Regents to ensure that they meet Regents standards and prepare effective teachers to help all students meet State Learning Standards.

- **All public school students have certified teachers.** In 2000, 13,000 uncertified teachers were employed with temporary licenses, primarily in low-performing schools. In 2002, Schools Under Registration Review (SURR) were no longer permitted to hire teachers with temporary licenses. In 2003, temporary licenses were abolished in all schools. A limited number of modified temporary licenses (2,000 in 2003-2004 and 1,500 in 2004-2005) led to a successful end to all credentials other than full certificates by fall 2005.

The Regents continue to support their teaching policy and related policies with active involvement in the P-16 education community. For example, on June 6, 2007, Vice Chancellor Tisch and Regents Bendit, Chapey, Gomez-Velez and Brooks-Hopkins visited Middle School 399 and Hostos Community College in the Bronx to learn about the goals and challenges of Bronx area schools and colleges and to see firsthand the impact of the work of the Regents and the Department. Similarly, on July 12, 2007, more than fifty individuals from the higher education and P-12 education community attended a teacher quality forum at Teachers College, Columbia University led by Vice Chancellor Tisch and attended by Regents Phillips, Brooks-Hopkins, Gomez-Velez and Bendit and senior managers from the Department. In addition, Regent Chapey coordinated an information session at St. John's University in Queens on November 8, 2007, to update the P-16 education community, community groups and cultural institutions about the Regents and Department's new initiatives in P-16 education, Contracts for Excellence and early childhood education.

The Regents define an effective system of teacher preparation programs as one that works with the Department and school districts to ensure that there are new teachers in sufficient number to meet the hiring needs of all schools in all subject areas and that new teachers have knowledge, understanding and skills consistent with best practice for helping all students learn. The Regents use three standards-based evaluation approaches to evaluate individual teacher preparation programs. Programs must:

- Have curricula aligned with State Learning Standards as well as faculty, resources, procedures and outcomes that meet Regents registration standards;
- Meet accrediting agency standards, as provided in partnership agreements with the Department, including standards for assessing candidates' and completers' impact on student learning and using findings for program improvement; and
- Maintain 80 percent or higher pass rates on required certification examinations, which are aligned with State Learning Standards.

In addition, the Department uses three research-based approaches that apply to multiple programs, institutions and policies. They include:

- Studies showing whether teacher preparation programs collectively provide all P-12 schools with enough new teachers to meet hiring needs in all subject areas;
- Studies of the activities and impact of alternative teacher preparation programs; and
- Studies of "what works" in teacher preparation and teaching policy to raise student achievement and teacher retention.

Study Methodology. As required by State Education Law, this study was based on consultation interviews and meetings with:

- Representatives of the chancellors of SUNY and CUNY;
- Representatives of other institutions of higher education;
- Representatives of school districts and BOCES; and
- Other stakeholders.

In addition, Department staff reviewed current research and a summary of promising evaluation practices in other states prepared by the Northeast and Islands Regional Educational Laboratory (NEIREL).

Findings and Recommendations. The teacher education community indicates that the Regents current approaches to evaluating teacher preparation programs are sound. It also identifies a number of opportunities for strengthening the evaluation of teacher preparation in the future if resources are available. Building on the Regents 1998 teaching policy and its successful implementation, the Department presents four recommendations to the Regents for approval. The recommendations form an ambitious five-year plan for enhancing information systems and organizational capacity to evaluate and improve teacher preparation, teaching practice and student achievement. Implementation will require focused leadership, an infusion of new resources and specialized work groups to study issues and make more detailed recommendations for specific actions. For each recommendation, estimates of costs and timelines are provided. These recommendations and their costs will be shared with the Executive, Legislature and others to identify resources to support them.

Finding 1. The Regents and the Department have an opportunity to launch the next phase of efforts to review and update teaching policy. The Regents 1996 State Learning Standards and 1998 teaching policy set the standards to which teacher preparation program, their completers and in-service teachers are held. These standards define what teachers are expected to know and be able to do and they influence evaluation and the pool of potential teachers. Since that time, the Regents and the Department have been engaged in an ongoing review evaluation of Regents teaching policy. As a result, a number of modifications to the policy have been made to reflect the changing educational environment. The next phase of efforts to evaluate teaching policy will help ensure that the policy reflects recent research; supports the current needs of students, schools and teachers; and is consistent with updated State Learning Standards.

Recommendation 1. Seek resources for a Teacher Quality Policy Update. Building on the Regents successful 1998 teaching policy, launch the next phase of a comprehensive review of teaching policy to ensure that the requirements reflect recent research; support the needs of students, schools and teachers; and are consistent with updated State Learning Standards. The policy review process should be based, in part, on evidence about the existing systems for ensuring quality teacher preparation. For example, a study of findings from the first round of accreditation reviews would help identify common areas of strength and weakness in teacher preparation that may have implications for policy and practice. Some policy updates may lead to pilot projects with rigorous evaluation components. Potential review questions raised during this

study are provided in an attachment to the study. Estimated cost: \$100,000 per year for three years, for a total of \$300,000.

Finding 2. Information systems and organizational capacity should be enhanced to support teacher quality. Teacher preparation programs and school districts need additional information for assessing candidates, completers, programs and in-service teachers for continuous assessment and improvement. For example, teacher preparation programs need:

- Technical guidance on interpreting certification exam results and new reports with exam results for program completers; and
- A systematic way to track program completers through certification into public schools over time.

Similarly, teacher preparation programs and school districts are interested in:

- Developing and validating model tools for assessing candidates, completers and in-service teachers – such as standards- or performance-based assessments and satisfaction surveys of completers and their employers – that have potential for regional or statewide adoption;
- Having statewide data systems that link student and teacher data to support the use of value-added models for research on the characteristics of effective teacher preparation programs and policies; and
- Having data on candidates enrolled in the teacher preparation pipeline to improve program planning and teacher recruitment.

Recommendation 2. Seek resources to develop a New York State Teacher Quality

Research Center. Building on existing data resources and research capacity, a New York State Teacher Quality Research Center (TQRC) should be developed to serve as a repository of data on teachers that can be linked to data on students, schools and districts. These data should be used for research to improve teaching and learning and to provide research services to teacher preparation institutions and others. One of the TQRC’s initial goals should be to use available data to help teacher preparation institutions track program completers and their characteristics (such as academic profile, pathway or race/ethnicity) through certification and into public school employment and to collect evidence about how institutions use the tracking data for program improvement. The TQRC’s next goal should be to establish a professional learning community of P-16 educators and policymakers to design a research and development agenda for improving teacher preparation and teaching practice. The agenda should include the development and validation of model tools for evaluating the effectiveness of pre-service and in-service teachers for adoption on a regional or statewide basis and studies of “what works” in teacher preparation and teaching policy. Estimated cost: \$500,000 per year for five years, plus \$200,000 if an existing data repository is not used, for a total ranging from \$2,500,000 to \$2,700,000.

Resources should be sought for the TQRC’s first five years from the State and private foundations. *(As of November 2007, The University at Albany received a grant of \$50,000 from the Carnegie Corporation of New York to support a one year pilot of a New York State Teacher Quality Research Center to (1) provide data to teacher preparation institutions and the*

Department that tracks teacher preparation program completers into certification and public school employment and (2) survey teacher preparation institutions on their use, or planned use, of the tracking data. The Department will seek approval for a sole source contract to provide matching funds.)

Recommendation 3. Seek resources to enhance the TEACH system to include candidates enrolled in the teacher preparation pipeline. TEACH was originally designed to help individuals apply for certificates online. It should be enhanced to include candidates matriculated in teacher preparation programs so that it can become a source of teacher preparation pipeline data needed for program planning and teacher recruitment. Estimated cost: \$300,000 for a one-time cost over one year once a contractor starts work.

Finding 3. Systemic P-16 partnerships are needed to enhance teaching and learning.

Teacher preparation programs, school districts, BOCES, teacher centers and others would benefit from more opportunities to work as partners to improve teacher preparation and create more seamless transitions between preparation and in-service teaching. Their goals are to:

- Increase the number of new teachers in shortage subject areas through earlier recruitment and, when needed, alternative preparation programs;
- Strengthen instruction linked to practice, in such areas as pedagogy, field-based experiences and student teaching;
- Develop and use common evaluation tools and procedures for evaluating and improving the effectiveness of candidates and teachers; and
- Provide more effective professional development and/or graduate education for novice teachers.

Recommendation 4. Seek resources to support systemic P-16 teacher quality partnerships in every region of the State. Building on regional P-16 teacher quality partnerships that are being piloted in selected regions of the State in 2007-2008, resources should be sought for supporting and extending P-16 teacher quality partnerships in every region. Partnerships will provide opportunities for teacher preparation programs, school districts, BOCES, teacher centers and others to work together to address teacher shortages, improve preparation linked to practice and create more seamless transitions from teacher preparation to teaching practice. Estimated cost: \$80,000 per year for a five-year cost of \$400,000, and continuing costs over time.

Conclusion. Teachers are essential for raising student achievement and closing achievement gaps. Building on the Board of Regents leadership in strengthening teacher preparation and ensuring that all students have certified and effective teachers, this report makes four recommendations for the Regents approval. The recommendations will enhance data systems and organizational capacity in order to promote additional evaluation and improvement in teaching and learning in New York State. The recommendations are designed to build capacity to:

- Enable teacher preparation programs to better meet schools' hiring needs;
- Help teacher preparation programs improve their completers' effectiveness at raising student achievement;

- Help school districts improve their teacher recruitment, hiring and professional development;
- Provide policymakers with better information for shaping policies to support career planning as well as teacher preparation, recruitment, retention and effectiveness; and
- Give middle school, high school and college students better information about job prospects in teaching to help them make better educational and career choices.

Total estimated costs are summarized below.

Summary of Cost Estimates							
(in thousands of dollars)							
	Recommendations	Year 1	Year 2	Year 3	Year 4	Year 5	All Years
1	Policy Update	100	100	100	0	0	300
2	Teacher Quality Research Center*	500	500	500	500	500	2500
3	TEACH pipeline enhancement	300	0	0	0	0	300
4	P-16 partnerships +	80	80	80	80	80	400
	All recommendations	980	680	680	580	580	3500

*It is recommended that resources for the Center be sought from the State and private foundations for the first five years. An additional \$200,000 could be needed in Year 1 if an existing data repository is not used.

+Costs will be ongoing.

Table of Contents

Purpose.....	1
Definitions.....	1
Background.....	3
Study Methodology.....	7
Findings.....	7
Recommendations.....	15
Conclusion	19
Attachments	
1. Classroom Teaching Certificate Titles as of February 2, 2004	21
2. New York State Institutions with Registered Teacher Preparation Programs	24
3. Accreditation Procedures and Standards for Teacher Preparation Programs	25
4. Consultation Contacts	31
5. Potential Questions for a Teacher Quality Policy Review.....	32
References.....	36

(This page intentionally left blank)

Building on Success: Strengthening Teaching in New York State

Purpose

Consistent with the Board of Regents leadership to strengthen the quality of teaching in New York State and to ensure that all students are taught by certified and effective teachers, section 305 of State Education Law was amended in April 2007 to require the Commissioner of Education to conduct a study about evaluating the effectiveness of teacher preparation programs in consultation with institutions of higher education and make recommendations to the Board of Regents, including recommendations for developing or modifying data systems. The Law states:

“The Commissioner shall evaluate the effectiveness of all teacher preparation programs in the state, and the timelines and costs of developing or modifying data systems to collect the necessary data. Such study shall consider measuring the effectiveness of such programs based on the academic performance of their students and graduates and through other measures. The commissioner shall consult with the chancellors of the state university of New York and the city university of New York, and other representatives of institutions of higher education. Upon completion of such study, the commissioner shall make recommendations to the board of regents on implementation of such methodologies.”

Definitions

Several key terms in section 305 of Education Law are defined here.

Teacher preparation programs. Teacher preparation programs are the more than 3,000 undergraduate and graduate programs of study at colleges and universities that are registered by the State Education Department (Department) as leading to one or more certificates in classroom teaching service in the titles listed in Attachment 1. Programs leading to certificates in pupil personnel service or administrative and supervisory service are beyond the scope of this study, although these certificate areas are essential for strengthening teaching and learning.

As of August 2007, New York State has 117 campuses with registered teacher preparation programs, listed in Attachment 2. Three fourths (76 percent) are in the independent sector, 14 percent are in State University of New York (SUNY), 8 percent are in The City University of New York (CUNY) and less than 2 percent are in degree-granting proprietary colleges. Some institutions have only one or two programs while other institutions have hundreds.

Teacher preparation programs are diverse. Their enrollment ranges from fewer than ten to hundreds of candidates. (National Evaluation Systems, 2007) Some programs lead to initial certification while others lead to professional certification. More than 200 programs are registered as being jointly offered with two-year colleges. Some lead to both undergraduate and graduate degrees.

Teacher preparation programs provide different routes to certification for new teachers. Most undergraduate teacher preparation programs leading to initial certificates (the entry level certificate) rely on a three-way partnership between education faculty, arts and sciences faculty and teachers in primary and secondary (P-12) schools. The majority of these programs enroll pre-service teachers who obtain field and student teaching experiences in P-12 schools. Most graduate programs leading to an initial certificate rely on a two-way partnership between education faculty and P-12 schools. Alternative teacher preparation programs are graduate programs that begin candidates in a pre-service summer program to prepare them to be employed as full-time teachers of record in P-12 schools in the fall while they continue their studies and receive school-based and university-based supports.

