

**A Summary of the  
National Comprehensive Center for Teacher Quality  
Third Annual What Works Conference:  
“Building Capacity for a Systems Approach to  
Improving Educator Quality”**

**November 10–12, 2008  
The Fairmont Washington, D.C.**

## **Day 1**

### **Welcome and Opening Keynote Panel**

**Sabrina Laine, Ph.D.**, director of the National Comprehensive Center for Teacher Quality (TQ Center) and chief program officer at Learning Point Associates, began the conference by underscoring the interdependence of policy and practice. Dr. Laine said that because neither can work in isolation, we need to think and work systemically toward managing educator talent. She added that progress will come only when we move toward aligned and integrated approaches to improving educator quality.

She then introduced the keynote panel—**Lewis Chappellear**, California 2008 Teacher of the Year, James Monroe High School, Los Angeles Unified School District; **Maria Fenwick**, teacher, Ralph Waldo Emerson School, Boston Public Schools; and **Amy McIntosh**, New York City Department of Education—and presented the following three questions to which each panelist responded:

1. Describe a scenario in your school or district that illustrates why investing in strategies that retain highly effective teachers is important for improving student learning.

Chappellear said that leadership opportunities that have come his way as a result of being named Teacher of the Year are indicative of the types of opportunities all teachers must have to stay motivated. Similarly, Fenwick shared that her participation in a teaching policy fellows program, during which she and colleagues discuss solutions to education policy issues, is one way to motivate effective teachers to stay in the classroom because it allows them to collaborate. She added that competitive salaries are essential for teacher retention. McIntosh emphasized that New York City employs a systems-based approach to addressing the problem of retaining highly effective teachers (versus implementing disparate initiatives). She discussed New York City’s multifaceted approach during the last five years, which includes the New York City Teaching Fellows program and more autonomy for principals, including the permission to hire their own teachers (versus the district placing teachers in their schools). McIntosh said that New York City also has increased teacher starting salaries.

2. What happens at the school, district, or state levels that gets in the way of ensuring that all students have access to highly effective teachers?

Fenwick highlighted the needs of Gen Y teachers, saying that a gap exists between their needs and desires and what is available for them in schools and districts. She suggested two approaches for helping to close that gap: reforming the teacher licensure process and creating a sustainable system via pension reform. McIntosh pointed to the lack of crisp, widely agreed upon ways to define effective teaching and emphasized that, as a result, districts are busy managing outcomes rather than inputs such as instruction. Chappelle said that he believes too many barriers exist to recruiting and retaining good teachers. He urged school, district, and state administrators to visit teachers in the classroom as a first step toward providing them the support they need to continue teaching.

3. What do those working at the state level need to know about how the spectrum of disconnected policies across the educator career continuum affects teacher effectiveness?

McIntosh suggested that states should help districts and schools measure outcomes as well as use data across districts to finalize the definition of a good teacher. Regarding teacher preparation to address shortages of mathematics, science, and special education teachers, she said that alternative certification can help, but a more effective tactic would be increasing salaries. Chappelle added that before states and districts invest money in professional development, they should make sure they are targeting the right teachers (not those who are not suited for the profession) or invest money in new teacher academies. He also pointed to what he believes is a disconnect between schools and the outside community; for example, mathematics teachers need to give students applied mathematics scenarios for the outside world.

## Concurrent Sessions I

### **A. The Human Capital Management Movement in Education: Its Meaning and Methods.**

This concurrent session, facilitated by **Ellen Behrstock**, policy associate at the TQ Center and Learning Point Associates, and moderated by **Ted Stilwill**, chief program officer at Learning Point Associates, presented an overview of human capital management, or strategic talent management, in the education sector. Using research from the private sector, the education field is starting to develop a human capital management framework to rethink state systems of support.

The theory is that teachers are a school's main asset, and therefore, a systematic approach is needed to identify, nurture, and develop that asset. Speakers presented the concept of human capital management from both a national perspective and a theoretical perspective and illustrated one example of human capital management implementation. Presenters included **David Axner, Ed.D.**, superintendent of Dublin (Ohio) City Schools; **Judy Wurtzel** of the Aspen Institute; and **Cynthia Yoder, Ph.D.**, executive director of the Center for the Teaching Profession, which is housed within the Ohio Department of Education.

