New Hampshire's Equity Plan

for ensuring that poor or minority children are not taught by inexperienced, unqualified, or out-of-field teachers at higher rates than are other children.

Prior to developing an equity plan it was necessary for the New Hampshire Department of Education (NHDOE) to look at data to determine what inequities in teacher quality and student achievement might exist across the State. New Hampshire is not characterized by clearly defined communities of high poverty and high minority populations. The Education Trust's Edwarch Online 2006 State Summary Report for New Hampshire (www.edtrust.org) lists those populations as "N/A" on its bar graphs. There are certainly people in New Hampshire who live in poverty and there is a rising minority population. New Hampshire's ELL population increased by 149% between 1994 and 2005 (National Clearinghouse for English Language Acquisition, George Washington University). However, the poor and minority students are largely distributed among the population of a relatively prosperous state. U.S. Census data for 2003 reports a poverty figure of 6.4% statewide. The NH counties with the highest poverty as measured by the U.S. Census are Sullivan (9.1%) and Coos (10.4%). These are the most rural counties of the state. The two largest cities in NH, Manchester and Nashua, are located in Hillsborough County which has a 2003 census poverty rate of 5.6%. New Hampshire's two largest cities are also home to the most diverse population of the State. The data that was used to analyze teacher quality did not point to a clear pattern of inequity in teacher quality among districts. There are inequities in the overall funding that is available across the state from district to district, but funding does not always correlate to student achievement and teacher quality. The most effective way for New Hampshire to ensure that poor or minority children are not taught by inexperienced, unqualified, or out-of-field teachers and thus to promote equity is to support broad based initiatives that improve the teacher quality in ALL schools and districts. Additionally, the NHDOE must target its resources to those schools and districts with the least local resources to provide an equitable teacher quality workforce. ALL teachers need to be able to address the individualized needs of a diverse student population. English language learners, students with disabilities, students from poverty, and students with other special needs must have access to a core curriculum that is taught by highly qualified teachers.

The NHDOE's school improvement process targets assistance to schools and districts that are identified as being in need of improvement. NH's Districts in Need of Improvement include districts with both high and low teacher salary schedules, varying percentages of teachers with Master's Degrees, and differing student-teacher ratios. There is no clear correlation between those aforementioned markers of teaching quality and the designation of a District being in Need of Improvement. It is necessary to look at the individual school level data to discover differences in performance that may be hidden at the district level. The NHDOE will continue to analyze school level data to target technical assistance and is developing strategies to facilitate the school level data analysis. Teacher hiring, firing, and compensation are managed at the local school district level in NH and are under the direction of the local school boards. Under its current legislative authority, NHDOE can have a significant impact on teacher quality through the enhancement of teacher preparation standards, provision of high quality professional development opportunities, and rigorous recertification guidelines for all educators. NH holds firmly to its local control governance of schools at the district level.

NH has two laws which provide a foundation for measuring the academic performance of schools and for supporting the school improvement process. NH RSA 193-C, "Statewide Education Improvement and Assessment Program" was enacted in 1993. The purpose of the law was to develop standards as the basis for an accountability system that would drive a local education improvement plan. The law was designed to establish what NH students should know and be able to do, to assess that learning, and to provide a tool for local decisions about curriculum development and delivery. NH RSA 193-H, "School Performance and Accountability," was added in 2003 to support the federal NCLB law requiring the identification and public disclosure of schools and districts in need of improvement. The Local Education Improvement Plan is the legislatively authorized procedure to drive the school and district improvement process. The NHDOE is directed through this law to provide technical assistance to those schools or districts who ask for help. The Commissioner of Education is empowered to provide a corrective action plan for those schools or districts that do not develop one on their own. The State Board of Education has the authority to direct a local school board to implement a corrective action plan.

NH is implementing a variety of strategies to support the improvement of teacher preparation programs and the delivery of high quality professional development across the State. After seeing the results of the New England Common Assessment Program, New Hampshire's Commissioner of Education, Lyonel B. Tracy, asked each teacher to develop steps to help each and every child reach proficiency by 2013-2014. The Commissioner promotes a "Follow The Child" growth model to ensure that each student

receives a personalized education. This initiative moves NH beyond attending to identified subgroups for accountability to serving students at the individual level.

"Follow The Child"

Follow The Child is an initiative to help schools and teachers foster student aspirations to promote student achievement through an emphasis on personalized learning and assessment. Expanding upon the intent of No Child Left Behind, Follow The Child focuses on measuring growth in the personal, social, physical, and academic facets of each student's life and defining the necessary support systems needed for each student's success. This initiative helps to preserve the individual education of each child as the defining purpose of NH's educational system.

Follow The Child is not a prescribed set of uniform measures, but rather a vision for child-centered learning that can be met as each school and district best sees fit. This combination of high expectations and flexibility helps to maintain the diverse, local character of education in NH. Already, 33 districts and 143 schools have chosen to participate in this exciting initiative. Follow The Child schools and districts make a deep commitment to their students and staff, ensuring that personalized learning and student well-being are at the center of school policies.

