

VI. Progress in Advancing Education Reform

A. Reducing inequities in the distribution of highly qualified teachers:

Describe the steps that the State has taken, from the approval of its phase 1 SFSF application through September 30, 2010, to reduce inequities in the distribution of highly qualified teachers.

Consistent with State Fiscal Stabilization Fund (SFSF) requirements and the Regents' reform agenda, particularly as it relates to recruitment, development, retention and career ladders for effective teachers and principals, the State has taken the following actions to reduce inequities in the distribution of highly qualified teachers:

- Restructuring and strengthening the requirements for special education teacher certificates;
- Addressing the shortage of science, technology and mathematics (STEM) teachers by creating an expedited pathway for individuals with certain qualifications to become certified STEM teachers;
- Developing a graduate level clinically rich teacher preparation pilot; and
- Developing a database to determine the severity of teacher shortages by region, subject and certification area.

Special Education Certification:

As part of the ongoing review of Regents teaching policy, since February 2007 the Board of Regents has discussed at six meetings the need for students with disabilities, especially at the adolescence level, to have both an adequate supply of teachers and special educators prepared to teach to the learning standards. On four separate occasions New York State Education Department (NYSED) staff sought and received feedback from the field and has engaged various constituency groups in discussions and recommendations regarding the restructuring of the students with disabilities teacher certification. Stakeholders offered many different opinions on how to restructure teacher certification for this area. In March 2010, the Board of Regents discussed recommendations centered on revisions to the adolescence level students with disabilities certification.

To implement the proposed recommendations, amendments to the Regulations of the Commissioner of Education were proposed for emergency adoption in October 2010 as follows:

- Candidates will no longer be able to enroll in special education teacher preparation programs that lead to Students with Disabilities 5-9 Generalist and Students with Disabilities 5-9 and 7-12 content-specific certificate titles after February 1, 2011.

- Amendments will be made to Parts 52 and 80 of Commissioner's Regulations to create a Students with Disabilities 7-12 Generalist certificate, beginning after September 1, 2011. Candidates seeking this certificate will have a foundation of academic preparation in four areas: math, science, English language arts and social studies to prepare them to teach to the State's learning standards and to teach in supportive roles such as consultant teachers, resource room service providers and integrated co-teachers.
- The Students with Disabilities 7-12 Generalist will include the option of completing 18 credits in a specific subject area. This, coupled with passing the Content Specialty Test in the specific subject area, will allow candidates to earn an extension to the base certificate to permit the teacher to be employed as the special class teacher of students with disabilities in that subject. This model will require weekly collaboration between the certified general education content specialist and the special educator, with at least one period per month co-taught by both teachers. The length of the required weekly collaboration and co-taught lesson will be defined at the local level.
- Amend regulations to ensure that all teachers are better prepared to skillfully collaborate with other teachers and to work with students with disabilities by adding a requirement that all teacher education programs include a minimum of three credits in educating students with disabilities. Regulations will specify that general education teachers must be prepared with knowledge and skills regarding: classroom management and positive behavioral supports and interventions, individualizing and differentiating instruction, effective practice for integrated co-teaching and collaboration, State special education laws and regulations, special education process, information on the categories of disability, including autism; and identification and remediation of specific learning disabilities. Regulations will be amended to add a required minimum number of field experience clock hours focused on working with students with disabilities for all candidates in teacher preparation programs.
- A summary of public comment in response to the emergency regulations is being prepared and technical assistance has been provided to more than 30 IHEs via telephone and email regarding the new structure. The CST for the 7-12 Generalist is currently being designed.

STEM faculty from college into high school:

Supply and demand data has shown that in many regions of New York State there is a shortage of certified teachers in the areas of science, technology, and mathematics. To address this issue, the Board of Regents discussed

emergency regulations in December 2010. Approval is expected in February 2011 to create an expedited pathway for individuals who have advanced degrees in the STEM disciplines and related postsecondary teaching experience to become certified teachers in the STEM subject areas in time for staffing in the 2011-12 school year.

Acceptable candidates must have a graduate degree or higher in a STEM area, a graduate major in the subject or a closely related subject area of the certificate sought; and at least two years of satisfactory teaching experience at the postsecondary level in the certificate area to be taught or in a closely related subject area. In addition, candidates must complete at least six credits of undergraduate pedagogical core study or four credits of graduate pedagogical study for the initial certificate in the area of the candidate's certificate; and the pedagogical core study will include study in the methods of teaching in the certificate area, teaching students with disabilities; curriculum and lesson planning aligned with the New York State Learning Standards; and classroom management and teaching at the developmental level of students to be taught, before candidates can earn their initial certificates. In lieu of the required credit hours, an on-line pedagogical model will be developed to help expedite the process. Candidates who have the requisite postsecondary experience but who lack the pedagogical study may be issued a Transitional G certificate, which allows them to teach in a public school for up to a year while they complete the required coursework.