During the session, Wurtzel pointed to several reasons for the increased focus on human capital management in public education, including the changing demographics of the American workforce, the existence of value-added data, and the proliferation of new initiatives such as The New Teacher Project and New Leaders for New Schools, many of which are organized based on the principles of strategic talent management. Following this, Dr. Yoder briefly explained the tenets of the human capital management framework currently being used in Ohio public schools. In Ohio, the human capital framework includes policies along the career continuum, which comprises six components:

- Preparation
- Recruitment/hiring
- Induction
- Training/professional development
- Leadership
- Performance management

Currently, there are three school districts in Ohio, including Dublin City Schools, piloting an educator talent management framework developed by Learning Point Associates. Presenters pointed out that human capital management is being used by many urban superintendents outside of Ohio and stated that urban districts are more often targeted for human capital management work because the volume and, often, the funding to support this work exists in those districts. However, they emphasized that rural districts could benefit from human capital management as well.

**B. Educator Quality for the 21st Century: Equipping the Next Generation of Teachers and Leaders for New Workforce Demands.** **George “Pinky” Nelson, Ph.D.**, director of Science, Mathematics and Technology Education at Western Washington University and former NASA astronaut, moderated this session featuring **Maria Fenwick**, a teacher at Boston Public Schools’ Ralph Waldo Emerson School; **Celine Coggins, Ph.D.**, from the Rennie Center for Education Research and Policy; and **Carolyn Brown, Ph.D.**, of The Center for Comprehensive School Reform and Improvement at Learning Point Associates. The three discussed the demographic shift in the teaching profession with particular attention to Gen Y. As the facilitator, **Gretchen Weber** outlined key research findings regarding the attributes of the Gen Y population. The TQ Center has developed a series of resources that further expand upon this issue, including the Lessons Learned Series and the Tips & Tools on identifying and supporting highly effective teachers, and has a forthcoming policy brief on Gen Y teachers.

Dr. Coggins and Fenwick described the core components of the Boston Teaching Policy Fellows and shared initial findings from their work. This program is tailored to those teachers in their third through tenth year of teaching who are looking for growth and leadership opportunities. The policy fellows engage in a series of activities such as readings of research, working groups that examine specific educational policy issues, and networking opportunities that include online communications. The program has found that teachers enter the profession with the desire to stay, and they desire greater opportunities to learn and develop effective teaching practices.

Moreover, these teachers are interested in issues of compensation/pay and desire recognition for their effectiveness.

Dr. Brown's presentation focused on school leadership and Gen Y teachers, specifically the leadership practices that promote the learning and retention of Gen Y teachers. These practices include setting high expectations, understanding effective teaching, managing data effectively, and providing consistent feedback. Leadership preparation should be engaged in the promotion and teaching of these skills.

**C. School Leadership Support and Development: Reconceptualizing Roles and Responsibilities of Principals and Teacher Leaders.** This session, facilitated by **Katherine Bassett** of the TQ Center and ETS, reviewed the importance of teacher leadership as part of the teacher career continuum. Teacher leadership positions are desired by teachers currently in the classroom and can serve as an important retention tool for teachers who want to expand their roles while remaining in the classroom. Teacher leader roles include mentors, serving as an information source for teachers, coaches, and assistant principals.

Session moderator **Terry Dozier, Ed.D.**, of the Center for Teacher Leadership explained that a teacher leader must be an excellent teacher who is able to influence others, but she emphasized that effective teachers are not necessarily teacher leaders. California 2008 Teacher of the Year **Lewis Chappelle** offered his perspective as a teacher leader in his school. He agreed that the most important part of being a teacher leader is not additional compensation but rather providing a teacher perspective to administrators and being a respected professional. In addition, Chappelle noted that teacher leaders also need the guidance of mentors in order to continually grow in their roles, and the success of most teacher leader programs depends on the level of support provided by school principals. **Pamela Coleman** from the Kansas Department of Education's Teacher Education and Licensure office provided a brief overview of the endorsement program that was recently established in Kansas to offer certification for teacher leaders.