Teacher preparation programs accounted for two-thirds of all certificates issued to new teachers in 2005-2006. (New York State Education Department, 2007) Of the 24,800 program completers that year, 68 percent were from the independent sector, 22 percent were from SUNY, 10 percent were from CUNY and less than 1 percent came from the degree-granting-proprietary sector. (National Evaluation Systems, 2007) Teacher preparation program completers will provide an even larger share of new teachers in the future if the Individual Evaluation pathway to certification ends in 2009 as planned.

Evaluate. “Evaluate” is defined as “examine and judge carefully.” In higher education, it involves “the systematic collection, review and use of information about educational programs undertaken for the purpose of improving student learning and development.” (Palomba and Banta, 1999) Evaluation is also used to judge whether educational programs or policies meet their stated goals or specific standards, should continue or change, or compare favorably to one another or benchmarks. The unit of analysis depends on an evaluation’s purpose.

Students and graduates. State Education Law refers to “students” and “graduates” of teacher preparation programs. This report refers to teacher preparation program students as “candidates” and graduates of teacher preparation programs as “completers” to avoid confusion with students and graduates in P-12 schools.

Academic performance. “Academic performance” usually means knowledge, understanding and skills in general education and academic disciplines, but not in pedagogy. High school Grade Point Averages (GPAs), high school exit exam scores, college admissions examination scores and college GPAs are typically used to measure the academic performance of *entering candidates*. College GPAs and teacher certification examination scores or pass rates are used to measure the academic performance of *enrolled candidates and completers*.

Effectiveness. The Board of Regents (Regents) 1998 teaching policy defines effective teacher preparation programs as those that meet their stated goals, which must include the preparation of teachers whose knowledge, understanding and skills are consistent with best practices for helping all students learn. This definition is widely accepted and is consistent with federal standards for accrediting agencies. (Levine, 2006) In addition, the Regents teaching policy and Regents Statewide Plan for Higher Education define an effective system of teacher preparation programs as one that works with the Department and school districts to produce enough new teachers to meet the hiring needs of all schools – including hard-to-staff schools in urban and rural areas – in all subject areas. (New York State Board of Regents, 2005, Priority D11) However, it is important to recognize that the number of teacher preparation program completers is not the only influence on teacher shortages. Economists define labor supply as the labor available at various wage rates, other things being equal. This means that there may not be enough program completers to fill all vacancies unless teaching is an attractive career option compared to others. In addition, even when there are enough program completers to fill vacancies, new teachers will not remain in teaching unless, compared to their other options, they have safe and supportive working environments, adequate compensation and career development opportunities.

Background

The Regents 1998 teaching policy and current approaches to evaluating teacher preparation provide a solid foundation for future evaluations.

Regents 1998 teaching policy. The Regents and Department are responsible for raising student achievement and closing achievement gaps so that all students are prepared for success. To achieve these goals, all students must have effective teachers who help students meet high academic standards and all schools must support teaching and learning. In this context, the Regents adopted State Learning Standards in 1996 and a comprehensive teaching policy in 1998. The teaching policy strengthened college and university teacher preparation programs, certification, mentoring, professional development and review, school leadership and school resources. The Regents also established a Professional Standards and Practices Board (PSPB) for Teaching to advise policymakers about teaching issues and called for ongoing evaluation of the Regents policy.

The Regents teaching policy led to significant achievements. Two examples are:

- **All teacher preparation programs are aligned with State Learning Standards and accredited.** In 2000-2001, 3,500 modified teacher preparation programs at 110 campuses were approved as being in compliance with new Regents standards requiring all teachers to be prepared to teach all students to State Learning Standards. By the end of 2006, all teacher education programs were required to achieve accreditation from NCATE, TEAC or the

Regents to ensure that they meet Regents standards and prepare effective teachers to help all students meet State Learning Standards.

- **All public school students have certified teachers.** In 2000, 13,000 uncertified teachers were employed with temporary licenses, primarily in low-performing schools. In 2002, Schools Under Registration Review (SURR) were no longer permitted to hire teachers with temporary licenses. In 2003, temporary licenses were abolished in all schools. A limited number of modified temporary licenses (2,000 in 2003-2004 and 1,500 in 2004-2005) led to a successful end to all credentials other than full certificates by fall 2005.

The Regents continue to support their teaching policy with active involvement in the P-16 education community. For example, on June 6, 2007, Vice Chancellor Tisch and Regents Bendit, Chapey, Gomez-Velez and Brooks-Hopkins visited Middle School 399 and Hostos Community College in the Bronx to learn about the goals and challenges of Bronx area schools and colleges and to see firsthand the impact of the work of the Regents and the Department. Similarly, on July 12, 2007, more than fifty individuals from the higher education and P-12 education community attended a teacher quality forum at Teachers College, Columbia University that was lead by Vice Chancellor Tisch and attended by Regents Phillips, Brooks-Hopkins, Gomez-Velez and Bendit and senior managers from the Department. In addition, Regent Chapey coordinated an information session to be held at St. John's University in Queens on November 8, 2007 to update the P-16 education community, community groups and cultural institutions about the Regents and Department's new initiatives in P-16 education, Contracts for Excellence and early childhood education.

Current approaches to evaluation. The Regents and Department currently use six approaches to ensure quality and ongoing improvement in teacher preparation programs. Three approaches are part of the standards-based program registration process and apply to individual programs and their institutions; three are research-based approaches that apply to multiple programs, institutions and policies.

1. **Registration: Curricula, resources and procedures.** Before an institution can register a new teacher preparation program, it must submit a comprehensive application to the Department to ensure the program meets Regents standards. The application requires programs to provide information on the purpose of the program, collaboration with P-12 schools, collaboration of education faculty with other departmental faculty, and details of curricula and faculty. The application allows the institution to demonstrate how the program meets Regents standards so that candidates in the program are prepared to teach to the New York State Learning Standards and complete college study in the specified education core, content core, and pedagogical core areas as well as complete field experiences and student teaching appropriate to the certificate title. Each program must have faculty that have appropriate degrees and expertise aligned with their teaching assignments. The institution is expected to support its programs with necessary resources, and implement procedures for assessing program effectiveness and making

improvements. Each program's curriculum must ensure that completers will have the knowledge, understanding and skills associated with effective teaching for all P-12 students. Each program must demonstrate acceptable admission standards for the academic performance of its candidates and provide support services that enable all admitted candidates to succeed. The academic performance of teacher preparation candidates and completers is measured by an institutional review of their academic performance and field practice while in the program, and their score results on required State certification examinations. Registration relies on the accreditation process for evidence of program effectiveness based on candidates' and completers' impact on student learning, the ultimate test of program effectiveness. Registration standards are available at <http://www.highered.nysed.gov/ocue/>.

2. **Registration: Accreditation.** To ensure that every registered teacher preparation program practices ongoing assessment and improvement, the Regents require that the education department or unit of all institutions preparing teachers in New York State be accredited by one of three accrediting agencies, the National Council for Accreditation of Teacher Education (NCATE), the Teacher Education Accrediting Council (TEAC) – both of which have partnership agreements with the Department – or the Regents, through the Regents Accreditation of Teacher Education (RATE). As of September 2007, New York was one of only nine states that required all teacher preparation programs to be accredited. (NCATE, 2007; TEAC, 2007) Each accrediting agency evaluates an institution's education department and teacher preparation programs on a multi-year cycle based on the agency's accreditation standards and, as applicable, partnership agreement. Although the three accrediting agencies use different approaches and criteria, their evaluation processes generally involve an institutional self-study, peer review with input from Department staff, site visits and a peer summary report. An important component of accreditation is the expectation that institutions will assess their candidates' and completers' impact on student learning to the extent feasible and use findings for program improvement. To attain accreditation, teacher preparation programs must have appropriate standards for the academic performance of their admitted applicants, candidates and completers; however, accrediting agencies do not set specific academic performance standards for programs except that they have adopted the registration standard for 80 percent pass rates on certification exams. Attachment 3 summarizes the three accrediting agencies' procedures and standards and provides links to more detailed information.

As of spring 2007, 47 percent of New York State's campuses with teacher preparation programs had selected NCATE; 28 percent had selected RATE; and 25 percent had selected TEAC. Accreditation, first required by the Regents in 2000, appears to have had a profound impact on teacher preparation institutions. It has been credited with improving programs by enhancing program coherence and focus; promoting collaboration between faculty in schools of education and liberal arts and sciences; stimulating the collection and examination of a wide range of evidence for assessing the

performance of candidates, completers and programs; and increasing faculty reliance on evidence to support instructional practice and program improvement. (Brabeck; 2007; Knapper, 2007; Lehman College, 2007; Weber, 2007; Tobias, 2006)

- 3. Registration: Certification examination pass rates.** To ensure that completers of teacher preparation programs have the knowledge, understanding and skills required for entry into teaching to State Learning Standards, each institution is required to have program completer pass rates of 80 percent or more on all three New York State Teacher Certification Examinations (NYSTCEs) required for initial certification. These examinations include the Liberal Arts and Science Test (LAST), which assesses general knowledge, including writing skills; the Assessment of Teaching Skills-Written (ATS-W), which assesses pedagogical knowledge; and an appropriate Content Specialty Test (CST), which assesses knowledge in one or more subjects related to the certificate. Although the examinations are not designed or validated for screening candidates for program entry or completion, institutions use them to inform decisions about individual candidates' educational needs and program improvement. An institution whose pass rate falls below 80 percent on an exam must successfully implement an approved corrective action plan for the relevant programs to remain registered. Certification examinations set statewide thresholds for the academic performance of teacher preparation program completers that are aligned with State Learning Standards. Pass rates are available at <http://www.highered.nysed.gov/ocue/TitleIIData/titleIIDataMain.htm>.
- 4. Teacher supply and demand studies.** The Department uses its teacher certification and public school workforce data to evaluate whether teacher preparation programs collectively produce enough new teachers to meet the hiring needs of all public schools in all subject areas and geographic regions of the State and issues annual teacher supply and demand reports. (New York State Education Department, 2007) Each report compares the number of new teachers to the number of vacancies for new teachers in each subject area and geographic region in order to identify shortages that are independent of teachers' willingness to work or employers' hiring standards. These reports are used to inform planning and policy development at all levels of education. The most recent report is available at <http://www.highered.nysed.gov/>.
- 5. Studies of alternative teacher preparation programs.** The Department issues periodic reports on the activities and impact of alternative teacher preparation (ATP) programs to inform policy decisions about the programs. In 2000, the Regents authorized ATP programs to provide a needed source of new teachers and ATP programs continue to provide new teachers in hard-to-staff subject areas and geographic regions. Reports are available at <http://www.highered.nysed.gov/ocue/intrototransc.htm>
- 6. Studies of “what works” in teacher preparation.** The Department supports research being conducted by scholars from the University at Albany and Stanford University that describes teacher labor markets and evaluates the impact of policies and practices

designed to improve teaching and student learning. For example, the research has shown the impact of different pathways to certification on gains in student achievement and teacher retention in New York City. Research findings are available at <http://www.teacherpolicyresearch.org/>.

Study Methodology

As required by State Education Law, this study was based on consultation interviews and meetings with:

- Representatives of the chancellors of SUNY and CUNY;
- Representatives of other institutions of higher education;
- Representatives of school districts and BOCES; and
- Other stakeholders.

Attachment 4 is a list of all consultation contacts. In addition, Department staff reviewed current research and a summary of promising evaluation practices in other states prepared by the Northeast and Islands Regional Educational Laboratory (NEIREL).

Findings

There are a total of five findings. The first two findings address the statutory requirement to consider evaluating the effectiveness of teacher preparation programs based on measures of the academic performance of students (candidates) and graduates (completers). The remaining three findings from this study involve other evaluation measures and approaches identified by the P-16 education community.

Statutory requirement: Finding 1. The academic performance of entering candidates is not an appropriate measure of teacher preparation program effectiveness. There is some evidence that the college entrance examination scores of candidates in teacher preparation programs in the U.S. have risen in recent years, although differences between certification areas remain wide and secondary subject teachers continue to have the highest scores. (Gitomer, forthcoming; Latham, Gitomer and Ziomek, 1999) However, there is not strong research evidence to support the evaluation of teacher preparation programs based the academic performance of entering candidates. (ECS, 2003) In its comprehensive report, the Panel on Research and Teacher Education of the American Educational Research Association (AERA) concluded:

- There is not strong research evidence that the college admissions exam scores or high school GPAs of entering teacher preparation candidates are good predictors of effective teaching;
- There is some evidence that teachers who do well on verbal ability tests do better in the classroom, but the evidence is not very strong;
- Although the U.S. Department of Education has claimed that “verbal ability and content knowledge are the most important attributes of highly qualified teachers,” no study has compared their relative importance to other knowledge and skills; and

- The use of college admissions examinations to make decisions about individuals can be problematic because these measures tend to screen out minorities who would otherwise perform well in college. (Cochran-Smith and Zeichner, 2005)

A forthcoming study suggests that the combination of college admissions exam scores in math and certification exam results is related to teachers' effectiveness in math in grade 4 and 5 in New York City, but there was a weaker relationship for middle school math and a relatively small relationship for English. (Boyd et al., 2007) Finally, the college admissions examinations scores and high school GPAs of entering candidates may not be appropriate for evaluating teacher preparation programs at colleges with missions to serve first-generation, low-income and nontraditional students.