During the 2005-2006 school year, Commissioner Lyonel B. Tracy began to describe his framework for Follow The Child for educators and audiences across the state. In 2006-2007 and beyond, the NHDOE will help to implement this vision with outstanding professional development opportunities in support of the Follow The Child initiative. Held all over NH, these opportunities will help to outfit teachers and administrators with the tools and techniques necessary to create classrooms and schools focused on the success, aspirations, and well-being of each child.

No Child Left Behind has made academic proficiency a national conversation. It is essential that NH captures this urgency and directs it into a whole-child approach that exceeds the national standard. Through the personalization of learning and the measuring of progress in all aspects of a student's life, NH can provide an education that helps students to increase their aspirations and reach their fullest potential. Commissioner

Tracy and the NHDOE have invited members of the educational community to join together to make this initiative a reality for every student in the state. The NHDOE has submitted an accountability growth model to ED to complement the current school based accountability system. The Follow The Child model provides an overall strategy and philosophy to support the diverse learning needs of all students. This fits with the demographic distribution of student diversity across NH.

Strategies to Improve Teacher Quality in New Hampshire

The strategies that follow are a combination of ongoing efforts and plans for the continuous improvement of Teacher Quality across the State.

Improvement of Data and Reporting Systems

Strategy: Educator Information System (EIS) system

The NHDOE will contract with a vendor to develop, implement and maintain the Educator Information System (EIS). It is anticipated that a contract will be in place for this project by April of 2007. The EIS project will leverage the Internet to create a citizen-centric system to manage educator licenses, track educator assignment data and help ensure that the state of NH has the right teachers in the right classrooms. The project will connect prospective educators, current educators, schools, educator preparation programs (college programs) and the state to process educator licenses. Functions will exist for all stakeholders. These services will include items such as on-line applications, on-line payment, licensing inquiry, on-line professional development plans, college completer endorsements, school assignment data capture, as well as many other functions. The NHDOE anticipates that this system will provide data tools that are presently unavailable. Accurate measures of teacher turnover, out-of-field teaching, highly qualified status, and levels of teacher experience will become accessible. NHDOE

will be able to move from its present system of LEA self reporting on a free standing teacher quality survey to a comprehensive tool that links certification and teacher preparation data directly to classroom level reporting.

Strategy: Increased Capacity to Analyze Data

The NHDOE plans to acquire the services of a statistician to assist with the interpretation and analysis of teacher quality data. As we build our capacity to collect and analyze data it has become apparent that we need additional expertise to bridge the communication between data collection, data analysis and delivering appropriate technical assistance and high quality professional development to the LEA's.

Strategy: Review and Revise Administrative Rules to Improve Teacher Quality through Pre-Service Education

NH RSA 186:60 authorizes the Professional Standards Board (PSB) to advise the State Board of Education regarding drafts of the administrative rules that guide the State's educator preparation and certification processes. The State Board has the authority to adopt new rules. The Council for Teacher Education (CTE), established under NH RSA 190:1, uses the program approval rules to guide the process of program review and approval for the teacher preparation programs in the state. The competencies for all teachers completing a teacher preparation program include identifying differences in student approaches to learning, designing differentiated instruction, and fluently using a variety of educational strategies to meet the needs of diverse learners. New rules are currently in the rulemaking process to strengthen the field experiences of teacher preparation candidates so that they work with students from diverse backgrounds during their educational placements. The NHDOE works with the PSB and the CTE on an

ongoing basis to review and revise the program and certification standards to reflect the latest research in best practices for teacher preparation. This year the State Board has charged the PSB to review several endorsement areas, further align the administrative rules on teacher quality with NCLB requirements, link the Professional Development Master Plans to the "Follow the Child" initiative, and to work with the CTE on teacher recruitment and retention activities.

The guidelines for the Professional Development Master Plan are created through administrative rulemaking. The PD Master Plan identifies the district goals and focuses the teachers' individual Education Improvement Plans (EIP). Teachers recertify through a process that includes high quality professional development in their endorsement area or areas that is supervised at the local level based on the district's master plan. Teachers must demonstrate continuous improvement on the competencies that include attention to the educational needs of diverse learners. Teachers write a new EIP every three years in conjunction with the recertification process. NH's PD Master Plan template encourages teachers to use job-embedded professional growth. The PD Master Plan has moved the State forward in setting a standard for professional development that facilitates professional learning communities and supports data driven decision-making by teams of education professionals.

Recruitment and Retention of Experienced Teachers

Strategy: Web-based Special Educator Personnel and Related Service Provider Recruitment Tool, Teacher-teachers.com

During the 2005-2006 academic year, NH received federally funded services to build state capacity in the recruitment of highly qualified and diverse special educators, early intervention, and related providers from the National Center for Special Education

Personnel and Related Service Providers. The services included the provision for twenty (20) districts to receive a free one year membership to Teachers-Teachers.com, a leading education recruitment service on the Internet.

The NHDOE, Bureau of Special Education accepted applications and awarded the first twenty (20) districts that applied a free one year membership to www.Teachers-Teachers.com. These districts have full access to a national database of certified special education candidates interested in working in NH; are able to post an unlimited number of jobs, conduct customized searches, and participate in interviewing candidates online.