The presentations reiterated the notion that teachers need to be involved in conversations that affect them and their work. Teacher leadership programs provide the opportunity for teacher voices to be represented and heard and also help retain teachers in the classroom while providing them the opportunity to grow in their careers.

**D. Enhancing Educator Quality for Special Student Populations: Addressing the Preparation of Teachers and Leaders.** With a growing population of English language learners and the inclusion of special education students in general education classrooms, there is significant and increasing diversity of students in classrooms. This concurrent session examined the preparation of teachers for students with special needs, including students with special needs and students with limited English proficiency. Presenters included **Dan Reschly, Ph.D.**, of Vanderbilt University and the TQ Center (who substituted for Lawrence Gloeckler, executive director of the Special Education Institute at the International Center for Leadership in Education) and **Socorro Herrera, Ph.D.**, of Kansas State University, and **Lynn Holdheide** of Vanderbilt University and the TQ Center served as moderator.

Presenters emphasized that special education should be integrated with general education; the former is a service to students rather than a place for them to relocate. In addition, they emphasized that quick fixes will not solve the problem: teachers need a comprehensive understanding of student diversity and should strive to be reflective about their practice and conscientious of the language used in the classroom. In addition, a comprehensive approach is needed for evaluating individual student needs according to their background and biopsychosocial history, including cognitive attributes, language, and sociocultural dynamics.

Presenters also suggested that when preparing teachers to work with diverse learners, link theory closely with experience by adhering to three principles: currency (keeping up-to-date with best practices), defensibility (self-reflection and rationales for appropriate practices), and futurity (taking action to ensure that needs of students and families are accommodated).

**E. Teacher Effectiveness: Strategies and Resources for Defining, Evaluating, and Supporting Effectiveness.** As school officials and policymakers begin to realize that “highly qualified” teachers are not necessarily the same as “highly effective” teachers, there is a need to develop new measures of teacher effectiveness, and new instruments to assess those measures. This session, moderated by **Laura Goe, Ph.D.**, of the TQ Center and ETS and facilitated by **Jane Coggshall, Ph.D.**, of the TQ Center and Learning Point Associates, featured **Janet Gless**, associate director of The New Teacher Center; independent consultant **Charlotte Danielson**; and **John Tyler, Ed.D.**, from Brown University.

Gless discussed The New Teacher Center’s induction and mentoring program, which is based on a model of the teacher development continuum, including coaching, collaborative learning communities, formative assessment, professional teaching and student content standards, and analysis of student data. She emphasized the establishment of and adherence to rigorous criteria for the selection of teacher mentors.

Danielson reviewed a method of evaluating the strength of a teacher performance assessment system. She recommended that teachers take an active role in the evaluation process and reflect on their practice. Danielson also pointed out that assessments of teacher practice may be based either on inputs (e.g., what teachers do, and what constitutes evidence of that work) or outputs (how well their students learn), and both have their advantages and disadvantages. Only assessments based on teacher action may be used in improvement of teacher practice.

Dr. Tyler spoke about his current research project in Cincinnati. The difference between teacher qualification and teacher effectiveness is similar to the difference between inputs and outputs. In other words, the “highly qualified” statute of the NCLB Act is focused primarily on variables that a teacher brings to the classroom, such as college degree, certification, and test scores. For a teacher to be highly effective, on the other hand, he or she must be evaluated on outputs, such as student achievement and growth. The challenge, then, is that measuring student growth is complicated because it involves longitudinal data and because in any given school year, many teachers have an effect on each child. To account for this, Dr. Tyler is using his current research to bring human resources data together with student achievement data and classroom observation data.

## Special Roundtable Session

### **Planning for Highly Qualified Teacher (HQT) Monitoring: Support and Resources**

**(Invitation Only).** In the coming year, 17 states will be monitored by the U.S. Department of Education on their highly qualified teacher (HQT) state plans. This invitation-only session provided these states an opportunity to learn about strategies to help them successfully prepare for monitoring from representatives of three states that were previously monitored: **Linda Benedetto** of the Pennsylvania Department of Education; **Flora Jenkins, Ph.D.**, of the Michigan Department of Education; and **Carol Illian** of the Wyoming Department of Education. **Elizabeth “Libby” Witt, Ph.D.**, of the U.S. Department of Education was the discussant.

