



R&D MEETING ON THE FUTURE OF TEACHER LICENSURE TESTING

Detailed Meeting Notes

Friday, May 9, 2008

Setting the Stage: Introductions, Objectives and Overview of the Meeting

Stuart Bennett, Chief Deputy State Superintendent of Georgia, provided an overview of efforts in Georgia to improve student achievement. Georgia is working on a new teacher data system, new assessment systems, implementation of performance standards, and ways for teachers to analyze student data.

Gene Wilhoit, Executive Director of CCSSO, welcomed everyone and explained that CCSSO is in the midst of intense conversations about the future mission of the organization. One specific Council goal is to advocate for a stronger role of chief state school officers in national policy. The idea is to bring states together in coalitions so they can leverage their work together and demonstrate they can be leaders of reform.

The Council is focusing its efforts on four key levers of reform:

- (1) Student standards and assessments – The goal is two-fold: to identify a common core of state-led student standards that are clearer, fewer and higher and that would be voluntary for states to use, and to develop a framework of skills and competencies necessary for 21st Century student success.
- (2) Data systems – The goal is to expand the Council's State Education Data Center (SEDC), position it as the national data source for student performance data, and work directly with the U.S. Department of Education on files sharing between the EdFacts reporting system and SEDC. Another goal is to increase the capacity of states to share learning around data systems and bring those data conversations to the national level.
- (3) Support for student learning in the 21st century – The goal is to explore and re-think what supports for student learning should look like in the 21st century. This will involve more than incremental change and will examine how we can remove

barriers of time, geography and resources to improve student learning. We have to embrace new learning models, including online or virtual models.

- (4) Educator development – The goal is to develop a system of support for teachers and leaders along their career continuum from aspiring to retiring as they work toward a new 21st century collaborative and student-centered learning environment. A redesigned system of educator support means rethinking the entire system of recruitment, selection, induction, mentoring, licensing, professional development, and differentiated career pathways so that we have high quality effective educators at all levels that can improve the achievement of each and every child. The key leverage point for states in building this new system of educator development is teacher licensure, which was the focus of the May 2008 Research and Development Meeting.

Alan Morgan, Vice President for Government Relations for Pearson, spoke about a recent trip of chiefs and international math and science folks to Singapore sponsored by Pearson. When the trip was being planned, three to four different possible themes for the trip came up but teacher quality rose to the top. All of the countries that participated in the trip believed that education depended on teacher quality. Singapore as a country has displayed a strong commitment to this belief in the need for quality teachers. All of the teacher functions in Singapore are unified in The National Institute of Education, which is also the sole teacher training institute in the country. Teachers in Singapore are in the highest 1/3 of paid employees. The country provides resources to ensure there is a quality preparation system in place for teachers. For example, all teachers go through DNA lab training as part of their preparation to teach science.

Alan asked R&D attendees what they believed was the single most important thing that facilitates student learning. Responses included: engagement by both teacher and student, people who care about kids, relationships, high student expectations, motivation, knowledge of content, and ongoing professional development and learning.

Alan explained the objectives of this R&D Meeting are to:

- Provide knowledge of what state officials need and want in new assessments for the licensing of teachers, which will not only inform future development of products and services but also guide INTASC in its model policymaking work;
- Bring together the resources of business and education to help improve teacher licensure testing within and across states.

With new technologies now available, great opportunity exists to develop a more cohesive system to recruit, support and evaluate teachers. The question is how can we connect this system so it is relevant to the day-to-day work of teachers?

Keynote: Generations in the K-12 Workplace

Richard Delano, Co-Founder and Marketing Director for LifeCourse Associates, provided a framework for looking at education through the lens of generations and their archetypes. The generations and archetypes are:

- the GI Generation (born 1901-1924) (Hero)
- the Silent Generation (born 1925-1942) (Artist)
- the Boomer Generation (born 1943-1960) (Prophet)
- Generation X (born 1961–1981) (Nomad)
- the Millennials (born 1982-present) (Hero).