From Spring 2006 to Spring 2007, the NHDOE, Bureau of Special Education, worked with the National Personnel Center staff and representatives from the Teacher-Teacher.com to ensure that districts received the recruitment services. This project includes the opportunity for New Hampshire Institutes of Higher Education to be included.

Strategy: Web Based Tool for Recruitment and Retention, "Attract, Hire and Support"

This guide presents research and resources related to hiring, attracting, and retaining new hires as well as supporting and retaining experienced educators. It will provide schools with research based information and tools to assist in their efforts to staff their school with talented educators. Users will increase their understanding of good practices for attracting, hiring, and supporting educators to be able to address and implement special practices that will move their school up on the continuum of good practice. The guide has surveys and activities that will enable administrators to determine the culture and climate and concerns of existing staff. Many cost effective strategies that address culture and climate and working conditions are available in this guide. The

NHDOE plans to provide an informational session on this tool to all five regional Superintendent groups in the coming months. In July 2007, the guide will be showcased at the statewide Leadership Conference in the format of training sessions for school and district level administrators.

Strategy: Teach North

Teach North, the New Hampshire North Country initiative for teacher recruitment, is a cooperative effort of 32 school districts, three colleges, and the NHDOE. TeachNorth (www.teachnorth.org) is one strategy employed in NH's North Country to attract teachers who would want to live and work in the northern, rural and mountainous part of the state. NH has an abundance of natural beauty and environmental conditions that attract some teachers to live and work in the state despite the challenges of rural isolation and lower salaries. This organization has a website for recruiting teachers. The links include up-to-date job postings, instructions on submitting resumes electronically, information on the various school districts and the area and links to the NHDOE credentialing and information website.

Strategy: Induction and Mentoring

New Hampshire promotes Induction with Mentoring (IWM) through the Teacher Quality Enhancement (TQE) grant. Funds are distributed to five Local Education Support Centers (LESC), which are responsible for coordinating IWM projects with participating districts. The centers and districts use the "An Induction with Mentoring Toolkit" as the program standard. Throughout this grant, the LESCs have been preparing to sustain their role of providing technical assistance to districts beyond the grant period. As a result of

the TQE grant, there are now several teachers in various districts who are qualified to provide mentor training to interested teachers.

Strategy: Loan Forgiveness-NH Higher Education Assistance Foundation (NHHEAF)

The NHHEAF Network's Teachers for NH Program includes the Teach for New

Hampshire Loan Forgiveness Program. This is a forgivable loan program for individuals with a BA in a non-education field. Candidates are required to attend one of the NH teacher preparation programs and, subsequent to completing coursework, to teach in NH.

This includes the Enterprise Teachers Program which encourages job changers to enter the teaching field. Teachers for New Hampshire is a competitive program. Scoring criteria rank order applicants' materials and essays. The criteria include preparing to teach in a critical shortage area, being previously uncertified to teach, financial need, and close proximity to completing a teacher preparation program.

Strategy: New Hampshire Forum on Higher Education Initiatives

The New Hampshire Forum on Higher Education is a collaborative partnership of government, higher education, and business leaders playing a key leadership role in the state to support collaborative efforts that benefit the education employment outlook for NH. Two of their initiatives are the Future Educators Academy (FEA) and the Workforce Investment Act (WIA) Dislocated Worker Program. The FEA is a project developed by the NHDOE and endorsed by the NH Forum on Higher Education. The goal of the FEA is to develop a pipeline of passionate, high skilled applicants for New Hampshire's teacher training colleges and subsequently quality educators for New Hampshire's school districts. FEA creates opportunities for students to gain information and exposure so that they, in turn, can identify and select a career in education prior to

postsecondary enrollment. The WIA Dislocated Worker Program is designed to attract unemployed workers to teaching in collaboration with the NH Technical College system.

Strategy: Troops to Teachers Program

In September of 2001, the New Hampshire Department of Education signed an agreement with the Northern New England Troops to Teachers program to boost recruitment efforts focused on retired military and other career changers interested in pursuing a teaching credential through certification Alternatives 4 and 5 (described below). The program offers support to military personnel and veterans who may be retiring and moving to NH and wish to pursue certification in this state.

Strategy: Alternative Routes to Certification

In July of 2002, the NH legislature passed a law to address the need for teachers in critical shortage areas throughout the state. According to this law, the local school board, in consultation with the Superintendent, may offer a one-time, one-year certificate of eligibility to any person interested in teaching on a full-time or part-time basis.

Candidates for this certificate must hold a Bachelor's degree from an accredited postsecondary institution, and meet the qualifications for the position through relevant experience and education. The legislation also includes a provision to establish a district shortage in a teaching area not declared as a state shortage.