During the session, TQ Center staff **Cortney Rowland**, **Amy Potemski**, and **Lynn Holdheide** presented 10 Lessons Learned from the second round of monitoring visits thus far. A copy of the *10 Lessons Learned* paper will be posted on the TQ Center website. State recommendations included designating a team leader to coordinate biweekly team meetings, coordinating with all stakeholders, and maintaining the original timeline established or updating timelines as needed.

Each state represented has received commendations for their plans: Pennsylvania received a commendation on a PowerPoint about its equitable distribution plan, which can be viewed on its webpage. Michigan was commended for the Michigan Technical Assistance program (MiTAP), through which the department works directly with the state’s 547 school districts. Michigan also recommended sharing any concerns with the U.S. Department of Education monitoring team. Wyoming received two commendations that were discussed: one for its collaborative working relationship with the Wyoming Professional Teaching Standards Board and the other for requiring Wyoming Department of Education approval of local education agencies’ HQT plans in order to receive a Title II application for grants.

## Dinner Keynote Panel

### ***Foundations for Success: The Final Report of the National Mathematics Advisory Panel.***

This keynote session was held during dinner on the first night of the conference. During the presentation, **Skip Fennell, Ph.D.**, of McDaniel College and the National Mathematics Advisory Panel, and former president of the National Council of Teachers of Mathematics, presented key recommendations pulled from the National Mathematics Advisory Panel Report. The report advises that curricula must simultaneously develop conceptual understanding, computational fluency, factual knowledge, and problem-solving skills. The report also found that children’s goals and beliefs about learning are related to their mathematics performance. In addition, instructional practice should be informed by high-quality research, when available, and by the best judgment and experience of accomplished classroom teachers. In addition, the report asserted, U.S. mathematics textbooks are far too long and hinder coherence and focus.

Following Dr. Fennell’s presentation, the speaker panel was introduced. The group included **Angela Penfold**, project director from the Center on Instruction; **Kirk Walters** of the National High School Center; and **Nancy Protheroe** from the Center on Innovation and Improvement. Addressing the issue of why the National Mathematics Advisory Panel chose to focus on algebra, Walters argued that the problems with algebra instruction are representative of systemic

problems in American public education. He and the other presenters discussed the trend toward exposing students to algebra in the elementary grades and the subsequent need for proper scaffolding to prepare them for high-level mathematics, as well as the need for early childhood teachers to be more prepared to teach elementary-age students higher-level mathematics concepts than in the past.

## Day 2

### Early Bird Session

**Panel on the Higher Education Opportunity Act Bill.** This early bird session, facilitated by **Katherine Bassett** of the TQ Center and ETS, and **Paul Kimmelman, Ed.D.**, of the TQ Center and Learning Point Associates, focused on the Higher Education Opportunity Act, the role of teacher education in this country, and the challenges confronting teacher training programs.

**Jane West, Ph.D.**, from the American Association of Colleges for Teacher Education (AACTE) discussed the Act's reauthorization and AACTE's Teacher Residency Program, which employs a cohort model and bridges the gap between preparation and practice through methods of application and problem solving. Dr. West pointed to the Chicago teacher residency program as an exemplar and described the need for bringing such innovative programs to scale. Moreover, she described the new accountability provisions within the legislation, with particular attention to the tracking of teacher candidates/graduates. She also named additional exemplary partnership programs as identified in AACTE publications and stated teacher education has an "image problem."

**David Cleary** from the office of Senator Lamar Alexander (R-TN) discussed what many believe are fundamental flaws in how teacher preparation programs train teachers and asserted that teachers are simply not prepared to teach in their challenging contexts. He called for better data from schools of education and, more generally, for better data for the purpose of tracking graduates' performance. Cleary spoke about the public consensus regarding the need for more and better data about teacher education programs and their teacher candidates/graduates.