Statutory requirement: Finding 2. The academic and other performance of enrolled candidates and completers is an appropriate measure of teacher preparation program effectiveness that the Regents currently use. As required by program registration and accreditation, New York State's teacher preparation programs evaluate their candidates' academic performance (such as general knowledge and core subject knowledge) and other performance (such as pedagogic knowledge, teaching skills and dispositions) to make decisions about program admission, grades in courses and clinical experiences, degree conferral, and recommendation for certification. In addition, the Department evaluates teacher preparation programs based on their completers' certification exam pass rates, creating statewide thresholds for academic and other performance. Nearly all teacher preparation institutions have program completer pass rates of 80 percent or more on each required certification exam. (National Evaluation Systems, 2007) Teacher certification exams are designed to screen out certificate applicants who lack entry-level knowledge and skills and are not designed to predict teachers' classroom effectiveness, but they do predict effectiveness in some circumstances. (Goldhaber, 2007)

Study: General Finding. The Regents current approaches to evaluating teacher preparation programs individually and collectively are sound, but these approaches could be strengthened in several ways if resources are available. In recent years there has been an increasing use of evidence to evaluate and improve teacher preparation programs in New York State as a result of Regents registration and accreditation requirements. The new emphasis on evidence-based decision making is illustrated by special projects such as the SUNY project on teacher education program assessment supported by the federal Fund for the Improvement of Postsecondary Education (FIPSE), the Teachers for a New Era (TNE) project funded by the Carnegie Corporation of New York and the Pathways Project funded by the Carnegie Corporation and other sponsors.

The teacher education community indicates that the Regents current approaches for evaluating individual teacher preparation programs and institutions are sound. These approaches require programs and institutions to identify multiple sources of evidence about candidates, completers and program effectiveness for program registration and accreditation, which provides the most

reasonable and comprehensive basis for making high stakes decisions about programs. The teacher education community also indicates that these approaches have been transformational, although it may be too early to see their full impact. Within this context of overall support for Regents current approaches to evaluating teacher preparation, support is not absolute, as some teacher educators ask whether the ongoing costs of accreditation for all institutions is justified by the benefits of accreditation. Similarly, some teacher educators ask why the Chapter 57 amendments to Education Law are needed given the extensive evaluation system already in place.

Teacher preparation institutions support the Department's teacher supply and demand studies, studies of alternative teacher preparation programs and research on "what works" in teacher preparation. They caution that scientific knowledge about effective teacher preparation is still in its infancy and recommend further research and pilot projects (including those requiring regulatory waivers) with rigorous evaluation components.

While the teacher preparation community supports current approaches to evaluating teacher preparation programs, it identified three areas for improvement within those approaches:

- a next phase of comprehensively reviewing and updating Regents teaching policy;
- enhanced information systems and organizational capacity; and
- systemic P-16 teacher quality partnerships in all regions of the State.

These areas for improvement are also supported by the P-12 education community.

Study: Finding 1. The Regents and the Department have an opportunity to launch the next phase of efforts to review and update teaching policy. The Regents 1996 State Learning Standards and 1998 teaching policy set the standards to which teacher preparation program, their completers and in-service teachers are held. These standards define what teachers are expected to know and be able to do and they influence evaluation and the pool of potential teachers. Since that time, the Regents and the Department have been engaged in an ongoing review evaluation of Regents teaching policy. As a result, a number of modifications to the policy have been made to reflect the changing educational environment. The next phase of efforts to evaluate teaching policy will help ensure that the policy reflects recent research; supports the current needs of students, schools and teachers; and is consistent with updated State Learning Standards. For example, the Professional Standards and Practices Board for Teaching believes that it is important to enhance the capacity of teacher candidates and teachers to understand and use student data to plan effective instruction and intervention. (National Research Council, forthcoming; Schwartz, 2007; Murnane and Steele, 2007; National Council on Teacher Quality, 2007; Moore Johnson, 2006; Darling-Hammond, 2005; Levin and Quinn, 2003) Attachment 5 contains potential policy review questions that were posed by the P-16 education community during consultation for this study.

Study: Finding 2. Information systems and organizational capacity should be enhanced to support teacher quality. Better information is needed to support the ongoing evaluation and improvement of teacher preparation and teaching practice.

- **Study: Finding 2.1. Teacher preparation institutions seek better information about certification examination results to help them use the results for program improvement.** They request a faculty guide for all New York State Teacher Certification Examinations (NYSTCEs) that explains each exam, how it is validated and scored and how to interpret its scores and sub-scores for use in program improvement. They also request new reports for each examination that show pass rates as well as mean scores, mean sub-scores and standard deviations for each year's program completers at their institution, in each sector and in the State. They would also welcome reports with item analyses to help them improve instruction. *(As of October 2007, the Department, the NYSTCE contractor and the teacher preparation community were working together to be responsive to these requests.)*

- **Study: Finding 2.2. Teacher preparation institutions and others seek better information about the certification and employment of program completers over time.** To help teacher preparation institutions assess their programs on an ongoing basis, they request a systematic way to use the Department's certification and employment databases to track their program completers (and their characteristics, such as pathway, race/ethnicity and academic profile) through certification and into public school employment in New York State. As feasible, they also request assistance in tracking completers into other employment in New York State and other states. Teacher preparation programs and others seek information about the career paths of program completers to give middle school, high school and college students and their families better information about job prospects in teaching for educational and career planning.

- **Study: Finding 2.3. Teacher preparation institutions and others seek better tools for measuring the teaching effectiveness of teacher preparation candidates, program completers and in-service teachers.** Effective teaching is a highly complex skill that requires the application of extensive knowledge in many domains and that does not lend itself easily to measurement. (Shulman, 2007; Darling-Hammond and Bransford, 2005; Wasley and McDiarmid, 2003) Teacher preparation programs and P-12 school and district leaders seek valid and reliable ways to measure and enhance the teaching effectiveness of candidates, completers and in-service teachers. An approach that relies on multiple, complementary measurement tools holds promise because it builds on strengths of each measurement tool, while recognizing its pitfalls, and it offers opportunities for research and validation.
 - **Measurement Tool 1. Standards-based and performance-based assessments.** The NYSTCE Assessment of Teaching Skills-Performance is being phased out because it is no longer a requirement for professional certification. The NYSTCE Assessment of Teaching Skills-Written, which is required for initial certification, measures pedagogical knowledge and skills but not actual performance. To measure actual teaching performance, teacher preparation faculty and public

school teachers overseeing field experiences and student teaching, as well as school and district leaders responsible for Annual Professional Performance Reviews, currently use many different tools of varying technical quality. These tools include checklists, rubrics, teacher work samples and teacher portfolios. (Brabeck, 2007; Lehman College, 2007; Kappner, 2007; Tobias, 2007; Weber, 2007; Danielson, 1996) The SUNY FIPSE project is planning to develop a database describing some of the tools being used throughout the State. (Forum, 2007) One challenge with these types of tools is ensuring the consistency of measurement so that results are valid, reliable and comparable across individuals and over time.

Teacher preparation institutions are interested in working with P-12 schools, districts, BOCES and others to explore the development and validation of one or more tools for standards- or performance-based evaluation that have the potential for regional or statewide adoption for both pre-service and in-service teachers, or, if that is not possible, model tools that share core items and are aligned to the same professional teaching standards. Their interest is consistent with a growing national interest in standards- and performance-based teaching assessment tools that can be validated against gains in student achievement. “When performance assessments can both predict teacher effectiveness and support individual and institutional learning, they can help to create an engine for stimulating greater teacher effectiveness in the system as a whole.” (Darling-Hammond, 2007; Denner et al, 2004; Griffin and Hett, 2004) It is challenging to develop and validate tools that adequately reflect the distinctive goals of each teacher preparation institution, school district and school but one possible response to that challenge would be to design tools with common items that could be supplemented with local items.

Examples of standards- and performance-based assessment tools include the assessments required for national board certification, the teacher work sample model developed by the Renaissance Partnership for Improving Teacher Quality, the Formative Assessment System developed by the New Teacher Center at Santa Cruz, student teaching assessments in the State of Washington, initial licensing assessments in California and Oregon and professional licensing assessments in Connecticut.

- **Measurement Tool 2. Surveys.** Surveys of teacher preparation program students and graduates and their supervisors or principals are another way to measure program effectiveness. School administrators’ judgments about teachers tend to be accurate for the best and worst teachers, though they tend not to distinguish teachers in the middle of the effectiveness distribution, roughly between the 20th and 80th percentiles. (Jacob, 2007) Currently, teacher preparation institutions use a variety of surveys of exiting candidates, completers

and completers' employers. (Forum, 2007) Teacher preparation institutions would like to explore the development of statewide surveys with core items that could be supplemented with institution-specific items. One possible mechanism for administering such surveys might be to ask all applicants for initial and professional certificates to complete a brief, online survey about their preparation and to ask all recent recipients of initial certificates to identify their principal or supervisor and authorize them to complete a brief, online survey, provided that these requests did not delay the certification process.

There are models for statewide surveys. In New York State, several SUNY campuses use the same online survey from a commercial source and the New York City Department of Education conducts online surveys of Teaching Fellows and their principals. At least seven other states, including Alabama, Georgia, Kentucky, Mississippi, North Carolina, Massachusetts and California, have used statewide surveys of teacher preparation completers, school administrators or both. (Breslow and Midouhas, 2007; Futernick, 2007; SREB, 2006) It is challenging to develop a survey that adequately reflects the distinctive goals of each teacher preparation institution but one possible response to this challenge would be to design a survey with common items that could be supplemented with institution-specific items.

Measurement Tool 3. Value-added models (VAM). Value-added models, which estimate the “effect” of teachers on their students’ year-to-year gains on assessments while statistically controlling for other measurable influences on the gains, are promising research and evaluation tools. (Aspen Institute, 2007; Berry, Fuller, Reeves and Laird, 2007; Boyd et.al., 2007; Strauss, Hao and Wang, 2007; Kane, Rockoff and Steiger, 2006; Teaching Commission, 2006 and 2004; Cochran-Smith and Zeichner; 2005; Carey, 2004; Fallon, 2003; Sanders and Rivers, 1996) Some support their use in evaluating teacher preparation programs. (Data Quality Campaign, 2007; Louisiana Board of Regents, 2007)

VAM requires longitudinal data on students, student assessment results and teachers, and a mechanism for linking student and teacher data. As of 2006, 16 states, including Louisiana, Utah and Florida, had an operational teacher identifier system with a mechanism for linking student and teacher data. (Badolato, 2007) VAM also requires student assessments that measure student gains from year to year in the same learning domains, such as mathematics or English, and extensive data about non-teacher influences on student gains.

In order to implement VAM on a statewide basis in New York State, at least three investments would be required. First, the Department’s data systems would need a teacher identifier and a mechanism for linking student and teacher data. Section 305 of State Education Law was amended in April 2007 to require the

Department to consider creating these features, and their creation will be one of the topics covered in the Department's plan for a P-16 data system. Pending the completion of that plan, staff experts believe that short-term and long-term approaches may be needed to support VAM. In the short term, the Department may need to create a link between student assessment results and the teacher(s) responsible for instruction in the assessed subjects. In the longer term, the Department will probably need to require all districts to conform to statewide system of unique identifiers for every instructional assignment so that teachers and students can be linked through the assignment identifiers. In both cases, the Department's mechanism for linking teachers to students and database storage will need to rigorously protect the privacy of individual students and teachers in accordance with State and federal privacy laws. Second, the Department would need to ensure that its grade 3 through 8 assessments in math and English Language Arts are appropriate for measuring student gains from year to year. Third, the Department would need to develop and test mathematical models for measuring value-added at appropriate units of analysis using available data.

Like any research methodology, VAM has limitations. A 2003 Rand Corporation study concluded that the research base was insufficient to support the use of VAM for high-stakes decisions about individual teachers or schools, that research must be informed by "the practical needs and constraints facing users of VAM" and that the implementation of VAM must be informed by "understanding of what inferences and decisions the research currently supports." (McCaffrey, Koretz, Lockwood and Hamilton, 2003). Other researchers and assessment experts concur. (Forum, 2007; Darling-Hammond, 2007; Berry et al., 2007; Murnane and Steele, 2007; New York State Education Department Technical Advisory Group on Assessment, 2007; Braun, 2005)

Despite VAM's limitations, many in New York State's teacher preparation community, along with the American Association of Colleges of Teacher Education (AACTE), support the creation of a link between student and teacher data and the use of VAM for responsible research on improving teacher preparation, recruitment and hiring – such as the Pathways Project in New York City – while using other approaches that are more appropriate for informing high-stakes decisions about individual candidates and programs. (Forum, 2007; New York State Professional Standards and Practices Board for Teaching, 2007; New York State Council of University Deans, 2007; Boyd et al, 2007; Robinson, 2007) They agree that VAM must be used with caution for evaluating individual candidates, teachers or preparation programs. However, they believe that, when used responsibly, VAM is a valuable research tool for evaluating policies and practices through the important lens of their impact on student learning gains. One option being used in other states to address the limitations of VAM is to

adopt policies on the intended and appropriate uses of linked data and VAM to avoid inappropriate and irresponsible uses.

- **Study: Finding 2.4. Teacher preparation institutions and others seek data on the pipeline of candidates in teacher preparation programs.** Except for summary enrollment data for programs preparing teachers and other school professionals to serve students with disabilities, the Department does not have data on candidates enrolled in the teacher preparation pipeline and, therefore, cannot project the future number of program completers that may be available to meet schools' hiring needs. Pipeline data and projections of program completers are important for planning teacher preparation programs, responding to expected demand, strengthening teacher recruitment and hiring practices and helping students and their families make informed educational and career choices. The following data would be needed for each matriculated candidate:
 - Individual identifiers and characteristics (the same ones that are used for certification)
 - Date of matriculation into a teacher preparation program
 - Teacher preparation institution and program(s) and their codes (from the Inventory of Registered Programs)
 - Certificate title and code for each certificate being sought
 - Expected program completion date
 - Plans for seeking employment in NYS public schools

Study: Finding 3. Systemic P-16 partnerships are needed to enhance teaching and learning. Teacher preparation programs are carried out by some combination of education faculty, arts and sciences faculty and teachers in P-12 schools. Representatives of teacher preparation institutions, school districts, BOCES and others seek more opportunities to work together to strengthen teacher preparation and teaching practice and achieve the following goals.