A cycle of dominant social moods parallels the above generations and provides context for understanding those generations:

- Crisis (1929-46) leads to
- High (1949-64) leads to
- Awakening (1964-84) leads to
- Unraveling (1984-?) leads to
- Crisis (???)

Delano noted that we are entering the crisis cycle. He also provided a description of the characteristics of each of the generation groups found in the current K-12 workplace (Boomer, Generation X, and Millennial), how they see the world differently, and how these factors might implicate educational strategies and policies, especially in light of the current focus on building an education system for the Millennial student and teacher. (See PowerPoint presentation for details.)

Delano outlined 7 core traits of Millennials and how they relate to the education context:

- Millennials are special and want to be involved in discussions about how the organization operates. They will expect consistent feedback on how they are doing (this may be uncomfortable for Gen X administrators).
- Millennials are sheltered and as teachers will want longer mentoring plans before they feel fully prepared. They are risk adverse by nature and less likely to think “out of the box.” They follow rules and are less likely to step up as leaders.
- Millennials are confident and more optimistic. They will be less likely than Gen X to job hop but their expectations may be higher than their present capabilities.
- Millennials are team-oriented and will seek out opportunities to team up with other teachers. Also administrators should look for new avenues for on-going training that taps the Millennials’ natural ability to network through technology.
- Millennials are conventional and will seek out careers that serve their community, like teaching and government (this can be used as a recruitment incentive). Again, don’t expect Millennials to think outside the box.
- Millennials are pressured and will seek out careers that offer clear balance between work and home life. They will want frequent performance reviews plus

numerous and concretely spelled-out advancement paths, but don't be surprised if they fail to understand the concept of "paying their dues."

- Millennials are achievers and want on-going dialog regarding their professional aspirations.

State Panel: Teaching for the Next Generation

Panelists:

- Michael Flanagan, Superintendent of Public Instruction, Michigan
- Susan Gendron, Commissioner of Education, Maine
- Judy Jeffrey, Director of Education, Iowa

Ken James, Commissioner of Education for Arkansas, served as moderator and asked the panel to address the following question: "*What knowledge and skills do teachers need to teach effectively in the 21st century learning context?*"

Comments from Commissioner of Education in Maine

Maine has identified a new skill set for new and existing teachers that focuses on integrating technology into pedagogy. The Maine Department of Education has created a digital research center with the University of Southern Maine to examine how technology and pedagogy must be embedded in content in a context to be successful. They have several efforts underway including partnering with a blood center to bring scientists and current research into the classroom. They have also worked with a media lab with MIT to integrate new technology and pedagogies into middle schools and hope to launch a similar program in the high schools, recognizing that working with high school teachers is different than working with middle school teachers. The key lesson learned is the need to look closely at both content and context when introducing new technology and pedagogies.

Maine has a world language standard for graduation that goes into effect in 2012. The Department is grappling with the question whether knowledge of a world language should be a requirement of all incoming teachers. The dilemma is that even without this additional requirement, the state of Maine is not capable of producing the 400 teachers it needs. How would this impact their teacher supply? The Department is having conversations with higher education to determine if the world language standard should be embedded in pre-service. "If we are thinking about 21st century learners and skill sets that are needed to be competitive in an international market, how does this change teacher preparation?"

The third concern expressed by the Commissioner from Maine was that teachers need more in-depth knowledge and understanding around formative assessments. They come into teaching with 1-2 courses in assessment. They need more than this as well as a different type of skill set. Teachers must be able to provide the feedback that Millennial students will be demanding. This will require a change in the pre-service preparation of teachers.

The final comments from the Commissioner from Maine described their efforts to enhance literacy across all content areas. The Department is partnering with the University of Connecticut on digital literacy – what will this look like and what are the critical skills that students need.