Both presenters agreed that data brings policy and advocacy together and acknowledged the role of the unions and current compensation systems. Finally, the panel discussed the differential state reactions to the release and use of data.

### Keynote

**Innovations in Improving the STEM Teacher Pipeline.** Introduced by the TQ Center's senior policy advisor **Dr. Kimmelman, Dr. George "Pinky" Nelson**, director of Science, Mathematics and Technology Education at Western Washington University and former NASA astronaut, presented three claims, supported by evidence from the North Cascades and Olympic Science Partnership (NCOSP), about teacher preparation:

- Today's preservice and inservice teachers can become effective teachers of science.

- Today’s higher education faculty can become effective science and science education teachers.
- The distributed nature of teacher preparation requires an authentic partnership to be successful.

NCOSP is a five-year partnership funded by the National Science Foundation between one university, four two-year colleges, 28 school districts, two ESDs, and Washington State LASER. Their goals are to improve science instruction in Grades K–12 and improve the preparation of teachers in science. Dr. Nelson said the partnership followed several principles that they returned to continually:

- Organizing principle: The project is organized on time and on budget.
- Research principle: Actions will be planned and modified based on the best available research.
- Learning principle: Everyone on the project is a learner.
- Equity principle: There are clear, high, realistic expectations and support for all learners.
- Collaboration principle: NCOSP is a true partnership; each partner contributes to and benefits from achieving the goals.

Dr. Nelson then presented both qualitative and quantitative evidence of the program’s success, including student achievement in partnership elementary schools as well as the creation of professional learning communities based on science instruction. He added that graduates of the program have an 87 percent retention rate. Dr. Nelson emphasized that the keys to the program’s success were development of internal capacity, coordinating quality instruction (both content and pedagogical content knowledge, assessments, and collaboration), development of a shared vision of effective instruction and leadership (including professional learning communities, formative assessments, and a focus on individual student success), and an unwavering focus on partnership and evaluation.

## **Concurrent Sessions II** (repeated from Day 1)

### **Luncheon Plenary and Conference Closing**

**Teacher Quality and the Teacher’s Career Continuum: Taking a Systematic Approach.** **Susan Moore Johnson, Ed.D.**, from Harvard University’s Project on the Next Generation of Teachers was the keynote speaker for the session. The presentation outlined the teaching profession in its current form, citing evidence that shows there are two sets of teachers: new teachers and baby boomer teachers. New teachers are first-career and midcareer entrants, traditionally and alternatively prepared, who are making either short-term or long-term commitments to the profession. Baby boomers came through traditional preparation programs and are retiring.

Dr. Moore Johnson asserted that the new generation of teachers desires different roles within teaching; the notion of staying in the same classroom for an entire career is not enticing to them.

They seek autonomy and view uniform pay as problematic; they want to be compensated for their effort and student achievement.

She also spoke about what makes induction most effective, citing programs that are deliberate, school-based, and integrated into the professional life and practice of the school. Induction should begin with hiring, go beyond one-to-one mentoring, and allow novice teachers to observe good teaching in many forms. In addition, a good induction program provides varied roles for experienced teachers.

Dr. Moore Johnson concluded her presentation by appealing for the creation of differentiated roles for teachers, emphasizing that such roles can help increase retention by providing opportunities for varied work, broader influence, and differentiated pay.

### **Technical Assistance Workshops**

**Determining Teacher Effectiveness: Tools and Talking Points.** Determining teacher effectiveness is an area of debate, concern, and often, dilemma for schools, districts, and states. **Dr. Cogshall** of the TQ Center and Learning Point Associates presented an overview of current research on the topic and provided session participants with a series of talking points:

- At the school level, teachers are the single most important factor in influencing student achievement.
- Research has found weak and mixed effects of teacher qualifications on student achievement test scores.
- The direct cause of student learning at school is instruction, not the teacher him- or herself.
- The measurement of teaching, teacher quality, and teacher effectiveness is improving but requires additional investment of/in resources.
- Students learn from many teachers' instruction, so it is difficult to measure the impact of just one teacher.