- **Address teacher shortages.** P-12 school leaders are concerned about teacher shortages and teacher attrition in high-need schools and want to work with teacher preparation institutions to address these concerns since shortages result from districts' wages and working conditions as well as the number of graduates of teacher preparation programs. High-need school districts are particularly interested in knowing the number and characteristics of teacher preparation candidates and completers in shortage subject areas and the number and characteristics of completers who take jobs in high-need schools and remain in those schools over time and the characteristics of those schools.
- **Strengthen preparation linked to practice.** P-12 education leaders recognize that new teachers will always need induction, mentoring and other support. However, some recommend that preparation be strengthened in such areas as classroom management, differentiated instruction and the use of assessment results to guide instruction and are open to working with teacher preparation institutions to strengthen preparation in these areas. At the same time, some teacher preparation institutions are concerned about the

challenge of finding field placements and student teaching placements where their candidates can emulate models of best practice and interact with students representing a wide range of learning needs. Some teacher preparation programs would welcome the opportunity to mentor their completers during the completers' first year of employment as a part of both graduate education and program evaluation.

- **Develop shared evaluation tools.** P-12 school leaders and the teacher preparation community are interested in working together to develop standards-based or performance-based tools for evaluating teaching effectiveness that have been validated against student performance and that would create a more seamless transition from pre-service to in-service teaching. Regional or statewide adoption of such tools has the potential to raise student achievement through evidence-based improvements in teacher preparation, mentoring, in-service professional development and practice. Teacher preparation institutions are interested in obtaining survey data from their completers and their completers' principals or supervisors without overwhelming school leaders with different surveys from multiple institutions.
- **Explore new approaches to professional development and professional certification.** With the goal of helping novice teachers, P-12 education leaders are interested in working with teacher preparation institutions to develop graduate programs for practicing teachers with initial certificates that incorporate district-based professional development and working with the Department to develop pilot projects with rigorous evaluation components that permit district-based professional development that meets high standards to replace some or all of the graduate education required for professional certification. However, the Professional Standards and Practices Board for Teaching indicates that "graduate study leading to a master's degree in New York must conform to standards of graduate study consistent with national, state, and professional education. In this regard, the qualifications and characteristics of graduate education differ significantly from that of district professional development." Any change to the graduate education requirement for professional certification would need to be approved by the Board of Regents.

Recommendations

Building on the Regents 1998 teaching policy and its successful implementation, the Department presents four recommendations to the Regents for approval. The recommendations form an ambitious five-year plan for enhancing information systems and organizational capacity to evaluate and improve teacher preparation, teaching practice and student achievement.

Implementation will require focused leadership, an infusion of new resources and specialized work groups to study issues and make more detailed recommendations for specific actions. For each recommendation, estimates of costs and timelines are provided. These recommendations and their costs will be shared with the Executive, Legislature and others to identify resources to support them.

Recommendation 1: Seek resources for a Teacher Quality Policy Update.

Building on the Regents successful 1998 teaching policy, launch the next phase of a comprehensive review of teaching policy to ensure that the requirements reflect recent research; support the needs of students, schools and teachers; and are consistent with updated State Learning Standards. The policy review process should be based, in part, on evidence about the existing systems for ensuring quality teacher preparation. For example, a study of findings from the first round of accreditation reviews would help identify common areas of strength and weakness in teacher preparation that may have implications for policy and practice. Some policy updates may lead to pilot projects with rigorous evaluation components. Potential review questions raised during this study are provided in Attachment 5.

Estimated costs and timelines. A Teacher Quality Policy Update would require at least \$100,000 per year for three years, for a total cost of \$300,000. Costs include one new Grade 26 Associate to provide staff leadership, contracted services for experts and travel costs for work group members. The schedule for reviewing content-specific standards for teacher preparation programs should be aligned with the Department’s schedule for reviewing State Learning Standards, which will extend beyond three years. *(As of August 2007, the Professional Standards and Practices Board had begun work on a few policy issues.)*

Recommendation 2. Seek resources to develop a New York State Teacher Quality Research Center.

Building on existing data resources and research capacity, a New York State Teacher Quality Research Center (TQRC) should be developed to serve as a repository of data on teachers that can be linked to data on students, schools and districts. These data should be used for research to improve teaching and learning and to provide research services to teacher preparation institutions and others. One of the TQRC’s initial goals should be to use available data to help teacher preparation institutions track program completers and their characteristics (such as academic profile, pathway or race/ethnicity) through certification and into public school employment and to collect evidence about how institutions use the tracking data for program improvement. The TQRC’s next goal should be to establish a professional learning community of P-16 educators and policymakers to design a research and development agenda for improving teacher preparation and teaching practice. The agenda should include the development and validation of model tools for evaluating the effectiveness of pre-service and in-service teachers for adoption on a regional or statewide basis and studies of “what works” in teacher preparation and teaching policy.

There are models for a TQRC in other states. Each model has its own priorities and approaches. While nearly all are based at a university or university system and rely on multiple funding sources, some involve partnerships between a university and a State education agency. The models include:

- National Research and Development Center's CALDER Center
<http://www.urban.org/publications/900978.html> and <http://www.caldercenter.org/>
- California State University Center for Teacher Quality
<http://www.calstate.edu/teacherquality/>
- Ohio Teacher Quality Partnership <http://www.tqpohio.org/index.php>
- Louisiana's Value-Added Teacher Preparation Program Assessment Model
http://asa.regents.state.la.us/TE/value_added_model
- Illinois Education Research Council <http://ierc.siue.edu/aboutcouncil.htm>
- Virginia's VITAL <http://research.schev.edu/topicpages.asp?t=9>

Scholars at the University at Albany have done similar work in New York State with the Department as a supporting partner. See <http://www.teacherpolicyresearch.org/>.

The experience of these models suggests that the TQRC should have achievable goals, strong leadership, an advisory council representing data providers and users to guide its work and ensure the responsible and appropriate use of data, and reliable and adequate resources from multiple sources, including New York State government, the federal government, philanthropic foundations and teacher preparation institutions.

The many types of data that the TQRC would need in order to achieve its research goals are described in the research literature. (Badolato, 2007; Goldhaber, 2005; Vorhees and Barnes, 2003) Many of these types of data already exist for New York State in some form.

- **The Department** has data on NYSTCE test takers and their test results; teacher preparation program completers; certificate recipients and certificates issued; teachers employed in public schools and their assignments; P-12 students and their enrollment pathways; P-12 student assessment results; the characteristics of schools and districts and their students; and the characteristics of teacher preparation institutions.
- **Teacher preparation institutions** have data on teacher preparation candidates, including their demographics, their admissions and enrollment history, their transcripts and their performance on evaluations in courses, field experiences and student teaching experiences associated with their programs.
- **Local school districts** have data on their teachers' professional performance reviews, tenure status and professional development plans and activities.
- **Teachers retirement systems** have data on retirees that may be helpful for projecting demand for teachers or estimating the potential impact of incentive programs for retired teachers to return to teaching.

- **The New York State Department of Labor** has data that could be used to follow program completers into employment in New York State beyond public schools.
- **Other states** have data that could be used to follow program completers into employment outside of New York State.
- **Estimated costs and timelines.** *Estimated cost:* \$500,000 per year for five years, plus \$200,000 if an existing data repository is not used, for a total ranging from \$2,500,000 to \$2,700,000. Resources should be sought for the TQRC's first five years from the State and private foundations. *(As of November 2007, The University at Albany received a grant of \$50,000 from the Carnegie Corporation of New York to support a one year pilot of a New York State Teacher Quality Research Center to (1) provide data to teacher preparation institutions and the Department that tracks teacher preparation program completers into certification and public school employment and (2) survey teacher preparation institutions on their use, or planned use, of the tracking data. A sole source contract to provide matching funds from the Department is under review by the Office of the State Comptroller.)*

Recommendation 3. Seek resources to enhance the TEACH system to include candidates enrolled in the teacher preparation pipeline.

TEACH was originally designed to help individuals apply for certificates online. Building on its successful implementation, TEACH should be enhanced to include candidates matriculated in teacher preparation programs in order to create a data source on the teacher preparation pipeline data. Pipeline data are important for planning teacher preparation programs, assessing whether future teachers are likely to reflect the racial/ethnic diversity of the State's P-12 students, projecting and averting teacher shortages, strengthening teacher recruitment, and helping students and their families make informed educational and career choices.

Estimated costs and timelines. A pipeline enhancement to the TEACH system is expected to cost approximately \$300,000 for a one-time contract to create data entry screens, enhance the TEACH database structure and create standard pipeline reports and file extracts. A detailed enhancement plan would need to be prepared in consultation with teacher preparation institutions and their candidates. Once plans are final and the contracting process completed, contracted work should take approximately one year to complete.

Recommendation 4. Seek resources to support systemic P-16 teacher quality partnerships in every region of the State.

Building on regional P-16 teacher quality partnerships that are being piloted in selected regions of the State in 2007-2008, resources should be sought for supporting and extending P-16 teacher quality partnerships in every region. Partnerships will provide opportunities for teacher preparation programs, school districts, BOCES, teacher centers and others to work together to address teacher shortages, improve preparation linked to practice and create more seamless transitions from teacher preparation to teaching practice.

Estimated costs and timelines. The 2007-2008 pilot project are is being implemented with existing resources but additional resources will be needed to extend partnerships to every region of the State and build on the findings from the pilot project. One new Grade 26 Associate is needed to lead this project and coordinate technical assistance to partnerships in every region, at a cost of \$80,000 per year for five years, for a total cost of \$400,000. This cost will recur indefinitely to support regional partnerships.

Conclusion

Effective teachers are essential for raising student achievement and closing achievement gaps. This report makes four recommendations for the Regents approval for enhancing data systems and organizational capacity in order to promote ongoing evaluation and improvement in teacher preparation and teaching practice in New York State. The recommendations are designed to build capacity to:

- Enable teacher preparation programs to better meet schools' hiring needs;
- Help teacher preparation programs improve their completers' effectiveness at raising student achievement;
- Help school districts improve teacher recruitment, hiring, professional development and effectiveness at raising student achievement;
- Provide policymakers with better information for shaping policies to support career planning as well as teacher preparation, recruitment, retention and effectiveness; and
- Give middle school, high school and college students better information about job prospects in teaching to help them make better educational and career choices.

The four recommendations have a total estimated cost of \$3,500,000 for the first five years. Of that total, \$2,500,000 is for a Teacher Quality Research Center and should be requested from the State and private foundations. Only one recommendation requires ongoing State funding of \$100,000 beyond the first five years. A summary of cost estimates is shown in the following table.

Summary of Cost Estimates							
(in thousands of dollars)							
	Recommendations	Year 1	Year 2	Year 3	Year 4	Year 5	All Years
1	Policy Update	100	100	100	0	0	300
2	Teacher Quality Research Center*	500	500	500	500	500	2500
3	TEACH pipeline enhancement	300	0	0	0	0	300
4	P-16 partnerships +	80	80	80	80	80	400
	All recommendations	980	680	680	580	580	3500

*The Regents should seek resources for the Center from the State and private foundations for the first five years. An additional \$200,000 could be needed in Year 1 if an existing data repository is not used.

+Costs will be ongoing.

Attachment 1
Classroom Teaching Certificate Titles as of February 2, 2004

LOWER AND UPPER ELEMENTARY GRADES

Codes and Titles:

- 3013 - Early Childhood Education Birth - Grade 2
- 3014 - Childhood Education Grades 1 - 6

EARLY SECONDARY GRADES 7-9 EXTENSIONS

Codes and Titles:

- 4069 - English Language Arts Grades 7 - 9 Extension
- 4084 - Mathematics Grades 7 - 9 Extension
- 4086 - Social Studies Grades 7 - 9 Extension
- 4046 - Biology Grades 7 - 9 Extension
- 4047 - Chemistry Grades 7 - 9 Extension
- 4048 - Earth Science Grades 7 - 9 Extension
- 4049 - Physics Grades 7 - 9 Extension
- 4064 - Spanish Grades 7 - 9 Extension
- 4066 - Latin Grades 7 - 9 Extension
- 4068 - German Grades 7 - 9 Extension
- 4070 - Russian Grades 7 - 9 Extension
- 4072 - Hebrew Grades 7 - 9 Extension
- 4074 - Italian Grades 7 - 9 Extension
- 4076 - Greek Grades 7 - 9 Extension
- 4077 - Urdu Grades 7 - 9 Extension
- 4079 - Japanese Grades 7 - 9 Extension
- 4080 - French Grades 7 - 9 Extension
- 4081 - Chinese Grades 7 - 9 Extension
- 4092 - American Sign Language Grades 7 - 9 Extension
- 5234 - Cantonese Grades 7 - 9 Extension
- 5241 - Mandarin Grades 7 - 9 Extension

MIDDLE CHILDHOOD EDUCATION GRADES 5-9

Codes and Titles:

- 4011 - Generalist in Middle Childhood Education Grades 5 - 9
- 4012 - English Language Arts Grades 5 - 9
- 4013 - Mathematics Grades 5 - 9
- 4018 - Social Studies Grades 5 - 9
- 4014 - Biology Grades 5 - 9
- 4015 - Chemistry Grades 5 - 9
- 4016 - Earth Science Grades 5 - 9
- 4017 - Physics Grades 5 - 9
- 4019 - General Science Grades 5 - 9 Extension
- 4031 - American Sign Language Grades 5 - 9
- 4032 - Cantonese Grades 5 - 9
- 4033 - Chinese Grades 5 - 9
- 4034 - French Grades 5 - 9
- 4035 - German Grades 5 - 9
- 4036 - Greek Grades 5 - 9
- 4037 - Hebrew Grades 5 - 9
- 4038 - Italian Grades 5 - 9
- 4039 - Japanese Grades 5 - 9
- 4041 - Latin Grades 5 - 9
- 4042 - Mandarin Grades 5 - 9
- 4043 - Russian Grades 5 - 9
- 4044 - Spanish Grades 5 - 9
- 4045 - Urdu Grades 5 - 9

SECONDARY ACADEMIC SUBJECTS GRADES 7-12

Codes and Titles:

- 5013 - English Language Arts 7 - 12

- 5130 - Mathematics Grades 7 - 12
- 5110 - Social Studies Grades 7 - 12
- 5010 - Biology Grades 7 - 12
- 5030 - Chemistry Grades 7 - 12
- 5050 - Physics Grades 7 - 12
- 5070 - Earth Science Grades 7 - 12
- 5091 - General Science Grades 7 - 12 Extension
- 5140 - French Grades 7 - 12
- 5150 - Spanish Grades 7 - 12
- 5160 - Latin Grades 7 - 12
- 5170 - German Grades 7 - 12
- 5180 - Russian Grades 7 - 12
- 5190 - Hebrew Grades 7 - 12
- 5200 - Italian Grades 7 - 12
- 5210 - Greek 7-12
- 5225 - Urdu Grades 7 - 12
- 5226 - American Sign Language Grades 7 - 12
- 5230 - Chinese Grades 7 - 12
- 5232 - Cantonese Grades 7 - 12
- 5238 - Mandarin Grades 7 - 12
- 4054 - Japanese Grades 7 - 12

SECONDARY ACADEMIC SUBJECTS GRADES 5-6 EXTENSION

Codes and Titles:

- 5014 - English Language Arts Grades 5 - 6 Extension
- 5131 - Mathematics Grades 5 - 6 Extension
- 5111 - Social Studies Grades 5 - 6 Extension
- 5011 - Biology Grades 5 - 6 Extension
- 5031 - Chemistry Grades 5 - 6 Extension
- 5051 - Physics Grades 5 - 6 Extension
- 5071 - Earth Science Grades 5 - 6 Extension
- 5093 - General Science Grades 5 - 6 Extension
- 5171 - German Grades 5 - 6 Extension
- 5181 - Russian Grades 5 - 6 Extension
- 5191 - Hebrew Grades 5 - 6 Extension
- 5201 - Italian Grades 5 - 6 Extension
- 5231 - Chinese Grades 5 - 6 Extension
- 5233 - Cantonese Grades 5 - 6 Extension
- 5239 - Mandarin Grades 5 - 6 Extension
- 5348 - Japanese Grades 5 - 6 Extension
- 5349 - French Grades 5 - 6 Extension
- 5350 - Spanish Grades 5 - 6 Extension
- 5351 - Latin Grades 5 - 6 Extension
- 5352 - Greek Grades 5 - 6 Extension
- 5357 - Urdu Grades 5 - 6 Extension
- 5358 - American Sign Language Grades 5 - 6 Extension

EXTENSIONS

[To teach a language other than English in grades 1-6 (holding a valid certificate to teach a language other than English in grade 7-12 is a prerequisite)]

Codes and Titles:

4099 - Japanese Grades 1 - 6 Extension
5166 - French Grades 1 - 6 Extension
5167 - Spanish Grades 1 - 6 Extension
5168 - Latin Grades 1 - 6 Extension
5169 - German Grades 1 - 6 Extension
5172 - Russian Grades 1 - 6 Extension
5173 - Hebrew Grades 1 - 6 Extension
5202 - Italian Grades 1 - 6 Extension
5212 - Greek Grades 1 - 6 Extension
5245 - Chinese Grades 1 - 6 Extension
5246 - Cantonese Grades 1 - 6 Extension
5247 - Mandarin Grades 1 - 6 Extension
5248 - Urdu Grades 1 - 6 Extension
5249 - American Sign Language Grades 1 - 6 Extension

SPECIAL SUBJECTS (ALL GRADES)

Codes and Titles:

6013 - Visual Arts
6021 - Business and Marketing
6121 - Health Education
6131 - Family and Consumer Sciences
6141 - Technology Education
6150 - Music
6160 - Physical Education
6193 - Theatre
6200 - Dance
6011 - Agriculture
9017 - Deaf and Hard of Hearing
9018 - Blind and Visually Impaired
9021 - Speech and Language Disabilities
7020 - Library Media Specialist
7051 - Educational Technology Specialist

LITERACY

Codes and Titles:

7061 - Literacy Birth - Grade 6
7062 - Literacy Grades 5 - 12

ENGLISH TO SPEAKERS OF OTHER LANGUAGES

Codes and Titles:

7080 - English to Speakers of Other Languages

BILINGUAL EDUCATION EXTENSION

Codes and Titles:

7093 - Bilingual Education Extension
7094 - Bilingual Education (Library Media/Education Technology Specialist) Extension

TEACHING STUDENTS WITH DISABILITIES

Codes and Titles:

9013 - Students with Disabilities Birth - Grade 2
9014 - Students with Disabilities Grades 1 - 6

9015 - Students with Disabilities - Generalist Grades 5 - 9
9026 - Students with Disabilities - English Grades 5 - 9
9037 - Students with Disabilities - Mathematics Grades 5 - 9
9042 - Students with Disabilities - Social Studies Grades 5 - 9
9022 - Students with Disabilities - Biology Grades 5 - 9
9024 - Students with Disabilities - Chemistry Grades 5 - 9
9027 - Students with Disabilities - Earth Science Grades 5 - 9
9038 - Students with Disabilities - Physics Grades 5 - 9
9019 - Students with Disabilities - American Sign Language Grades 5 - 9
9023 - Students with Disabilities - Cantonese Grades 5 - 9
9025 - Students with Disabilities - Chinese Grades 5 - 9
9028 - Students with Disabilities - French Grades 5 - 9
9029 - Students with Disabilities - German Grades 5 - 9
9031 - Students with Disabilities - Greek Grades 5 - 9
9032 - Students with Disabilities - Hebrew Grades 5 - 9
9033 - Students with Disabilities - Italian Grades 5 - 9
9034 - Students with Disabilities - Japanese Grades 5 - 9
9035 - Students with Disabilities - Latin Grades 5 - 9
9036 - Students with Disabilities - Mandarin Grades 5 - 9
9039 - Students with Disabilities - Russian Grades 5 - 9
9043 - Students with Disabilities - Spanish Grades 5 - 9
9044 - Students with Disabilities - Urdu Grades 5 - 9
9051 - Students with Disabilities - English Language Arts Grades 7 - 12
9063 - Students with Disabilities - Mathematics Grades 7 - 12
9066 - Students with Disabilities - Social Studies Grades 7 - 12
9046 - Students with Disabilities - Biology Grades 7 - 12
9048 - Students with Disabilities - Chemistry Grades 7 - 12
9053 - Students with Disabilities - Earth Science Grades 7 - 12
9064 - Students with Disabilities - Physics Grades 7 - 12
9045 - Students with Disabilities - American Sign Language Grades 7 - 12
9047 - Students with Disabilities - Cantonese Grades 7 - 12
9049 - Students with Disabilities - Chinese Grades 7 - 12
9054 - Students with Disabilities - French Grades 7 - 12
9055 - Students with Disabilities - German Grades 7 - 12
9056 - Students with Disabilities - Greek Grades 7 - 12
9057 - Students with Disabilities - Hebrew Grades 7 - 12
9058 - Students with Disabilities - Italian Grades 7 - 12
9059 - Students with Disabilities - Japanese Grades 7 - 12
9061 - Students with Disabilities - Latin Grades 7 - 12
9062 - Students with Disabilities - Mandarin Grades 7 - 12
9065 - Students with Disabilities - Russian Grades 7 - 12
9067 - Students with Disabilities - Spanish Grades 7 - 12
9068 - Students with Disabilities - Urdu Grades 7 - 12

ANNOTATIONS AND EXTENSIONS

Codes and Titles:

9170 - Gifted Education Extension
9171 - Severe or Multiple Disabilities Annotation
7100 - American Sign Language as the Medium of Instruction Extension

CAREER AND TECHNICAL EDUCATION GRADES 7-12

Codes and Titles:

Agriculture

- 8249 - Natural Resources and Ecology
- 8253 - Animal Science
- 8254 - Plant Science
- 8261 - Agricultural Production, Science and Business
- 8262 - Agricultural Engineering and Mechanics

Health Occupation

- 8201 - Dental Assisting
- 8211 - Dental Laboratory Technology
- 8241 - Medical Assisting
- 8251 - Medical Laboratory Assisting
- 8252 - Emergency Medical Services
- 8291 - Nurse's Assisting
- 8301 - Practical Nursing

Family and Consumer Sciences

(Associates or Higher Degree Required)

- 8231 - Human Services and Family Studies Cluster
- 8232 - Food and Nutrition
- 8233 - Textile and Design Cluster

TECHNICAL SUBJECT TITLES (Associates or Higher Degree Required)

Codes and Titles:

- 8238 - Computer Technology
- 8239 - Electrical/Electronic Technology
- 8245 - Mechanical Technology

TRADE SUBJECT TITLES

Codes and Titles:

Graphic, Printing, & Visual Communications Occupations

- 8181 - Graphic Imaging (including Printing/Lithography)
- 8182 - Media Communications
- 8215 - Commercial Art
- 8216 - Professional Photography

Construction Industry & Building Maintenance Occupations

- 8221 - Carpentry
- 8222 - Masonry
- 8223 - Plumbing
- 8224 - Electrical
- 8225 - Heating, Ventilation, Air Conditioning and Refrigeration
- 8226 - Residential/Commercial Building Maintenance and Remodeling

Vehicle Maintenance & Repair Occupations

- 8202 - Vehicle Mechanical Repair (including Heavy Equipment Repair)
- 8203 - Vehicle Body Repair and Painting

Drafting Occupations

- 8292 - Drafting

8397 - Computer Aided Drafting

Electronic/Electro-Mechanical Occupations

- 8209 - Electrical/Electronic Occupations (Repair and Installation)
- 8213 - Electro-Mechanical Equipment Occupations (Repair and Installation)

Precision Metal Work Occupations

- 8227 - Machine Tool Operations/Machine Shop
- 8228 - Welding

Motorcycle, Marine & Outdoor Power Equipment Occupations

- 8229 - Motorcycle, Marine and Outdoor Power Equipment

Cosmetology Occupations

- 8183 - Cosmetology/Barbering

Aviation/Aerospace Maintenance, Manufacturing & Repair Occupations

- 8374 - Ground Support Operations
- 8375 - Airframe Maintenance and Repair
- 8376 - Power Plant Maintenance and Repair

Unique & Emerging Occupations

- 8486 - Security Operations

Performing Arts

- 8171 - Performing Arts/Dance-Classical Ballet
- 8172 - Performing Arts/Dance-Modern
- 8173 - Performing Arts-Dance Music
- 8174 - Performing Arts-Drama

Food Service Occupations

- 8419 - Culinary Careers

Coordinator of Work-Based Learning Programs Extensions

- 8981 - Coordinator of Work-Based Learning Programs for Career Awareness Extension
- 8982 - Coordinator of Work-Based Learning Programs for Career Development Extension

SOURCE:

<http://www.highered.nysed.gov/tcert/certificate/ip-certcodes.htm> (05/31/07)

Attachment 2

New York State Campuses with Registered Teacher Preparation Programs

SUNY at Albany	Long Island University - New York University Campus
SUNY at Binghamton	Long Island University - Rockland Campus
SUNY at Buffalo	Long Island University - Southampton Campus
SUNY at Stony Brook	Long Island University - Westchester Campus
State University College at Brockport	Manhattan College
State University College at Buffalo	Manhattanville College
State University College at Cortland	Marist College
SUNY Empire State College	Marymount Manhattan College
State University College at Fredonia	Medaille College - Main Campus
State University College at Geneseo	Medaille College - Amherst Campus
State University College at New Paltz	Mercy College - Main Campus
State University College at Old Westbury	Mercy College - Bronx Campus
State University College at Oneonta	Mercy College - White Plains Campus
State University College at Oswego	Mercy College - Manhattan Campus
State University College at Plattsburgh	Metropolitan College of New York
State University College at Potsdam	Molloy College
SUNY Col of Agriculture and Life Sciences	Mount Saint Mary College
CUNY Brooklyn College	Nazareth College of Rochester
CUNY City College	NY Institute of Technology - Manhattan Campus
CUNY College of Staten Island	NY Institute of Technology - Main Campus(Old Westbury)
CUNY Herbert H. Lehman College	New York University - Main Campus
CUNY Hunter College	Niagara University
CUNY Medgar Evers College	Nyack College
CUNY New York City College of Technology	Pace University - New York City Campus
CUNY Queens College	Pace University - Pleasantville Campus
CUNY York College	Pace University - White Plains Campus
Adelphi University	Pratt Institute - Main Campus
Alfred University	Roberts Wesleyan College
Bank Street College of Education	Rochester Institute of Technology
Bard College - Main Campus	The Sage Colleges-Troy Campus
Barnard College	The Sage Colleges-Albany Campus
Boricua College	St. Bonaventure University
Canisius College of Buffalo	St. Francis College
Cazenovia College	St. John Fisher College
Colgate University	St. John's University - Main Campus
College of Mount Saint Vincent	St. John's University - Staten Island Campus
College of New Rochelle	St. Joseph's College - Brooklyn Campus
College of Saint Rose	St. Joseph's College - Suffolk Campus
Concordia College	St. Lawrence University
Daemen College	St. Thomas Aquinas College
Dominican College of Blauvelt	Sarah Lawrence College
Dowling College - Main Campus	Siena College
Dowling College - Brookhaven Center	Skidmore College
D'Youville College	Syracuse University
Elmira College	Teachers College
Fordham University- Lincoln Center	Touro College- Main
Fordham University-Tarrytown Campus	Touro College-Kew Gardens
Fordham University-Marymount Campus	Union Graduate College
Hartwick College	University of Rochester
Hobart and William Smith Colleges	Utica College
Hofstra University	Vassar College
Houghton College	Wagner College
Iona College - New Rochelle Main Campus	Wells College
Iona College - Rockland Campus	Yeshiva University
Ithaca College	Five Towns College
Keuka College - Main Campus	School of Visual Arts
King's College (The)	
Le Moyne College	
Long Island University - Brentwood Campus	
Long Island University - Brooklyn Campus	
Long Island University - C. W. Post Campus	

Source: NYSED, OHE, Office of College and University Evaluation, July 2007

Attachment 3 Accreditation Standards for Teacher Preparation Programs

The table below compares definitions, procedures and standards used by the three teacher preparation accrediting agencies acceptable in New York State. It is followed by information about federal regulations governing nationally approved accrediting agencies and their application to teacher preparation program accrediting agencies.