Comments from the Director of Education in Iowa

In 2000-2001, Iowa revamped its teacher quality system and is now ready to assess progress and begin a new iteration of that work. They approved teacher standards, their practitioner program approval process, their professional development expectations, as well as teacher evaluations. The Department has recently finished identifying 21st century essential concepts and skills for students. This has huge implications for teachers. “The Department is struggling with how far do we push our teachers?” It is a given that teachers need content and pedagogical knowledge, but what else do they need? The 21st century essential concepts and skills required of learners can inform this question. Iowa expects learners to:

- *Communicate and work productively with others.* To address this skill, our schools need to become learning communities and emphasize team players. We need to incorporate cultural differences and increase innovation. Teachers must be able to help students see different perspectives and learn across cultures.
- *Adapt to various roles and responsibilities and work flexibly in ambiguous and changing circumstances.* Millennials are not strong on this.
- *Demonstrate leadership, integrity, ethics and social responsibility while working collaboratively to achieve common goals.* Violation of the code of ethics in Iowa is the major reason teachers lose their license. We need to pay attention to this.
- *Demonstrate productivity and accountability by meeting high expectations.* Teachers need high expectations for their own work.
- *Demonstrate initiative and self-direction through life long learning.*

We want our teachers to exhibit the same skills and abilities expected of our students above. What else do we need in our schools to produce productive and democratic citizens?

Comments from the Superintendent of Public Instruction in Michigan

The challenge today is how to get the best brain power into the field of teaching. We must infuse technology into the learning process. This is one way to appeal to a new generation of kids who are wired to learn. Michigan requires high school students to enroll in an online course. There is a need to support teachers with this type of teaching. The more prevalent use of technology and the skills needed to use it effectively poses a challenge for teacher preparation programs. Another concern expressed by the Michigan superintendent is some teachers have low expectations for poor and rural students.

The moderator next asked panelists to address a second question: “*What are the implications of the new vision of 21st century teaching for teacher standards, teacher education and teacher licensure?*”

Comments from the Commissioner of Education in Maine

This is a critical conversation for the state of Maine. Currently, the State Board of Education oversees teacher preparation and certification. Institutions of higher education (IHEs) go through a 7 year review process. Maine uses multiple measures for its students and the State Board has worked with IHEs to encourage multiple measures for teachers through the use of portfolios. The state plans to extend the use of the electronic portfolio for teachers into the induction process. The state is now using an electronic portfolio to help teachers transition into induction. By 2010 all new teachers will go through a new licensure process where they will have a mentor and an electronic portfolio that will be reviewed at the local level for final certification.

A critical component in this process is being able to capture the engagement or relationship piece between the teacher and his/her students. These skills cannot be taught but quality teachers have them. How can we capture this? Can a portfolio in pre service, induction and licensure help?

Regarding technology, the Commissioner reported that it is a part of pedagogy and will be a critical piece in the thinking around their standards. Currently, they are in conversations with higher education around Maine's laptop initiative, which requires all freshmen to have a laptop. The state and IHEs need to discuss how to address pedagogical knowledge within the technology initiative.

Finally, Maine is examining the knowledge and skills teachers need to effectively teach English language learners, those with special needs, and those from lower socioeconomic backgrounds. This may require a different skill set and how does that get factored into the discussion of 21st century skills.

Comments from the Director of Education in Iowa

The Director of Education from Iowa expressed concern about lowering teacher standards to address the shortage issue. She thinks making it easier to become a teacher is a wrong strategy and that instead we should raise the standard and convey that we value teaching as a profession and want to see it strengthened.

The Director shared the experiences Iowa had with its teacher assessment system. In 2001, Iowa implemented a plan in which every teacher preparation program was required to have an assessment system in place that would continually assess the teacher candidate from the time of entry to the time they left the teacher preparation program. All IHEs had a variety of performance based assessments. Some included work sampling and electronic portfolios. When NCLB was enacted, the US Department of Education did not approve this performance assessment system but wanted one standard across all programs. The state is now working on one standard with IHEs and is in the process of piloting a series of common assessments with rubrics (one for dispositions, one for student teaching, and one for content knowledge) that provide multiple measures of a teacher's performance. All of this work proved labor and time intensive for IHEs and many became disgruntled because they were not sure the assessments would be approved by the US Department of Education. As a result, many abandoned the multiple measures system and decided to implement a test as required

under NCLB. The Director said Iowa is continuing to push the envelope in terms of finding a system of multiple measures that will work. She is not sure what the end product will look like.