**Laura Goe, Ph.D.**, of the TQ Center and ETS, presented a five-point definition of a highly effective teacher. According to Dr. Goe, a highly effective teacher must exhibit the following traits:

- Have high expectations for all students and help students learn.
- Contribute to positive academic, attitudinal, and social outcomes for students.
- Use diverse resources to plan and structure engaging learning opportunities.
- Contribute to the development of classrooms and schools that value diversity and civic-mindedness.
- Collaborate with other teachers, administrators, parents, and education professionals to ensure student success, particularly that of students with special needs and those at high risk of failure.

Finally, **Ginny Elliott**, education specialist from the Georgia Professional Standards Commission, explained the tenets of Georgia’s Master Teacher Program, which runs parallel to National Board Certification. To qualify to be selected as a master teacher, practitioners must show impact on student achievement and growth for two subsequent years and must be approved by a school administrator. Although there are no fiscal incentives to becoming a Georgia Master Teacher, the selected educators attend a retreat once per year, at which they are asked to weigh in on current policy issues and challenges in their state.

Presenters also elaborated on the difference, in the public’s mind, between “highly qualified” and “highly effective” teachers. Highly qualified does not necessarily mean highly effective, and indicators of highly qualified teachers do not often correlate with highly effective teachers. In addition, those measuring teacher effectiveness must be clear about their goals, as high-stakes motives are met with a lot of resistance.

**Moving State Highly Qualified Teacher Plans From Compliance to Implementation.** This session aimed to help states shift the focus of their Highly Qualified Teacher (HQT) plans from technical compliance to policy levers for change. Presenters were **Cortney Rowland**, TQ Center and Learning Point Associates; **Cathryn Gardner**, Northwest RCC; **Beverly Pratt**, Oregon Department of Education; **Danny Martinez**, Southeast Comprehensive Center; **Janice Zube**, Louisiana Department of Education; and **Gwendolyn Watson**, Tennessee Department of Education.

Presenters outlined their states’ strategies for achieving their teacher and leadership quality goals as well as how they worked with their RCCs to build the infrastructure to start implementing their plans. For example, one state and its RCC developed learning communities based on the HQT work. These communities were facilitated via conference calls and webinars, which in turn helped build not only the state’s capacity for meeting its HQT plan goals but also benefited the RCC by adding to its knowledge base.

States also highlighted some of the details of their HQT work, such as providing LEAs rubrics to develop plans and requiring approval of the plan before renewing funding, and basing technical assistance on data collected during monitoring of LEAs. In addition, the TQ Center highlighted tools and resources that can help states with this work, including the Southwest Comprehensive Center’s *Analysis of Nine States’ Highly Qualified Teacher Plans*, as well as general technical assistance for RCCs and state education agencies.

Presenters agreed that partnerships with RCCs are essential in the process of moving HQT plans toward a progressive policy orientation and that RCCs should anticipate variation in districts’ needs and capacities regarding HQT work.

**Implementing Evidence-Based Instructional Practices Through Enhancing Teacher Preservice and Inservice Practices.** **Dr. Reschly**, professor of education and psychology at Peabody College, Vanderbilt University, and **Martha Hougen, Ph.D.**, from the Vaughn Gross Center for Reading and Language Arts at the University of Texas–Austin helped participants become familiar with tools designed to improve teacher preparation and professional development practices, specifically those pertaining to research-based instruction and classroom organization and behavior management strategies. Participants were introduced to four innovation configurations:

- Classroom organization and behavior management
- Scientifically based reading instruction
- Inclusive practices
- Learning strategies

Participants were then given the opportunity to practice using the tools. In groups, they examined sample syllabi using the scientifically based reading instruction tool and discussed challenges in implementing scientifically based reading practices in institutions of higher education.

### **Day 3**

#### **Special Plenary and Working Session for RCCs and State Teams**

**Implementation of Equitable Distribution Policies and Practices.** **Marguerite Roza, Ph.D.**, of the Center for Reinventing Public Education at the University of Washington discussed two steps states should take to ensure equitable distribution of high-quality teachers that are not addressed by HQT plans:

- Examine the percentage of teachers in disadvantaged schools with poor and minority student populations.
- Examine the levels of experience teachers possess at these schools.