RATE	NCATE	TEAC
NYS Regents Accreditation of Teacher Education	National Council for Accreditation of Teacher Education	Teacher Education Accrediting Council
Accredits programs as defined in NYS Education Department (NYSED) <i>Inventory of Registered Programs</i> , in institutional and departmental context.	Accredits “units” as determined by the institution, e.g., Schools/Departments of Education.	Accredits “programs” as determined by the institution, which may be a set of “programs” registered by NYSED and having common program structure, quality control and evidence.
Institution files written notification of intent to seek New York State Regents Accreditation for teacher education programs. NYS Education Dept. Office of College & University Evaluation (OCUE) sends Regents Accreditation Agreement form, name of staff visit coordinator, and materials including Self-Study Guide and sample site visit schedule.	“Professional Education Unit” files Intent to Seek NCATE Accreditation Form. NCATE sends information and invoice for fees. NCATE Pre-Conditions include the submission of evidence of clear lines of authority and written procedures for the unit; a conceptual framework that guides program operation and evaluation; entrance and exit criteria based on candidate performance; institutional accreditation and state approval of professional education programs.	Institution contacts TEAC for consultation about seeking TEAC accreditation. TEAC consults with institution and “Program Faculty” (termed “Responsible Faculty” in this comparison). TEAC Eligibility Standards – evidence that: 1. There is a faculty responsible & accountable for program 2. Graduates qualify for licensure as P-12 teachers 3. Program is state-approved 4. Program head attests to commitment to TEAC goal & quality principles, understanding that TEAC may disclose program’s accreditation status, & to faculty’s commitment to provide necessary information 5. Institution is regionally accredited & adheres to Civil Rights Act Title VII Program meets institution’s standards for an academic degree
Institution sends Agreement Form and \$1,000 annual fee.	Unit files Preconditions Report Unit submits sliding-scale fee (approx. \$2,200 to \$4,000). NCATE reviews report, consults with institution; when documentation complete, Unit Accreditation Board votes on acceptance of Unit as candidate for NCATE accreditation.	Responsible Faculty submits Eligibility Application. Institution submits \$2,000 annual fee. TEAC accepts or rejects Responsible Faculty as candidate for TEAC accreditation. Responsible Faculty may elect to apply for Pre-accreditation status and submit Inquiry Brief Proposal.

<p>Initial Accreditation Actions:</p> <ul style="list-style-type: none"> ■ Accreditation for 7 years without conditions ■ Accreditation with Conditions ■ Denial of Accreditation 	<p>Accreditation Decisions:</p> <ul style="list-style-type: none"> ■ Initial Accreditation for 5 years ■ Initial Provisional Accreditation for 2 years ■ Continuing Accreditation for 7 years ■ Continuing Accreditation with Conditions for 2 years ■ Continuing Accreditation with Probation for 2 years ■ Revocation of Accreditation ■ Denial of Accreditation 	<p>Accreditation Decisions:</p> <ul style="list-style-type: none"> ■ Initial Accreditation for 5 years ■ Continuing Accreditation for 10 years ■ Provisional Accreditation for 3 years ■ Pre-accreditation for 5 years ■ Denial of Accreditation
<p>ACCREDITATION STANDARDS</p> <p>Accreditation Standards are found in New York State regulations (8 NYCRR section 4-2.5) in Subpart Part 4.2, Standards for Regents Accreditation of Teacher Education Programs.</p> <p>Standards of Quality:</p> <ul style="list-style-type: none"> ■ Commitment and vision ■ Philosophy, purposes, and objectives ■ Standards for program registration, found in 8 NYCRR §52.2 <ul style="list-style-type: none"> Resources Faculty Curricula and awards Admissions Administration §52.21 Requirements for teacher education, including performance standards showing that candidates acquire “skills & knowledge” specified in this Section Part 53 Information for students & prospective students Part 54 Off-campus instruction ■ Teaching effectiveness of graduates ■ Assessment of candidate achievement Related standards ■ Financial resources ■ Support services ■ Advertising ■ Candidate complaints ■ Public disclosure of accreditation status ■ Annual reports 	<p>ACCREDITATION STANDARDS</p> <p>NCATE 2000 Standards:</p> <p>I. Candidate Performance</p> <ol style="list-style-type: none"> 1. Candidates’ content, pedagogical, and professional knowledge, skills, and dispositions; and impact on P-12 student learning 2. Assessment system & unit evaluation <p>II. Unit capacity</p> <ol style="list-style-type: none"> 3. Field experiences & clinical practice 4. Diversity 5. Faculty qualifications, performance, and development 6. Unit Governance & Resources 	<p>ACCREDITATION STANDARDS</p> <p>TEAC Quality Principles (based on institutional standards):</p> <p>I. Evidence of student learning</p> <ul style="list-style-type: none"> ■ Subject matter knowledge ■ Liberal education ■ Pedagogical knowledge ■ Teaching skill <p>II. Valid assessment of student learning</p> <ul style="list-style-type: none"> ■ Rationale for links among program goals, claims about student learning, & means of assessing student learning ■ Evidence of valid assessment <p>III. Institutional learning</p> <ul style="list-style-type: none"> ■ Program decisions & planning based on evidence ■ Influential quality control system
<p>Each program is separately reviewed by expert(s) familiar with national standards in program’s certificate field, who report to OCUE.</p>	<p>Each curriculum is reviewed by specialty organization in its certificate field; results of review are reported to NCATE.</p>	<p>The TEAC accreditation process does not include a curricular review by experts familiar with national and state standards.</p>
<p>Site-visit teams are drawn from a pool of teacher educators, school practitioners, and other constituencies nominated by colleges and universities, District Superintendents, NYS school districts, and other relevant parties. All potential site-visit team members are trained by NYSED on NYS standards and their roles as site visitors.</p>	<p>Site-visit teams are drawn from:</p> <ul style="list-style-type: none"> ■ NCATE-trained Board of Examiners, including teacher educators, teachers, and other constituencies such as policymakers and specialty groups ■ As determined by the 	<p>TEAC President appoints Accreditation Panel, skilled in evaluating evidence, drawn from teacher educators, higher education faculty and administrators, preschool-through-grade-12 educators, the public, education policymakers and scholars, and the TEAC auditors who</p>

	Department, OCUE staff may join the team as a state consultant.	evaluate an institution's programs (ex-officio, nonvoting). The auditors are TEAC employees with special training and expertise for their roles. As determined by the Department, OCUE staff may join the team as a state consultant
Institution comments on proposed Site- Visit Team. Team (typically 5 to 8) members from a pool of trained teacher educators and school practitioners Team Leader: a distinguished teacher educator and, SED staff site-visit coordinator	Unit comments on proposed NCATE site-visit team (typically 5 to 8 members): NCATE and NYS Consultant (when recommended) Members selected from Board of Examiners	Institution and Responsible Faculty comment on résumés of proposed TEAC Auditors. Institution recommends a local practitioner as a member of the team
OCUE solicits & receives third-party testimony from graduates, parents, schools, community organizations, etc. Institution submits Self-Study and other requested documentation to NYS Regents Accreditation Team Leader and team members. Self-Study includes data, analyses, and plans pertaining to each accreditation standard.	NCATE receives required third-party testimony from graduates, parents, schools, and community organizations. Unit submits annual AACTE/NCATE data report(s). Unit submits Institutional Report to NCATE. Institutional Report includes narrative response to specific indicators relating to the six NCATE standards.	Responsible Faculty submits Inquiry Brief. Inquiry Brief includes Responsible Faculty's claims that graduates are competent, qualified, caring professional educators; rationale for claims; methods of assessing graduates' knowledge and skills & gathering evidence supporting claims; results of assessments; discussion of results & plan. Appendices include evidence of institution's commitment to education program(s) & Responsible Faculty's internal audit of its quality control system.
Team Chair & OCUE staff site-visit coordinator make a one-day pre-visit to institution to discuss site visit and develop site visit schedule.	NCATE & NYS Consultant (when recommended) make a one-day pre-visit to discuss site visit and develop site visit schedule.	TEAC staff and institution consult to arrange the TEAC Audit, including logistics, data, interviews, and observations.
Site-visit team conducts site visit, normally 3 days, to review and analyze evidence in relation to RATE standards.	Site-visit team conducts 4-day site visit, to review and analyze evidence in relation to NCATE standards.	2 TEAC Auditors conduct TEAC Audit at the institution for 2 to 3 days and verify submitted data, guided by questions formulated by TEAC Accreditation Panel Chair on basis of Inquiry Brief.
Staff site-visit organizer prepares draft site visit report of findings and recommendations, based on information collected and individual team members' reports. After review by team leader and members, report is sent to institution for comment and correction of factual errors.	BOE team prepares draft report. Draft report on whether standards are found to be met is sent to Unit head at institution for correction of factual errors. State consultant reviews report to suggest edits.	TEAC Auditors prepare Audit Report on accuracy of evidence in Inquiry Brief and send it to TEAC and Responsible Faculty. Responsible Faculty corrects factual errors and may respond in writing to Audit's findings. State consultant reviews report to suggest edits.
Draft report, with institution's response, becomes final site visit team report submitted to NYSED Sr. Deputy Commissioner for P-16 Education, with copy to institution.	Corrections are incorporated into final report at BOE and NYS Consultant's discretion. Final report is sent to NCATE, which distributes it within NCATE, to institution, and to NYS Consultant.	TEAC Auditors correct factual errors, consider Responsible Faculty's responses, and submit final Audit Report to TEAC staff, Responsible Faculty, and TEAC Accreditation Panel Chair

	Institution acknowledges receipt of final report and may submit a rejoinder	
Deputy Commissioner submits final report to NYS Professional Standards and Practices Board for Teaching [PSPB] with NYSED's preliminary recommendation on accreditation; copy to institution. Institution may submit further pertinent documentation to SED.	NCATE's Unit Accreditation Board (UAB) audit committees review final report and rejoinder and make recommendation to UAB.	
At scheduled public meeting, PSPB or its subcommittee clarifies any questions with institution representatives, SED staff, and other invited parties; PSPB votes on findings & recommendations.		TEAC Accreditation Panel meets, inviting Responsible Faculty to attend to answer questions and observe.
Deputy Commissioner submits to Commissioner, with copy to institution, Deputy Commissioner's recommendations regarding accreditation & program registration, with factual basis.		Accreditation panel submits Accreditation Report to TEAC President, with copy to Responsible Faculty.
If institution does not appeal, Commissioner sends Deputy Commissioner's findings and recommendations as Commissioner's recommendation to NYS Board of Regents.		Responsible Faculty may respond to Accreditation Panel Report. The Accreditation Committee, a subcommittee of the TEAC Board of Directors, reviews Audit Report, any reports from consulting reviewers, Accreditation Panel Report, information provided by TEAC President, and Responsible Faculty's responses.
At a regularly scheduled public meeting, NYS Board of Regents determines final accreditation action.	At next semiannual meeting UAB makes decision on accreditation, institution's compliance with standards, and any weaknesses to be officially cited.	At next semiannual meeting TEAC Accreditation Committee votes to accept or reject Accreditation Panel's recommendation.
Deputy Commissioner sends copy of action to institution.	NCATE sends to institution accreditation decision and action report to institution.	TEAC staff sends Board of Directors' action to institution, with rationale.
http://www.highered.nysed.gov/ocue/04/rateoverview10-17-03.htm	http://www.ncate.org/	http://www.teac.org/

Source: NYSED, OHE, Office of College and University Evaluation, August 2007

Federal regulations governing accrediting agencies and their application to teacher preparation accrediting agencies

Accrediting agencies recognized by the federal government meet the requirements of Section 602.12 of Title 34 of the Code of Federal Regulations, cited below.