The Director noted that Iowa is working on a feedback mechanism between IHEs and the districts employing teacher candidates. The state is collecting data from mentors and employers on teacher graduate performance and providing feedback to each IHE to improve the quality of the preparation programs.

The preparation program is viewed as the starting bloc for a new teacher. If this is done right and good transitions are in place, the whole system will make sense. This can be achieved through technology. With the assistance of mentors and the use of electronic portfolios, preparation and induction can work together. Iowa is working on professional development now and has a very strong system. They have clarified the roles of the state, preparation programs, district and schools.

In Iowa, the Director of Education chairs the Board of Licensure in the state; in addition, the State Board and the Board of Licensure work together. All of this creates alignment across the governance structure. The Director expressed concerns with the issue of portability of teacher licensure. "As we talk about national standards for students, shouldn't we have this same conversation for teachers?" Although most states have signed the NASDTEC agreement, we need to examine what the portable license should look like. Should we consider a world license?

The Director also noted that Iowa is moving from a focus on course titles to looking at teacher attributes for licensure. This is a good idea but very difficult to implement.

Comments from the Superintendent of Public Instruction in Michigan

Michigan is moving away from a compliance focus to a more outcome based system for program approval. They are also moving toward the establishment of a tiered licensure system in which the 2nd tier is more performance-based and the 3rd tier would be voluntary and more rigorous. The Michigan Department of Education has discussed this option with both teacher union groups in the state (AFT and MEA).

Questions/Comments from Attendees

- How do we address the need that students have more creative/innovative skills?
 - This question goes to the heart of pedagogy and how teachers design lessons. They need to structure lessons so they provide more opportunities for students to exercise creativity and innovation. This also relates to the engagement issue. We must make learning relevant and technology provides a tool for students to feel engaged and be creative.
 - Iowa is working with the University of Chicago around authentic intelligence. High school teachers examine lessons and compare them with student products and often recognize that no higher order thinking skills are embedded in the lesson. Teachers are very interested in this analysis and it makes sense to them. Sixty high schools will be participating in this program next year. Creativity must be built on a strong

foundation and requires the right atmosphere. We must rethink the need for this disposition in teachers and give them flexibility in designing lessons.

- How can we balance the need for teachers to have more knowledge and skill and fit it all in a four-year preparation program?
 - Iowa allows high school students to take college courses and graduate from high school with an Associate of Arts degree. The issue is can we integrate teacher training into the first two years of college, which usually just covers general requirements?
 - Maine is looking at implementing a 5-year plan where the BA and MA programs are merged. The state is also rethinking with IHEs what the senior year of high school can look like.
- How do we address the professional development needs of teachers currently in the classroom so they are prepared for the coming change?
 - Standards are critical. Technology will be important in re-tooling existing teachers. Maine took professional development funds and bought every teacher and school leader a laptop computer and provided focused PD in their content area. Initially there was resistance at the high school level but now teachers want online courses and the ability to dialog and network across the state. Maine will use resources to continue to expand PD opportunities. They are beginning to change their standards for recertification to address this issue as well.
 - In Iowa beginning teachers are evaluated by a certified evaluator after the 1st two years of teaching. The evaluator determines whether the teacher has achieved the standards and if not, they are no longer licensed to teach in Iowa. If the evaluator deems the teacher has successfully met the standards, s/he becomes a career teacher. Iowa changed its PD requirements so that every teacher must have a professional development plan aligned to school and district goals and that is developed with the evaluator. Every district must have a professional development plan designed to meet the needs of teachers and that is aligned to the Iowa professional development standards. Each district also has a teacher quality committee. Iowa is supporting teacher development academies every summer and provides coaching across the state. One concern is that principals who evaluate teachers may lower their standards in response to facing teacher shortages because they may not be able to find another person to fill the slot. The real world intrudes when it comes to evaluating teachers.
 - Michigan is offering the 3rd tier of licensure with the hope that it, along with an increase in the pay scale, will provide incentives for teachers to improve and stay in the profession.
- We have clear standards for pre service but not clear standards of professional development. How can we get the third tier to work?
 - We need the same level of clarity of standards for a master teacher.
 - Iowa is running pilots that are funded by the Wallace Foundation where principals hire a person to handle management issues at the school so the principal can be an instructional leader and work with teachers on

professional development plans. They are getting terrific results from the pilots.