Dr. Roza shared research findings related to inequitable teacher salaries between high-income and low-income schools. She urged the audience keep in mind that an uneven distribution of applicants across schools (or subjects) leads to an uneven offering of incentives across teaching posts and faulty recruiting and hiring efforts at some schools. Dr. Roza emphasized that the following across-the-board strategies fail to address maldistribution:

- Teacher licensing reforms, changes in recruitment
- Base salary increases for all teachers
- Large-scale professional development
- Teacher mentoring/induction programs

She explained that strategies to remedy these problems depend on the type of data states possess and urged states to align their strategies with their data. Dr. Roza went on to discuss the forces that lead to teacher maldistribution, including the typical uniform salary schedule independent of

job placement or performance, seniority provisions in labor contracts, and geographic isolation of some schools.

Participants then broke into groups to discuss solutions to and strategies for addressing inequitable distribution of teachers.

### **Breakout Discussions: Solutions and Strategies to Address Equity**

**A. Incentives for Recruiting and Retaining Teachers in Hard-to-Staff Schools.** Participants briefly discussed examples of inequitable distribution issues in their states and then shared ideas for types of data that would help, including qualitative interviews and observations, exit-interview data, and surveys of alternatively certified teachers to gauge the support they are receiving.

The group also discussed steps states can take to motivate teachers to stay in high-needs schools, including developing a housing incentive that builds subsidized housing for teachers, especially crucial in areas where housing costs are high; training districts to create an environment that welcomes teachers; and offering student loan forgiveness to teachers in hard-to-staff schools.

Participants shared ideas for ensuring that incentives work, including the addition of a retention component to the state's HQT plan, and keeping in mind that one size does not fit all.

**B. Improvements in the Job of Teaching.** Discussion centered on the following question: In terms of working conditions and career path (as opposed to incentives), what can be done to attract and support both new and experienced teachers?

At the *state* level, participants proposed reviewing and improving their legislative policies that obstruct changes (e.g., salary schedule, mandatory classroom size, local control issues); implementing student-based funding statewide; adjusting budget to support coaching and other assistance for new teachers; and coordinating with teacher preparation programs in institutions of higher education.

The following tactics were proposed at the *district and school level*: Develop principals and teacher leaders toward creating a positive school culture (e.g., sense of collegiality, ownership, partnership); limit duties of first-year teachers and train them in creating a positive, structured classroom environment; distribute challenging students among all teachers; and create a climate that supports all teachers by providing professional development for all teachers in classroom management, pedagogy, and content knowledge; and create school leadership opportunities.

Participants agreed that decisions made at the state, district, and school levels should be based on available and valid data. With budget and resource constraints, a redistribution of current funds and resources is necessary rather than reliance upon additional funding. Solutions should be context-specific, and outcomes should be measured.

**C. Enhancements in the Local Supply of Teachers.** Participants discussed ways states can support the “grow your own” teachers concept, including scholarships or loan forgiveness,

communities of practice, job shadowing, and courses for high school students interested in the profession, and ensuring that current strategies are targeting the right populations. In addition, participants discussed increasing the number of high-quality, localized paths to certification.

**D. Professional Development to Increase Teacher Qualifications and Support Teacher Quality.** Discussion focused on ideas for using professional development to help support teachers and school leaders in high-needs schools, with the goal of increasing retention of highly effective teachers through strong support. Many ideas were generated, including the following:

- Implementing individual, targeted induction plans for teachers and targeted, job-embedded professional development for teachers, administrators, and paraprofessionals that is framed by a process of collecting evidence of practice
- Creating professional development that helps principals and teachers develop professional learning communities in their schools, which in turn help teachers by providing opportunities to collectively analyze student work and achievement data to inform instruction
- Creating professional learning communities for principals across communities, districts, and states

### **Closing Remarks**

Following the state and regional team working sessions, Dr. Roza concluded with a discussion of how to measure the progress/effectiveness of these strategies. These measurements included premeasurements and postmeasurements of applicant pools, distribution, and other measures of teacher characteristics. Dr. Roza called for state leaders to link data systems and examine data closely to understand the challenges within the state and the appropriate strategies for reform.