602.16 Accreditation and preaccreditation standards.

(a) The agency must demonstrate that it has standards for accreditation, and preaccreditation, if offered, that are sufficiently rigorous to ensure that the agency is a reliable authority regarding the quality of the education or training provided by the institutions or programs it accredits. The agency meets this requirement if-

- (1) The agency's accreditation standards effectively address the quality of the institution or program in the following areas:*
- (i) Success with respect to student achievement in relation to the institution's mission, including, as appropriate, consideration of course completion, State licensing examination, and job placement rates.*
 - (ii) Curricula.*
 - (iii) Faculty.*
 - (iv) Facilities, equipment, and supplies.*
 - (v) Fiscal and administrative capacity as appropriate to the specified scale of operations.*
 - (vi) Student support services.*
 - (vii) Recruiting and admissions practices, academic calendars, catalogs, publications, grading, and advertising.*
 - (viii) Measures of program length and the objectives of the degrees or credentials offered.*
 - (ix) Record of student complaints received by, or available to, the agency.*

The phrase "Success with respect to student achievement in relation to the institution's mission...." has been interpreted by the federal government to mean more than course completion, passing certification examinations and becoming employed as teachers. The phrase has also been interpreted to include other "student learning outcomes." For example, since teacher preparation programs have the mission of preparing individuals who can help students learn, accrediting agencies must require such programs to have evidence of the impact of their candidates and completers on student learning and their positive impact would be an indicator of success in relation to the institution's mission.

Implementation of the federal requirement for accrediting agencies to evaluate "success with respect to student achievement in relation to the institution's mission"

For NCATE, which is nationally recognized, the relevant element of the accreditation criteria is this:

Teacher candidates accurately assess and analyze student learning, make appropriate adjustments to instruction, monitor student learning, and have a positive effect on learning for all students.

For TEAC, which is nationally recognized, the relevant element of the accreditation criteria is this:

1.0 Quality Principle I: Evidence of student learning
The core of TEAC accreditation is the quality of the evidence the program faculty members provide in support of their claims about their students' learning and understanding of the teacher education curriculum. Overall, TEAC requires evidence that the candidates can teach effectively and do what else is expected of them as professional educators.

For RATE, the relevant phrases are found here:

4-2.1 Purpose. The purpose of this Subpart is to establish standards and procedures for determining that programs that select teacher education accreditation by the Board of Regents are preparing all teacher education program graduates to be effective teachers, meaning teachers who promote the well-being of all their students, help them learn to their highest levels of achievement and independence, and use their knowledge of human developmental processes and variations and their skill in applying that knowledge to form caring and nurturing environments for all their students, including those with diverse characteristics and backgrounds, students for whom English is a new language, students with varying abilities and disabilities, and students of both sexes.

Teaching effectiveness of graduates. The program shall provide adequate evidence that it prepares effective teachers, as defined in section 4-2.1 of this Subpart, taking into consideration the school environments in which the program graduates teach.

Assessment of candidate achievement. The institution shall demonstrate candidate achievement in its teacher education programs, including but not limited to direct assessment of candidates' learning requiring candidates to display their knowledge and skills; graduation rates; State teacher certification examination results; and job placement rates.

Attachment 4 Consultation Contacts

The State University of New York

The City University of New York

Commission on Independent Colleges and Universities

New York State Professional Standards and Practices Board for Teaching

New York State Teacher Education Advisory Group (TEAG) representing NYSATE, NYACTE, CUD, CUNY, SUNY (March 2007 meeting)

New York State Council of University Deans (CUD) representing the Deans of education schools at research universities in New York State

New York State Association of Teacher Educators (NYSATE)

New York State Association of Colleges of Teacher Education (NYACTE)

SUNY FIPSE Project on Teacher Education Program Assessment

New York University Steinhardt School of Culture, Education and Human Development

State University of New York, University at Albany, School of Education

State University of New York, University at Albany, Rockefeller College, Teacher Policy Research Group

New York State Education Department's Teacher Education Team

New York State Education Department's Technical Advisory Group for State Assessments

Commissioner's Advisory Council on Special Education

New York State Association of School Personnel Administrators

New York State Education Department's NCLB Committee of Practitioners

District Superintendents

Council of Superintendents of Big City Schools

New York State Council of School Superintendents

New York City Department of Education

New York State United Teachers

American Association of Colleges of Teacher Education (AACTE)

Northeast and the Islands Regional Educational Laboratory (NEIREL)

MEETINGS

Carnegie Foundation Roundtable: Improving New York's Teacher Education Programs Through Evidence-based Decision Making (Rockefeller Institute, Albany, April 18, 2007)

Forum on Teacher Education in New York State: Meeting the Needs of Our PreK-12 Students (Teachers College, New York, July 12, 2007)

Forum on Building a P-16 Educational Quality Information System (University at Albany, July 19-20, 2007)

Teacher Education Assessment Symposium (Syracuse, October 4-5, 2007)

Attachment 5

Potential Questions for a Teacher Quality Policy Review

Representatives of the teacher preparation and P-12 education communities raised the following questions during consultation for this study and in response to draft reports. The questions below reflect comments received through December 14, 2007.

Policy coherence

- Does New York State need an explicit model of teaching and learning that can serve as a unifying framework for a review of existing policies and practices?
- Should New York State adopt a set of professional teaching standards that would apply to both pre-service and in-service teaching?
- How can evidence about the existing systems for ensuring teacher quality be used to inform policy and practice?

Teacher supply and demand

- Do districts and the Department have adequate systems to ensure the accuracy of data are submitted to the BEDS Personnel Master File? If not, what additional controls are needed and how should they be implemented?
- What State, regional and local efforts should be undertaken to recruit and retain high quality teachers in the subjects and geographic regions where they are needed? To recruit and retain candidates and teachers who reflect the race/ethnic and language diversity of New York State?
- How can the combined efforts of the Regents and the Department, K-12 education, higher education, government, business, and other stakeholder communities:
 - promote students acquiring realistic expectations about teaching workforce opportunities;
 - enhance the pipeline of high school students interested in teaching in high needs areas;
 - enhance K-12 schools' hiring timelines and practices;
 - insure higher quality workplace experiences and compensation; and
 - create additional incentives to recruit individuals into the teaching profession?

Teacher preparation programs

- How can evidence about the existing systems for ensuring quality teacher preparation be used to inform policy? For example, a study of findings from the first round of accreditation reviews would help identify common areas of strength and weakness in teacher preparation that may have implications for policy and practice, and shed light on the effectiveness of the accreditation process.
- Should registration requirements for teacher preparation program be reviewed to ensure that they reflect recent research and current expectations for what teachers should know and be able to do?
- Should Regents RATE accreditation standards and procedures be reviewed to ensure that they reflect recent research and current expectations?
- Should the Department's partnership agreements with NCATE and TEAC be reviewed to ensure that their accreditation standards applied in New York State reflect recent research and current expectations?
- Should required pass rates on certification examination be higher than 80 percent?

- Are current requirements for teacher preparation programs adequate for preparing teachers to use technology effectively in instruction? What do experts in technology, teaching and learning recommend to ensure that teachers are prepared for the future?
- Are current requirements for teacher preparation programs adequate for preparing teachers to be effective in high poverty schools? For serving diverse students?
- Do current requirements for teacher preparation programs include enough time for field experiences and student teaching? How do our requirements compare to other states?
- Should candidates be required to have at least a half-year internship in schools before certification? If so, how would the internship experience be financed?
- Do teacher preparation programs need non-regulatory guidance from the Department or professional development opportunities to strengthen teacher preparation in such areas as teaching literacy and numeracy; teaching students with disabilities in inclusive settings; teaching English language learners; using student assessment data to guide instruction; using technology to support instruction; using social and emotional support to enhance student achievement (Hamre and Pianta, 2005); providing high quality supervised field and student teaching experiences; recruiting diverse candidates and disclosing consumer information?
- What roles should community colleges play in helping their local communities have enough certified and highly qualified teachers? See <http://www.communitycollegepolicy.org/html/toolkit/default.asp> and <http://www.communitycollegepolicy.org/html/toolkit/briefs.asp>.
- Given the importance of school-based clinical experiences and student teaching experiences in teacher preparation, should there be additional standards in this area for both schools and teacher preparation institutions and State funding to support improvements?
- How can institutions be encouraged to offer or expand traditional and/or alternative teacher preparation programs to help meet schools' hiring needs?
- Should Regents accreditation determinations and Regents items on teacher preparation program accreditation be made more accessible online, as in the United Kingdom? See <http://www.ofsted.gov.uk/portal/system/template.LOGIN/>
- In addition to reports on certification pass rates, available at <http://www.highered.nysed.gov/ocue/TitleIIData/titleIIDataMain.htm>, should the Department issue other reports on individual teacher preparation institutions and their programs? If so, what information should they include?
- Should there be pilot and/or incentive programs to promote graduate programs leading to professional certification that incorporate professional development provided by school districts?
- Should the Regents adopt policies on the appropriate uses of value-added models for improving teaching and learning?
- Should the Regents review their policy on full-time faculty and faculty workload in teacher preparation programs?
- Should the Department conduct a study that compares funding of teacher preparation programs with other programs providing professional training?

Teacher certification examinations

- Should existing certification examinations be consolidated to reduce their number? Be redesigned to require a passing score on each subpart? Should passing scores be raised?
- Should the frameworks for certification examinations be updated to reflect updated new State learning standards, recent research findings and current expectations?

Teacher certification

- What certification structure is appropriate for teaching students with disabilities to ensure high standards while also ensuring an adequate number of new teachers to meet schools' hiring needs? *(As of summer 2007, this question had been debated by an advisory group and recommendations had been drafted for presentation to the Board of Regents.)*
- What certification structure is appropriate in general education to ensure high standards and an adequate supply of content specialists and align with tenure areas? Has the post-2004 structure been effective in meeting the Regents goals?
- How should the Individual Evaluation pathway be phased out as required in regulations while ensuring an adequate supply of certified teachers?
- Should candidates for initial certification be required to demonstrate competency with the the Department's new student information system? See NYStart at <https://www.nystart.gov/nystart/u/index.do>.
- Could the Regents increase teacher supply without comprising quality by changing requirements for some supplementary certificates? For example, could a teacher with a certificate in one science subject (or one language other than English) obtain a supplementary certificate in another science (or another language other than English) with fewer than 30 semester hours of study in the new subject? Are there other changes to certification requirements that would increase supply without compromising quality?
- Should there be one or more pilot projects with rigorous evaluation components to permit selected teachers in selected districts to substitute in-service professional development for all or part of the master's degree requirement for qualifying for professional certification?
- Should teaching be a licensed profession in New York State?

Teacher hiring, induction, mentoring and professional development

- How could school districts improve their teacher recruitment, hiring and placement procedures?
- Does New York State need formal standards for mentoring and professional development programs to guide school districts' efforts? *(As of summer 2007 the Professional Standards and Practices Board had begun addressing this question.)*
- Can districts' professional development programs be coordinated with graduate study required for professional certification to support novice teachers?
- How can school districts help teachers make the most effective use of technology in instruction? What professional development and other reforms do experts in technology, teaching and learning recommend to ensure that teachers are prepared for the future?
- Should State law be changed to make a teacher's tenure probationary period last five years instead of two or three years in order to align the probationary period with the validity period of

- the initial certificate, give new teachers more time to develop their teaching skills and give districts more time to assess teaching performance?
- Should the Department encourage districts to use the Teacher Advancement Program or other national programs to strengthen teaching practice and career development? See <http://www.talentedteachers.org/> How can the Department encourage innovative projects for professional development?
 - Should the Regents adopt policies on the appropriate uses of value-added models for improving teaching and learning?

Incentives, career development and working conditions

- Should validated tools be developed for conducting Annual Professional Performance Reviews that have the potential to be adopted in regions or statewide, that could be supplemented with local items as needed, and that could be aligned with performance assessments used in pre-service preparation?
- Should the Department encourage districts to experiment with performance pay for teachers? http://www.talentedteachers.org/newsroom.taf?page=release_20070723
- Should the Regents establish certificates for career ladders and differentiated roles for teachers to support career growth and development and promote retention?
- Should the Department conduct surveys, or encourage districts to conduct surveys, of in-service teachers to measure working conditions in schools and progress towards improvement? See <http://www.teachingquality.org/twc/main.htm>.
- Do district and school leaders need research summaries to help them allocate resources to improve teacher quality efficiently? For example, do districts need research summaries about when class size reduction is likely to be effective and when it is not?

NOTE

Some of the questions in this attachment reflect issues raised in the *Regents P-16 Education: A Plan for Action* of November 2006, available at <http://usny.nysed.gov/summit/p-16ed.htm>.

References

- AACTE: American Association of Colleges of Teacher Education (2007) *The Role of Higher Education in Improving Teacher Quality*. Unpublished position paper presented at the U.S. Department of Education's Title II Part A National Conference in March 2007.
- Allen, M. (2003) *Eight Questions on Teacher Preparation: What Does the Research Say?* Education Commission of the States.
<http://www.ecs.org/ecsmain.asp?page=/html/issuesK12.asp>
- Aspen Institute (2007) *Beyond NCLB: Fulfilling the Promise to Our Nation's Children*.
http://www.aspeninstitute.org/site/c.huLWJeMRKpH/b.938015/k.40DA/Commission_on_No_Child_Left_Behind.htm
- Badolato, V. (2007) *Addressing the Need for Better Data on Teaching in Colorado: Unique Identifier Stakeholder Process Report*. The Alliance for Quality Teaching.
www.qualityteaching.org
- Berry, B., Fuller, E., Reeves, C., Laird E. (2007) *Linking Teacher and Student Data to Improve Teacher and Teaching Quality*. Data Quality Campaign, March 2007.
<http://www.teachingquality.org/publications/reports.htm>
- Boyd, D., Lankford, H., Wyckoff, J., Grossman, P. and Loeb, S. (2007) *Improving Teaching in New York City Public Schools*. Presentation to the NYS Board of Regents Higher Education and Professional Practice Committee, May 21, 2007.
- Boyd, D., Lankford, H., Wyckoff, J., Grossman, P. and Loeb, S. (2007) *Closing the Student Achievement Gap by Increasing the Effectiveness of Teachers in Low-Performing Schools: What are Promising Policies?* Unpublished review of the literature.
- Boyd, D., Goldhaber, D., Lankford, H., and Wyckoff, J. (2007). "The Effect of Certification and Preparation on Teacher Quality" in *Excellence in the Classroom*, Vol. 17, Number 1, Spring 2007. The Future of Children: Princeton and Brookings. www.futureofchildren.org
- Boyd, D, Lankford, H., Loeb, S., Rockoff, J. and Wyckoff, J. (2007) *The Narrowing Gap in New York City Teacher Qualifications and Its Implications for Student Achievement in High Poverty Schools*. Unpublished manuscript, August 2007.
- Brabeck, M. M. (2007) *Using Accreditation to Increase the Evidence Base of Teacher Education*. Presentation at the Teachers for a New Era New York Roundtable: Improving New York's Teacher Education Programs Through Evidence-based Decision Making. Nelson A. Rockefeller Institute of Government, Albany, NY, April 18, 2007.
- Braun, H. I. (2005) *Using Student Progress to Evaluate Teachers: A Primer on Value-Added Models*. Educational Testing Service: Policy Information Center. www.ets.org/research/pic

Breslow, N. and Midouhas, E. (2007) *States' Practices for Evaluating and Monitoring the Impact of Teacher Preparation Programs*, Northeast and Islands Regional Educational Laboratory at the Education Development Center.