Reactor to the morning sessions:

Karen Cator, Director for Education Leadership and Advocacy for Apple, and Former Chair of Partnership for 21st Century Skills, opened by saying that a good way to summarize the discussion from this morning is to look at the Why, What, and How of what we are trying to do. The Why we need to ensure that students have 21st Century skills is because now we have global competition, global interdependence (no borders between countries any more), a different and more innovative workplace environment, a context in which information is ubiquitous and in which we cannot keep up with all the content (if we try to focus on content we will miss other skills), and a stronger imperative to engage ALL kids who are much more diverse today and who are dropping out because they do not see the relevance of school.

The What we are trying to do is move students to 21st Century skills, which include not only core academic content but skills that include global awareness (which is more than learning a second language), creativity, innovation, communication, media literacy, and problem solving.

The How is the challenge of creating an environment so students can learn these skills. We need an environment with less locus of control, one in which students do more and teachers do less. We must clearly articulate our learning goals and then let students drop projects in to this. We need to look at how we can use technology to help us accomplish our goals. The benefits of technology include that: it provides a forum for students and teachers to engage each other; it can make complex processes more visual; it provides accessibility by providing the opportunity to engage different learning preferences; it can increase feedback loops to students, teachers, and parents; it can extend the reach of experts through virtual teaching; and finally technology allows us to publish to and interact with a worldwide audience.

The challenge becomes how do we clear away the clutter in public education and focus on the student/teacher/content relationship. Karen outlined 6 points that need to be addressed if we hope to successfully implement 21st Century skills:

1. Everyone should be able to articulate the 21st Century skills we are trying to achieve.
2. A relevant and applied curriculum should be available. For students to be engaged, they need to know that someone cares they are at school and they need to believe that what they are doing has relevance.
3. INFORMative assessments that provide feedback are essential.
4. A culture of creativity and innovation should be fostered in both students and the environment of the school.
5. Every child should feel an emotional connection to what they are doing.
6. Access to technology and tools should be available 24/7.

In addition, much of the framework of 21st Century learning is based on teamwork or an approach that uses combinations of people to solve problems so collaboration skills will be required. Finally, we need to re-inspire the teaching profession. We need to gather together the chiefs, governors and teacher unions and launch a national campaign to inspire new teachers.

Keynote: Developing and Supporting Teacher Knowledge and Practice for 21st Century Student Learning: Implications and Challenges for the Future of Teacher Licensure Testing (See Powerpoint presentation)

Patricia Magruder, National Fellow, Institute for Learning, Learning Research Development Center, University of Pittsburgh, stated that in examining teacher knowledge and practice for 21st Century learning, we must look at a model of system performance. At the center of this system is the instructional “core” – the interaction of teachers and students around content. Instructional capacity is defined as the knowledge, skills, and material resources brought to bear on this interaction along with the understanding that none of the three elements—teachers, students, content-- can be treated in isolation as a change in one impacts the others. The teacher plays a key role in mediating the relationships in this core.

Instructional capacity is also shaped by conceptions of knowledge and professional practice. *Knowledge-for-practice* assumes that a distinctive knowledge base for teaching exists from research and that the teacher applies this received knowledge. *Knowledge-in-practice* assumes that practical teaching knowledge comes through the experience of teaching and teachers generate this knowledge as they mediate ideas, construct meaning, and take action based on this knowledge.

What teachers need to know and be able to do and how they come to know this varies depending on one’s conception of knowledge as outlined above and the aims, content and methods of instruction. What is the relationship between knowledge and practice? Are we responsible for growing a teacher’s knowledge? Teachers change their beliefs with exposure to different students and situations.