There are three alternative routes to teacher certification in NH in addition to alternatives 1 and 2 which are through college or university teacher preparation programs. **Alternative 3** is designed for candidates who have gained the competencies, skills, and knowledge through means other than Alternative 1 (in-state teacher preparation program) or Alternative 2 (out of state teacher preparation program). The

Alternative 3A process includes both written examination and oral review. Candidates may request teaching, administrative, or educational specialist certification on the basis of demonstrated competencies and equivalent experiences. Alternative 4 is a certification process restricted to critical shortage areas, certain career and technical specialty areas, and business administrators. A superintendent may employ a candidate who meets eligibility requirements. The superintendent of schools, or designee, then develops an Individualized Professional Development Plan leading to full certification. Entry level requirements for all areas are available from the Bureau. A list of critical shortage areas is published by the Bureau of Credentialing each year. Alternative 5 is an on-the-job training option which allows an individual to attain certification in elementary and secondary teaching areas if the candidate has a bachelor's degree, a 2.50 GPA overall and at least 30 credits in the area they wish to pursue certification, and if a local school district is willing to assume the responsibility for training and supervising the teacher candidate. A superintendent may hire an individual who possesses a statement of eligibility issued by the Bureau of Credentialing.

The Educator Information System will allow the NHDOE to analyze the recruitment and retention patterns of the various alternatives to teacher certification.

Strategy: Project Across Teacher Education Conversion Program

In September of 2002, the NH Department of Education was awarded a two-year \$800,000 Transition to Teaching grant from the US Department of Education. The objective of this teacher-training project, entitled Project ACROSS, was to recruit, train, and mentor teacher candidates from a target group of career changers and recent college

graduates. The purpose of this project was to fill critical shortage teaching positions in the state. There is now a Teacher Educator Conversion Program to prepare teachers in mathematics, science, and special education at New Hampshire Technical Institute.

Professional Development, Technical Assistance, and Follow The Child **Strategy:** Provide high quality professional development (HQPD) in core content courses to non-HQ teachers in schools and districts in need of improvement.

The NHDOE will utilize the State Agency for Higher Education Grant (SAHE) entitled Content Enhancement Instruction Leadership (CEIL) to deliver content area professional development opportunities to high need schools and districts and specialized groups across the state. The CEIL project provides resources and workshops that help teachers attain Highly Qualified Teacher status. CEIL is continually sponsoring workshops that foster professional development in the core content areas.

In New Hampshire, the data show that teachers in grades 7 and 8 require content enhancement in mathematics, general science, and English or reading. The majority of teachers in this group are certified as elementary teachers for grades K-8. While they are certified in the appropriate area, New Hampshire has required the equivalence of a content major in grades 7 and 8 to demonstrate highly qualified status. Special educators in grades 7 and 8 also need support to complete the HQ requirements in multiple content areas.

Many teachers in K-8 schools teach at least two content areas and have made tremendous progress toward becoming HQT. In rural areas, teachers in grades 7 and 8 may teach four content areas and are using the rural flexibility allowed to complete the

additional requirements. Special educators are another group using the flexibility to complete multiple areas. The focus of the CEIL grant has been the middle school content areas. A series of mathematics workshops, 24 workshops across the general science curriculum, and numerous social studies and English workshops have been well attended in the past three years. These will now be targeted to schools and districts in need of improvement.

CEIL will meet with the districts in need of improvement (DINIs) and present an overview of the professional development and technical assistance services that are available to DINIs and SINIs through their grant at one of the scheduled monthly meetings that are held at the NHDOE to support school improvement. This presentation will be repeated at the SEA sponsored statewide Leadership Institute this July.

At the high school level, many science-certified teachers are required to teach at least one additional science area out of their certification area. Meeting HQT in multiple sciences is an area of need, because NH certifies individual sciences, rather than general science for grades 9-12. Special education teachers at the secondary level also have multiple areas in which to demonstrate content knowledge.

The CEIL project has developed a conference scheduled for February 7, 2007 for special education directors across the state. The conference will provide technical assistance in meeting HQT for special educators. The workshop includes updates from the Bureau of Special Education and Title IIA in the requirements, models for collaboration, scheduling concepts, and a best practices panel. The CEIL project will be asked to address the secondary science issue in collaboration with the state science consultant and the CEIL science consultants.

Strategy: Open-NH, e-learning initiative

The NH DOE, in partnership with nine other states, received a five-year "Ready to Teach" grant from the US Department of Education called "eLearning for Educators." E-Learning for Educators is a five-year initiative, funded by the federal Ready to Teach Program, designed to help states meet critical requirements for improving student achievement through providing high quality professional development content and support as they build their capacity to implement programs to meet teacher quality requirements. The initiative will seek to address the needs of students in high-poverty, low-achieving schools. The NH version is called: OPEN-NH. The mission of OPEN-NH is to build capacity to design and deliver high quality professional development to meet the needs of NH educators and students in a cost effective manner. Core project activities include selecting and training facilitators, designing online courses specifically tied to the needs of NH schools and educators, and researching effective online professional development.

OPEN-NH offers courses that are facilitated by New Hampshire teachers, and dedicated to serving the needs of New Hampshire schools. All courses will begin with an initial face to face orientation (supplemented by videoconferencing) that will allow participating teachers to meet their classmates and instructors, and to become familiar with the online environment, the Blackboard delivery system, and the course requirements before beginning the online activities. Courses will last for six weeks and will emphasize theory-to-practice applications. Course work will include online discussions, reflection, readings, and projects.