Graduate Level Clinically Rich Teacher Preparation Pilot:

New York State has offered a Request for Proposals (RFP) for a Graduate Level Clinically Rich Teacher Preparation Pilot as an innovative part of New York State's application for the Federal Race to the Top. The purpose of the Graduate Level Clinically Rich Teacher Preparation Pilot Program is to:

1. Positively impact student growth and achievement
2. Effectively prepare teachers for high needs schools
3. Prepare candidates to focus on teaching shortage areas
4. Increase the retention of these teachers

These programs will develop practices that other institutions can adapt for their teacher preparation programs. The RFP requires institutions to partner with high needs schools; additionally the partnership may include additional high needs schools, institutions and /or community based organizations. Candidates for the programs will be chosen through a highly selective screening process to be enrolled in the graduate residency programs for up to one school year in a residency while enrolled in graduate level coursework. Candidates will be supervised by institutional faculty and mentored by a trained mentor throughout the program. The program will have rigorous graduate level course work leading to a master's degree that includes learning theory, research, and content. There

are two models available: Model A and Model B. In the Model A, track candidates will be placed with a mentor teacher of record and will receive mentoring and supervision. In the Model B track, candidates will be the teacher of record and will receive mentoring and supervision. Candidates successfully completing the program and all required teacher certification examinations will receive their initial certificate in teaching.

Teacher Supply and Demand:

NYSED has implemented a database that allows the evaluation of shortage areas by comparing the number of new teachers/principals prepared to the actual number of vacancies filled by a first-year teacher or principal. When the ratio of new teachers/principals certified to vacancies filled is high (e.g., five new teachers prepared for one new teacher hired), a surplus is projected. If the data show fewer than two new teachers/principals prepared for each vacancy filled, the area is flagged as a potential shortage area, or one needing a greater number of newly prepared teachers or principals (i.e., more program graduates.) NYSED monitors certification trends, presents analyses to the Regents, and publishes the results on NYSED's website annually.

To more precisely identify teacher and principal shortages at the school level, beginning in fall 2010, NYSED is collecting vacancy data from each LEA by certification area and grade level and will add this data to the existing certificate supply data. Vacancy data is being collected in areas that cannot be filled, or that cannot be filled by an appropriately certified teacher or principal. These data will identify the regions, subjects, and certification areas in the State with the most urgent need. The National Center for Education Statistics' schools and staffing survey was used as a model for collecting the vacancy data. In addition, through existing communications networks (e.g., the Staff and Curriculum Development Network, the NYS Council of Educational Associations, and Deans' meetings,) NYSED will reach out to administrators, high school guidance counselors, and Deans of Education to encourage their use of the teacher/principal supply and demand data for planning and attracting prospective students to the areas of greatest need. These new data, together with the existing supply data, will inform NYSED, LEAs, institutions preparing teachers and principals, and the public where and in what areas shortages exist, allowing them to better address teacher and principal need.

B. Implementing a Statewide longitudinal data system:

Describe the progress the State has made, from the approval of the phase 1 SFSF application through September 30, 2010, in implementing a statewide longitudinal data system that includes the twelve elements of the America COMPETES Act.

The State has made significant enhancements to its P-12 data system since the approval of the SFSF application. The State has demonstrated the capacity to meet all of the 12 elements of the America COMPETES Act, and is engaged in a major, four-year reform and expansion to a full P-20 educational data system. With almost \$115 million in additional funding from federal and State grants, the State is now taking the following actions:

- Collecting teacher and course data;
- Linking P-12 and Higher Education data;
- Designing and building a Data Portal and Instructional Reporting and Improvement System that helps teachers, school officials, and parents improve student achievement and close the achievement gap;
- Creating an electronic data exchange system (i.e., transcript information) that will accompany students throughout their schooling;
- Creating an Early Warning System to help at-risk students;
- Linking with other state agencies, state financial aid, vocational rehabilitation, and early childhood data systems;
- Improving data quality and overall system performance, with daily data verification and error checks for schools.

NYSED established a statewide longitudinal data system (LDS) and a unique statewide student identifier system in the 2005–06 school year to collect and report student-level data for grades pre-kindergarten through 8. The LDS included demographic, enrollment and exit outcomes, program participation, and assessment information.