Carey, K. (2004) *The Real Value of Teachers: Using New Information about Effective Teachers to Close the Achievement Gap*. Education Trust.

<http://www2.edtrust.org/NR/rdonlyres/5704CBA6-CE12-46D0-A852-D2E2B4638885/0/Spring04.pdf>

Cochran-Smith, M. and Zeichner, K., Eds. (2005) *Studying Teacher Education: The Report of the AERA Panel on Research and Teacher Education*. American Educational Research Association: Lawrence Erlbaum Associates, Inc.

Council of Chief State School Officers (CCSSO), INTASC standards for teachers

http://www.ccsso.org/projects/Interstate_New_Teacher_Assessment_and_Support_Consortium/

Council of University Deans (2007) Unpublished position paper on subdivision 12-a of section 305 of Education Law submitted to the Board of Regents on May 31, 2007.

Danielson, C. (1996) *Enhancing Professional Practice: A Framework for Teaching*. Association for Supervision and Curriculum Development, Alexandria, VA.

Darling-Hammond, L. and Bransford, J., Eds. (2005) *Preparing Teachers for a Changing World: What Teachers Should Know and Be Able to Do*. The National Academy of Education: Jossey-Bass.

Darling-Hammond, L. (2007) "Recognizing and Enhancing Teacher Effectiveness: A Policy Maker's Guide" in *Strengthening Teacher Quality in High-Need Schools – Policy and Practice*, Council of Chief State School Officers, July 2007.

http://www.ccsso.org/Whats_New/Press_Releases/10399.cfm

Data Quality Campaign <http://www.dataqualitycampaign.org/>

Denner, P., Pankratz, R.S., Norman, A. and Newsome, J. (2004) *Building Credibility into Performance Assessment and Accountability Systems for Teacher Preparation Programs: A "How To" Manual for Teacher Educators Who Want to Collect, Use and Report Valid and Reliable Performance Data on Teacher Candidates with a Link to P-12 Student Learning*.

<http://www.uni.edu/itq/>

Fallon, Dan (2003) Case Study of a Paradigm Shift: The Value of Focusing on Instruction. Education Commission of the States, Fall Steering Committee Meeting, November 12, 2003, Richmond, Virginia. <http://www.ecs.org/clearinghouse/49/00/4900.htm>

Forum on Building a NYS P-16 Educational Quality Information System (2007) Sponsored by the SUNY FIPSE project at the University of Albany on July 19-20, 2007 and attended by over 60 individuals representing teacher preparation programs, the P-12 school administrators, National Evaluation Systems and the New York State Education Department.

Futernick, K. (2007) *A Possible Dream: Retaining California Teachers So All Students Learn*. Sacramento: Center for Teacher Quality, Office of the Chancellor, California State University <http://www.calstate.edu/teacherquality/retention/>

Gitomer, D.H. (forthcoming) *The Academic Quality of Teachers: Have Policy Changes Had an Impact?* ETS: <http://www.ets.org/Media/Campaign/4585/rsc/presentations/gitomer.ppt#257,1>, The Academic Quality of Teachers: Have Policy Changes Had an Impact?

Goldhaber, Dan (2007) *Everybody's Doing It but What Does Teacher Testing Tell Us about Teacher Effectiveness?* CALDER Center, Working Paper 9, April 2007. http://www.caldercenter.org/PDF/1001072_everyones_doing.PDF

Goldhaber, D. (2005) *Key Attributes of State Data Systems That Allow for Sophisticated Research on Teachers*. Unpublished paper prepared for the Center for Teaching Quality.

Griffin, A. and Hett, A. (2004) Performance-based Pedagogy Assessment of Teacher Candidates. A project of the Washington Association of Colleges for Teacher Education in collaboration with the Office of the Superintendent of Public Instruction. <http://www.k12.wa.us/certification/profed/pubdocs/PedagogyAssessment.pdf>

Hamre, B.K. and Pianta, R. C. (2005) "Can Instructional and Emotional Support in the First-Grade Classroom Make a Difference for Children at Risk of School Failure?" *Child Development*, September/October 2005, Volume 76, Number 5, Pages 949-967.

Humphrey, D. and Wechsler, M. (2006) "Fighting the Wrong Battle in Teacher Preparation Wars" *Education Week*, Vol. 26, Issue 01, pp. 46-47.

Jacob, B.A. (2007) "The Challenges of Staffing Urban Schools with Effective Teachers" in *Excellence in the Classroom*, Vol. 17, Number 1, Spring 2007. The Future of Children: Princeton and Brookings. www.futureofchildren.org

Kane, T., Rockoff, J. and Staiger, D. (2006) *What Does Certification Tell Us About Teacher Effectiveness? Evidence from New York City*. NBER Working Paper No. 12155.

Kappner, A.S. (2007) Presentation at the Teachers for a New Era New York Roundtable: Improving New York's Teacher Education Programs Through Evidence-based Decision Making. Nelson A. Rockefeller Institute of Government, Albany, NY, April 18, 2007.

Latham, A.S., Gitomer, D. and Ziomek, R. (1999) "What the Tests Tell Us About New Teachers." *Educational Leadership*, Vol. 56 No. 8, pages 23-6, May.

Lehman College (2007) *Lehman College Institutional Report, 2007*. Report prepared for NCATE accreditation.

Levin, J. and Quinn, M. (2003) *Missed Opportunities: How We Keep High-Quality Teachers Out of Urban Classrooms*. New Teacher Project.
<http://www.tntp.org/ourresearch/missedopportunities.html>

Levine, A. (2006) *Educating School Teachers*. The Education Schools Project.
http://www.edschools.org/teacher_report.htm

Louisiana Board of Regents (2007) http://asa.regents.state.la.us/TE/value_added_model

McCaffrey, D.F., Koretz, D., Lockwood, J. R., and Hamilton, L.S. (2003) *The Promise and Peril of Using Value-Added Modeling to Measure Teacher Effectiveness*. Rand Corporation: Research Brief. http://www.rand.org/pubs/research_briefs/RB9050/index1.html

Moore Johnson, S. (2006) *Building a Skilled Teaching Force for Improved Student Learning: An International Perspective*. Paper presented to the Aspen-OECD Bellagio Seminar, October 2006, Bellagio, Italy.
http://www.aspeninstitute.org/atf/cf/%7BDEB6F227-659B-4EC8-8F84-8DF23CA704F5%7D/ED_susanmoorejohnson_BuildingaSkilledTeachingForce.pdf

Murnane, R. J. and J.L. Steele (2007) "What is the Problem? The Challenge of Providing Effective Teachers for All Children" in *Excellence in the Classroom*, Vol. 17, Number 1, Spring 2007. The Future of Children: Princeton and Brookings. www.futureofchildren.org

National Board for Professional Teaching Standards
<http://www.nbpts.org/>

National Council on Teacher Quality (2007) *State Teacher Policy Yearbook: Progress on Teacher Quality*. National Summary and New York State report.
<http://www.nctq.org/stpy/>

National Evaluation Systems (2006 and 2007) Data files and reports provided to the New York State Education Department for program completers for 2005-2006.
<http://www.highered.nysed.gov/ocue/TitleIIData/titleIIDataMain.htm>

National Research Council (forthcoming) *Study of Teacher Preparation in the United States*. A congressional mandated study expected to be released in early 2008.

NCATE (2007) <http://www.ncate.org/documents/stateRelations/NCATEStatePartFeatures2007.pdf> as updated by R. Gervais of SED/OHE/OCUE in September 2007.

New Teacher Center at Santa Cruz Formative Assessment System
http://www.newteachercenter.org/ti_formative_assessment.php

New York State Education Department (2006, 2004, 2003, 2002) *Updates on Alternative Teacher Preparation Programs*. <http://www.highered.nysed.gov/ocue/intrototransc.htm>

New York State Education Department Technical Advisory Group on Assessment (2007) Meeting on April 30, 2007. A list of members, who are national assessment experts, is available upon request.

New York State Board of Regents (1998) *Teaching to Higher Standards: New York's Commitment*. <http://www.nysed.gov/facmtg/paper20.pdf>

New York State Board of Regents (2005) *Statewide Plan for Higher Education*. http://www.highered.nysed.gov/Quality_Assurance/statewideplan/page1.htm

New York State Board of Regents (2006) *P-16 Education: A Plan for Action*. <http://usny.nysed.gov/summit/p-16ed.htm#aims>

New York State Education Department (2006) *New York State's Revised Plan to Enhance Teacher Quality*. Approved by the U.S. Department of Education in fulfillment of requirements under the No Child Left Behind Act of 2001. <http://www.ed.gov/programs/teacherqual/hqtplans/index.html#ny>

New York State Education Department (2007) *Second Annual Report: Teacher Supply and Demand in New York State in 2005-2006*. <http://www.highered.nysed.gov/>

New York State Professional Standards and Practices Board for Teaching (2007). Unpublished position paper in response to consultation regarding subsection 12-a of section 305 of State Education Law.

Palomba, C.A. and T. W. Banta (1999) *Assessment Essentials: Planning, Implementing, and Improving Assessment in Higher Education*. Jossey-Bass.

Performance Assessment for California Teachers
<http://www.pacttpa.org/>

Renaissance Partnership for Improving Teacher Quality. <http://www.uni.edu/itq/>

Robinson, S. (2007) *The Role of Higher Education in Improving Teacher Quality*. Presentation at the U.S. Department of Education's Title II Part A National Conference, March 27, 2007.

Robinson, S. (2007) Interview with Dr. Sharon Robinson, President and CEO of the American Association of Colleges of Teacher Education (AACTE) on May 15, 2007.

Sanders, W.L. and Rivers, J.C. (1996) *Research Project Report: Cumulative and Residual Effects of Teachers on Future Student Academic Achievement*, University of Tennessee Value-Added Research and Assessment Center. http://www.cgp.upenn.edu/pdf/Sanders_Rivers-TVASS_teacher%20effects.pdf

Shulman, L.S. (2007) "Good Teaching" in *Excellence in the Classroom*, Vol. 17, Number 1, Spring 2007. The Future of Children: Princeton and Brookings. www.futureofchildren.org

Schwartz, R.B. and Wurtzel, J. (2007) *Teaching Policy to Improve Student Learning: Lessons from Abroad*. The Aspen Institute
http://www.aspeninstitute.org/atf/cf/%7BDEB6F227-659B-4EC8-8F84-8DF23CA704F5%7D/Ed_Lessons_from_Abroad.pdf

SREB or Southern Regional Education Board (2006) Increasing Accountability for Teacher Preparation Programs, December 2006. www.sreb.org

Strauss, R.P., Hao, H. and Wang, Y. (2007) Explaining the Racial Achievement Gap in the Pittsburgh Public Schools. <http://www.andrew.cmu.edu/user/rs9f> See: [6. Online: Current Papers, Speeches, & Personal Opinion Pieces](#)

TEAC (2007) Email from S. Fuhrman, Vice President for State Relations and Membership, to R. Gervais, SED/OHE/OCUE.

Teaching Commission (2004) *Teaching at Risk: A Call to Action*. Introduction by Louis V. Gerstner, Jr., Chairman, and former chairman of IBM.

Teaching Commission (2006) *The Final Report - Teaching at Risk: Progress and Potholes*. Tobias, R. (2007) *Studying the Relationships Between and Among Teacher Education, Teacher Quality and Pupil Learning: Strategies, Challenges and Rewards*. Presentation to the American Association of Colleges of Teacher Education, February 2007.

Vorhees, R. and Barnes, G. (2003) *Data Systems to Enhance Teacher Quality*. State Higher Education Executive Officers. <http://www.sheeo.org/quality/data%20sys.pdf>

Wasley, P.A. and McDiarmid, G.W. (2003) *Tying the Assessment of New Teachers to Student Learning and to Teacher Preparation*. Unpublished draft. University of Washington, College of Education.

Weber, S. (2007) SUNY *Teacher Education Program Assessment Project*. Presentation at the Teachers for a New Era New York Roundtable: Improving New York's Teacher Education Programs Through Evidence-based Decision Making. Nelson A. Rockefeller Institute of Government, Albany, NY, April 18, 2007.

Weber, S. (2007) *Toward a New York State PK-16 Educational Quality Information System*. Presentation at the Teachers for a New Era New York Roundtable: Improving New York's Teacher Education Programs Through Evidence-based Decision Making. Nelson A. Rockefeller Institute of Government, Albany, NY, April 18, 2007.