Strategy: School Improvement Support System

The School Improvement Support System provides intensive professional development in core academic content to teachers currently working in high-need schools. The NHDOE provides funds and programmatic support for staff to address needs in low-performing schools. The following professional development positions are included:

- School Improvement Coaches are experienced, exemplary educators
 committed to improving teaching and learning who partner with classroom
 teachers from SINIs and DINIs to provide support and training, and to serve
 as a resource needed to help the teacher improve instructional skills. School
 Improvement Coaches assist classroom teachers by
 - demonstrating effective teaching and encouraging teachers to model that teaching to improve instruction,
 - assisting the faculty in gaining knowledge and in implementing best instructional practices,
 - assisting school teams in analyzing test data to identify patterns and instructional deficiencies,
 - developing strategies to address instructional deficiencies, and
 - providing support and training for needed changes in instructional practices.

Although current School Improvement Coaches are working only in the area of Reading/English Language Arts, it is anticipated that Coaches will soon be made available for mathematics as well.

- 2. Curriculum Consultants and District Improvement Coordinators provide technical assistance and instructional support in curriculum planning and alignment, professional development, and student performance. The Curriculum Consultants are available as needed within the limits of their schedules. They have developed support materials for the GLEs/GSEs, and will conduct workshops to disseminate them. They will also conduct NECAP Released Item workshops, and book studies, to encourage discussion of how students learn in the various disciplines. The NHDOE holds monthly meetings for the District Improvement Coordinators as a group. These meetings provide professional development for the coordinators, and allow the NHDOE to monitor and guide the performance of the Coordinators in their district duties. An example would be training in the Root Cause Analysis process to allow districts to improve their data-driven decision-making.
- 3. The **High School Reform Consultant**, soon to be appointed, will work with high schools in need of improvement, and high schools in DINIs, to examine how instruction is delivered, and how it might be improved. This consultant will work on implementation of high school competencies and the Breaking Ranks Initiative.

Strategy: Professional Development in Response to Intervention

One of the goals of the NH Special Education State Improvement Grant II (SIG II) is to provide professional development in research-based comprehensive literacy instruction, assessment, and data driven decision making to school teams in low performing schools to improve the literacy skills of all students, especially those in grades 4-10. This is being accomplished through the development and implementation of a Response to Intervention (RTI) for Literacy Pilot Program being provided to four selected Schools In Need of Improvement (SINIs). A Response to Intervention program is a multi-tiered service delivery model of increasing instructional supports to students that incorporates curriculum based assessment and use of a team approach to problem solving and decision making.

Through a competitive RFP process SIG II has contracted with the University of New Hampshire's Institute on Disability to provide expert training and technical assistance in the area of reading literacy using the research-based Response to Intervention (RTI) model to 4 SINI schools for the 2006-2007 school year. Outcomes anticipated by the end of the project include: 1) improving reading scores on standardized tests (e.g., New England Common Assessment Program (NECAP); 2) improving the expertise of teachers, reading specialists, and other key staff involved in reading instruction; 3) increasing administrator's knowledge of and support for the effective utilization of the RTI model for literacy in their school; 4) improving students' classroom reading performance across the curriculum, and 5) reducing the number of students referred for special education services.

Specialized Knowledge and Skills

Strategy: Improve services to highly mobile students

Highly mobile students are generally identified as those students who make six or more moves during their k-12 education that are not considered normal transitions (elementary to middle school, middle school to high school, etc.). These students include children of military parents, children and youth in homeless situations, children of migratory workers, families experiencing domestic violence, or other unstable work and/or home environments (Project HOPE, 2004).

Poor families move 50% to 100% more than non-poor families (Project HOPE,

2004) Approximately 30% of children in low income families change schools annually compared to 8% if children above poverty. (Project HOPE, 2004) Frequent school changes have been correlated with lower academic achievement (US General Accounting Office, 1994) It may take up four to six months to recover academically from a change in schools (National Law Center on Homelessness and Poverty, 2004) High mobility also adversely affects the academic achievement of stable students. (Students on the Move, Reaching and Teaching Highly Mobile Children and Youth, 2003)

With the advent of NH's Unique Student Identifier System (SASID) and the i.4.see
Initiative (Initiative for School Empowerment and Excellence) the SEA, and LEAs, and communities have a new opportunity to address the challenges of mobility. With NH's recent ability to track the movement of students from one school to another there will be meaningful data related to student mobility. This will provide information to determine the impact of student mobility on students and schools and to develop a plan to limit and ease that impact.

School and Teaching Strategies:

Identify gaps in services and learning

Establish routines to make transfers less disruptive

Monitor and support as needed throughout student's stay at the school

Conduct formative evaluations - diagnostic-prescriptive teaching

Curriculum based assessments and measurements

Prepare for departures

Streamline procedures - prompt transfer of student

records/exchange of information between current school and new school.

Provide students with opportunities for closure

Monitor student progress throughout school career - even in different

LEAS/Schools (SASID).

Working Conditions

Strategy: NH Follow The Child Statewide Summer Leadership Conference, July 23-26,

Research studies of factors that lead to the retention of experienced teachers show that salary and benefits are only a part of the conditions that lead to retention.