In 2006–07, the LDS was expanded to include these data for grades 9–12, as well as data from college readiness tests (e.g., SAT, Advanced Placement) that are approved alternatives to high school Regents examinations; that collection expanded in 2010 with a full agreement between the College Board and NYSED to exchange data and engage in joint research projects. In 2007–08, NYSED began collecting additional data elements, including data for preschool students with disabilities, to assist with accountability reporting for the Individuals with Disabilities Education Act (IDEA).

The following table provides a summary of how the State and federal funds will be spent for the continued expansion of the State's LDS:

IES-1	IES-2	NYS Capital Funding	Race to the Top
\$7.8 MM	\$19.7 MM	\$20.4 MM	\$66.8 MM
4 years / June 1, 2009	3 years / July 1, 2010	3 years / September 1, 2010	4 years / September 2010
<p>Improve the collection and reporting of required accountability data:</p> <ul style="list-style-type: none"> • Improve data quality; • Improve data portal and reporting tools to benefit schools and districts; • Establish data management committees to facilitate communication with the field. 	<p>Expand the data system, improve collection of all data elements required in America Competes Act:</p> <ul style="list-style-type: none"> • Establish significant support for statewide regional data centers (e.g., hardware, software licenses) to handle increase in data collection and improve data quality; • Collect basic teacher/course data; • Create initial linkages with SUNY/CUNY; • Collect basic higher education data; • Develop protocol for linkages with private colleges; • Develop initial linkages with other State agencies (e.g., workforce, children and family services); • Plan for instructional improvement system; • Plan for early warning system to help at-risk students; • Collect other key data elements: (e.g., attendance, suspension, and additional ELL data). 	<p>Maintain and expand data collection to create a true P-20 Data System:</p> <ul style="list-style-type: none"> • Expand data system infrastructure to collect and report additional data (student attendance, disruptive incidents); • Expand teacher/course data; • Create electronic student transcript (K-12 through college); • Expand SUNY/CUNY data systems; • Fully integrate linkages with SUNY/CUNY; • Expand unique student identifier system to link with multiple data systems (e.g., workforce, children and family services); • Based on expanded data collection, develop Early Warning reporting system to help students not on track, at risk of dropping out. 	<p>Use the data system to improve instruction and student outcomes:</p> <ul style="list-style-type: none"> • Build a data portal with customized dashboard reports and collaboration functionality based on stakeholder role (e.g., student, parent, educator, researcher); • Create a Statewide Instructional Reporting and Improvement System that helps teachers, school officials, and parents improve student achievement and close the achievement gap; • Incorporate performance evaluation systems based on student growth; • Expand linkages with participating private colleges and other State agencies (e.g., health, children and family services).

Data Systems to Support Instruction:

The expansion of the State's longitudinal education data system (LDS) to a full P-20 system will increase the State's ability to provide data directly to schools to support instruction. The primary goal of our data system over the past ten years has been to meet federal and state accountability requirements. The next generation of such longitudinal data systems is designed to provide the data directly back to schools, administrators, teachers and parents in order to improve and support instruction.

In a state as large and diverse as New York, we have found that complex data initiatives are best introduced in phases. Such an approach allows for the voluntary participation of early leaders, the gathering of feedback and the implementation of improvements and enhancements prior to launch at scale, and decreased frustration and increased stakeholder buy-in.

NYSED established pilot projects in 2010 with selected school districts and created a new system to collect teacher- and student-level transcript information. That system has now been expanded statewide, with unique statewide teacher and course codes for all schools and districts and procedures to include teacher and course data in the LDS.

NYSED has engaged in an extensive exchange of data among the NYSED, SUNY, and CUNY systems that enables the analysis of student transition from high school to college, as well as remediation and retention in college. New York's P-16 statewide data model is now collecting data on student demographics, assigned teachers, student enrollments and exit outcomes, course information, program services, assessments, and transition to and success in higher education.

New York's LDS is distinctive in its design. The State's work is based on the collaboration among NYSED, our diverse schools and districts, and the statewide network of 11 regional data centers. These data centers include New York City, Yonkers City School District, and nine of the State's 12 Regional Information Centers (RICs). Both the regional data centers and the statewide LDS are built upon a standardized data model (eScholar).

This dynamic has produced innovations that have matured into a statewide standard data model, a statewide data verification tool, and protocols for collecting data that link teacher, course, and student performance data. The State is now on the cusp of integrating and standardizing our statewide instructional reporting and professional development platform to provide resources, information, and best practices directly back to the teachers and educators at the school level.