Leadership is an important component of teacher satisfaction and the NHDOE is planning to focus on leadership in its annual Summer Institute to support the school improvement process. The NHDOE plans to release a Statewide Literacy Guide with a target audience of school administrators at the Summer Leadership Conference. NH Reading First is developing its state outreach to disseminate the lessons learned from the RF funded sites.

2007

The SAHE grants will provide workshops to leadership in meeting the highly qualified requirements and reading across the curriculum in the middle grades.

Strategy: Curriculum Administrator Endorsement

There is a new certification endorsement making its way through administrative rulemaking for Curriculum Administrator. This endorsement will provide standards for the development of school leaders to become experts in curriculum and assessment. This will increase the number of educational leaders and thereby the districts' capacity to improve instruction and achievement at the local level.

Strategy: Coordinated State Level Monitoring Systems

The NHDOE is working with the New England Comprehensive Center to coordinate the monitoring activities that already exist among different parts of the agency. Part of the monitoring process involves teacher quality and improving professional development. The NHDOE is planning to strengthen its capacity to measure teacher quality and to focus on teacher quality improvement in a more focused fashion as part of the overall school improvement process. The Department is planning initiatives to strengthen its data collection and analysis systems as well as the staffing infrastructure to use the data for focused school improvement endeavors. The Cross Bureau Team meetings have highlighted the need for an increased capacity to collect and analyze data.

Policy

NH's Governor John Lynch recently created a P-16 Education Council by Executive Order. Governor Lynch has announced an initiative to increase the age of compulsory school attendance from 16 to 18 years of age. Educators and administrators across the state insist that the increase in compulsory attendance must be accompanied by

an increase in alternative programs to personalize the educational experience for students who are at risk of school failure and who would leave school at sixteen if allowed to do so. The NHDOE is asking for an increase in the budget to provide these programs. Professional development will be provided to assist teachers in providing differentiated education to students that are at risk of dropping out. Another focus of the P-16 council is to provide a linkage between the teachers in the high schools and the post-secondary institutions to align expectations and provide a smooth transition for students from one setting to another.

The NH State Supreme Court gave the NH Legislature a deadline of June 2007 to create a funding mechanism such that the State will pay for the cost of an adequate education for each child. The legislative leaders in the NH House and Senate education committees have announced their intent to move forward with defining an adequate education for NH children in this session. NH's future funding mechanism for education will have a significant impact on the financial equity among school districts in the State. Financial equity is related to a districts ability to attract and retain highly qualified, experienced teachers.

Research Base

NHDOE's strategy to Follow The Child and focus on student learning at the individual student level is supported by research from the Quaglia Institute for Student Aspirations, www.qisa.org.

Improvement of Data and Reporting Systems

Strategy: Build state capacity for collecting and reporting data through the Educator Information System (EIS) system.

Timeline

Timeline for implementation of EIS	Activity or phase of implementation
April 9, 2007	Governor and Council (G+C) to award contact to vendor, and convert existing teacher data
October 2007 First Release	On-line applications, on-line payment, licensing inquiry, on-line professional development plans, college completer endorsements, school assignment data capture
March 2008 Second Release	Teacher turnover, out-of- field teaching, highly qualified status, levels of teacher experience
December 2008	Use EIS to complete the CSPR for the 2007-2008 school year

The NHDOE will contract with a vendor to develop, implement and maintain the Educator Information System (EIS). It is anticipated that a contract will be in place for this project by April of 2007. This contract has experienced a delay because the original vendor abandoned the project. The EIS project will leverage the Internet to create a citizen-centric system to manage educator licenses, track educator assignment data and help ensure that the state of NH has the right teachers in the right classrooms. The project will connect prospective educators, current educators, schools, educator preparation programs (college programs) and the state to process educator licenses.

Beginning in April 2007 (providing that the contract is approved), existing teacher data will be converted into the new system. The first phase of implementation, scheduled for release in October this year, will include functions for all stakeholders. These services will include items such as on-line applications, on-line payment, licensing inquiry, on-line professional development plans, college completer endorsements, school assignment data capture, teacher preparation route, as well as many other functions.

The NHDOE anticipates that this system will provide data tools that are presently unavailable. The second phase of implementation, scheduled for release in December of 2008, will add tools to accurately measure teacher turnover, out-of-field teaching, highly qualified status, and levels of teacher experience. NHDOE will be able to move from its present system of LEA self reporting on a free standing teacher quality survey to a comprehensive tool that links certification and teacher preparation data directly to classroom level reporting.

Strategy: Increase state capacity to analyze data.

The NHDOE has acquired the services of a statistician through a referral from the New England Comprehensive Center (NECC) to the Northeast Regional Lab. This has given NHDOE access to the technical assistance contract with the Institute for Education Sciences (IES). This will assist NHDOE with the interpretation and analysis of teacher quality data. As we build our capacity to collect and analyze data it has become apparent that we need additional expertise to bridge the communication between data collection and data analysis in order to deliver appropriate technical assistance and high quality professional development to the LEAs.

The NH DOE has been working with a statistician from the Education Development Center (EDC) as part of the Northeast Regional Lab to review the 2005-2006 HQT data, which is replicating the data analysis used in the NH State Plan for Highly Qualified Teachers. The proposal from the EDC consultant follows:

"Initial Analysis of New Hampshire's HQT Data and Plan"

"Request from NH DOE"

"NH has requested that we provide assistance in evaluating their HQT Plan (that has already been submitted to ED for review) and in analyzing their HQT data. As it stands now, their HQT Plan contains descriptive data on HQ teachers without statistical analysis; however causal claims have been made around the descriptive data.

The NH DOE would therefore like someone to look at their plan, in order to see where they're making causal claims when they shouldn't be and to then run statistical analyses in order to accurately answer the questions from ED. They would also like someone to take a deeper look at the data they've collected to determine what other questions can be asked from it, what variables might be lacking for a deeper analysis, and what other statistics can and should be run. They would then like for someone to conduct this analysis.

This would be used by the NH DOE for internal review since the DOE has committed to providing a more in-depth analysis of their HQT data for the following year and they would like a better understanding of their data as it currently stands.

Overview of Current Plan

NH's Teacher Quality plan contains comparisons of averages and breakdowns of variables at different levels (e.g., looking at average risk level at schools with >5% teachers not HQT, <=5% teachers not HQT, 0% teachers not HQT) in order to answer several questions from the feds. No statistical analysis of the data was provided.

Descriptive data is presented for the following variables:

- 1. Percentage of classes taught by HQ teachers in a school
- 2. Percentage of HQT teachers within the school
- 3. AYP Risk Factor (0-5: 5=3rd year School in Need of Improvement (SINI); 4=2nd year SINI; 3=1st year SINI; 2=Did not make AYP for 2 years but not SINI because non-AYP was for different subgroups/subjects; 1=Did not make AYP in one of the last two years; Made AYP in both of last two years
- 4. Percentage of teachers within school with less than 3 years experience
- 5. Percentage of free and reduced lunch students within the school

Ways to Examine Data

There are quite a few questions/trends that we could examine from a statistical standpoint. These questions fall in the following two forms:

- 1. Is there a relationship/correlation between two variables (e.g., HQT percentages and free and reduced lunch %).
 - a. This would involve Pearson's Correlation and would also be plotted to look for interesting distributions of the data
- 2. Is there a statistically significantly difference between groups (e.g., the average risk level of schools with >5% teachers not HQT, <=5% teachers not HQT, and 0% teachers not HQT)
 - a. This analysis would most likely involve chi-squares or z tests.

Specifically, the following questions emerged from the plan: *General Questions*

- 1. Are the percentages of classes taught by H.Q. teachers and percentages of highly qualified teachers for 03-04, 04-05, and 05-06 statistically significantly different from each other (i.e., is there actual growth in HQT from one year to the next)?
- 2. Is there a correlation between the percentage of classes taught by H.Q.T and the risk level of the school?
 - a. Are the percentages of non HQ teachers a different risk levels statistically different from each other?
 - b. Are schools with less than 100% HQT less likely to make AYP/have a higher risk level than schools with 100% HQT?
 - c. Do schools with 100% HQT, >5% teachers not HQT, and <=5% teachers not HQT have statistically significantly different risk levels?
- 3. Is there a correlation between the percentage of teachers in a school with <3 years experience and the risk level of that school?
- 4. Are inexperienced teachers more likely to be highly qualified?

Questions Specific to Issue of Equity

- 5. Do poorer schools, as measured by percent free and reduced lunch (broken down in quartiles) have higher percentages of HQT?
- 6. Are poorer schools more likely to have not made AYP/be SINI/be in higher risk levels?
- 7. Do poorer schools have greater percentages of inexperienced teachers (as defined by less than three years experience)?"

Plan of Action/Next Steps (**Timeline**)

A 1.1 technical assistance research brief is to be produced which will involve answering the aforementioned 7 questions (and any additional questions requested by the NH DOE). This analysis will involve descriptive statistics, such as univariate analysis (e.g., correlations and t-tests) which would bring to light correlational-but not causal-relationships. This would likely take 1 month (or less) to complete and should be ready by mid March.

The findings will be presented to the Cross-Bureau data team upon completion.

The process and procedures developed will be used going forward as the state looks at data from 2005-2006 and future collections. The information from the EIS system and the data analysis in the process outlined above will build state capacity for monitoring the equitable distribution of highly qualified and effective teachers within districts, as well as offering an overview of the distribution of teachers across the state. This will enable the NHDOE, including Title IIA and other Title programs, the Office of Accountability, the Content Consultants and the Bureau of Special Education, to target High Quality Professional Development in the core content areas and Technical Assistance to high need schools and districts.

Strategy: Build state capacity to use data to effectively monitor for equitable distribution of highly qualified and effective teachers within school districts. The state will examine the issue of equitable teacher assignment when it monitors LEAs.

The SEA will use technical assistance from the regional lab as described above to determine the answers to the seven essential questions (on page 4). The data collection will continue through the NH Educator Survey until the EIS system incorporates this collection function. The NH Educator Survey identifies which districts and LEAs have or have not met the annual measurable objective (AMO) for highly qualified teachers.

In the future, the Educator Information System (EIS), currently under development, will track certification and highly qualified teachers. The EIS will provide more accurate information on teacher quality, retention, and employment trends than is currently available. The project will enable districts to interface directly with the system, improving the quality of the data. The system will allow the state to track assignment information in addition to certification information. The system will enable the state to identify HQT compliance for all assignments and identify any gaps in HQT qualifications.

The Initiative for Student Empowerment and Excellence (I4see) www.ed.state.nh.us/education/datacollection/i4see.htm will allow Districts to link classroom teachers with their individual students' performance data.

The NHDOE will continue its work with the New England Comprehensive Center (NECC) to examine and improve interagency monitoring systems. The title II-A monitoring system will track LEAs who have not met the HQ AMO for two consecutive years. Title IIA monitoring criteria will be incorporated into the state monitoring system which includes online data collection, on-site visits and paper monitoring. The data will allow the NHDOE to be more focused in its monitoring efforts.

NECC continues to help the NHDOE to review the data collection documents and procedures from various programs in connection to the important work of each bureau as well as among bureaus and across divisions. The information will be used by the NHDOE to prioritize and focus technical assistance to high need districts. Continued collaboration within and among bureaus will identify commonalities and connections in

data collection and reporting. The state will be able to provide more focused technical assistance and content PD to assist LEAs in their work.

Title I and Non-Title I Schools Sorted by Beginner vs. Experienced Educator Certificate

The attached documents show the numbers and percentages of teachers with less than three years of experience (beginning educator certificate) in the individual schools in New Hampshire's largest cities, Manchester and Nashua. These communities contain the highest numbers of students from minority populations in the state. The tables illustrate that there are differences among the various schools in the level of experience in the teaching staff. In some cases, there is a notable difference (before statistical analysis). Title I schools are bold faced. NHDOE plans to share this data with the school districts and the teacher unions.

Table 1 shows numbers and percentages of less than three years of teaching experience in Manchester and Table 2 shows the same information for Nashua.

Table 1		Dec 2006 Teachers				
Manchester School District	DstId	District	Enroll	Total	< 3yr Exp.	< 3yr %
Beech Street School	335	Manchester	576	45	9	<u>20.0%</u>
Parker-Varney School	335	Manchester	403	31	6	<u>19.0%</u>
Northwest Elementary School	335	Manchester	591	42	7	<u>17.0%</u>
Smyth Road School	335	Manchester	329	25	4	16.0%
Hallsville School	335	Manchester	315	21	3	<u>14.0%</u>
Bakersville School	335	Manchester	256	23	3	<u>13.0%</u>
Green Acres School	335	Manchester	490	34	4	12.0%
Wilson School	335	Manchester	360	36	4	<u>11.0%</u>
Highland-Goffs Falls School	335	Manchester	513	35	3	9.0%
Jewett School	335	Manchester	329	21	1	5.0%
Gossler Park School	335	Manchester	375	27	1	<u>4.0%</u>
Webster School	335	Manchester	430	25	1	4.0%
McDonough School	335	Manchester	485	39	1	<u>3.0%</u>
Weston School	335	Manchester	484	35	0	0.0%
Southside Middle School	335	Manchester	936	56	13	23.0%
Middle School At Parkside	335	Manchester	791	55	11	20.0%
Henry J. McLaughlin Middle School	335	Manchester	818	52	5	10.0%
Hillside Middle School	335	Manchester	937	68	6	9.0%
Manchester Central High School	335	Manchester	2395	106	20	19.0%
Manchester Memorial High School	335	Manchester	2268	102	15	15.0%
Manchester West High School	335	Manchester	2279	97	15	15.0%

All boldfaced schools are Title I Schoolwides

Table 2				Dec 2006 Teachers		
Nashua School District	DstId	District	Enroll	Total	< 3yr	< 3yr %
					Exp.	
Main Dunstable School	371	Nashua	496	33	5	15.0%
New Searles School	371	Nashua	260	21	3	14.0%
Dr. Norman W. Crisp School	371	Nashua	324	26	3	<u>12.0%</u>
Amherst Street School	371	Nashua	245	21	2	<u>10.0%</u>
Broad Street Elementary School	371	Nashua	266	23	2	9.0%
Sunset Heights School	371	Nashua	380	27	2	7.0%
Charlotte Ave Elementary School	371	Nashua	481	31	2	6.0%
Fairgrounds Elementary School	371	Nashua	515	35	2	<u>6.0%</u>
Mt. Pleasant School	371	Nashua	297	20	1	<u>5.0%</u>
Birch Hill Elementary School	371	Nashua	399	29	1	3.0%
Ledge Street School	371	Nashua	420	36	1	3.0%
Bicentennial Elementary School	371	Nashua	544	34	0	0.0%
Academy of Learning And Technology	371	Nashua	74	10	4	<u>40.0%</u>
Elm Street Middle School	371	Nashua	1407	71	12	17.0%
Fairgrounds Middle School	371	Nashua	978	50	7	14.0%
Pennichuck Middle School	371	Nashua	767	46	3	7.0%
Nashua High School North	371	Nashua	2023	92	22	24.0%
Nashua High School South	371	Nashua	2251	104	15	14.0%

Title I Schools are bolded. Crisp, Ledge and Amherst are SWP, Fairgrounds and Mt. Pleasant are TAS

Academy - TAS - first year program