What we know:

- Teacher content knowledge – teachers need deep, flexible content as the foundation to developing effective teaching practice
- Pedagogical content knowledge – effective pedagogy develops over time in the context of real schools with real students
- Developing teacher practice – effective practice is defined by the discipline
- 21st Century skills
 - Strategies across the curriculum do not work. We need a content-specific approach.
 - Literacy – students need to learn core ideas and concepts of a discipline while learning to inquire, investigate, solve problems, and think, read, write, and talk in that discipline. Literacy is now understood as more than decoding and encoding but includes higher order thinking and oral communication skills that derive from the content.

- Critical thinking is not a skill that can be applied in any situation but the processes of thinking are intertwined with the content of thought.

Instructional materials and formal assessments affect a teacher's conception of what is important to teach, how it should be taught, what to expect from students, and how to understand students' ideas and thinking. Most teachers look at textbooks as curriculum. Very few textbooks support 21st Century learning. We need high quality instructional materials to support teachers.

Critical issues for us to think about regarding creating effective instructional environments:

- We need a unified vision, purpose, and methods of instruction plus alignment among agencies and core functions of instruction including standards, curriculum, instructional materials, and assessments.
- We need to enact reciprocal accountability, which requires a unit of investment in capacity that is equal to each unit of increased expectation of performance.
- We need to develop leadership that supports the improvement of teacher practice.
- We need to have performance accountability with reliable measures of practice.

Questions from Attendees:

- If teachers develop knowledge in practice, what knowledge and skills is enough for an initial license in relation to content and pedagogy?
 - Beginning teachers need deep content knowledge, basic content-specific pedagogy, and basic learning theory.
 - There is some concern that we are focusing too much on accountability and measures that do not support teachers' knowledge. Studies have shown that within 2 years teachers revert to the same kinds of teaching practices found in the environment where s/he works. We need to ensure we are placing teachers in environments that support the kind of teaching we want emulated. There are lots of ways to support high quality learning experiences and they need to be part of the system of support for teachers.
- Can we provide elementary teacher candidates, who are generalists, with a deep knowledge of content? Do we need to think of specialization for teachers of younger students?
 - We are seeing math test scores going up at the elementary level but the failure rate in algebra is astounding. The real issue is that elementary students aren't learning concepts but are learning procedures. We have teachers who don't know concepts. We do lose something if we go to specialists though.
- Should 21st century skills be a part of teacher preparation programs and a part of state licensure requirements?
 - Yes, we must define those standards and determine what teachers can learn prior to authentic practice. We need to provide appropriate learning systems and instructional materials. Most of the problems we observe in the districts start at the policy level. We should measure the quality of

supports (capacity) found within the district and not just look at the teacher and principal performance.

- When it comes to evaluating teacher practice, many principals don't have deep content knowledge. Coaches are often members of the teachers' union and don't want to evaluate their peers. Who should do the evaluation?
 - One of the issues that Richard Elmore discusses in his research is that we have to value expertise in the system and those who can walk into classroom and give feedback about the quality of teaching. Coaches have more knowledge than teachers and we need to develop them more effectively. Maybe we should make coaches quasi administrators so they aren't part of the teacher union. Restructuring the system is critical. One option is to license mentors, lead teachers, and coaches to ensure they have the content knowledge and capacity to support teachers.
- What is the role of the state textbook adoption process and the issue of quality instructional materials?
 - The textbook adoption process can be somewhat political. We don't see the materials being high quality. Teachers tend to use texts as a curriculum and follow the textbook chapter by chapter. Textbooks offer lots of activities around topics but do not provide what teachers need. The value of the textbook is its ease of use. What we need are high quality materials that are standards-based and free online to all teachers. Materials need to be developed in a better way. This is an important issue because textbook companies tend to drive interim assessments as well. We need the political will to address this issue head on.

Breakout groups: Teacher Licensure Testing for the 21st Century

Participants were divided into 3 groups to answer the question, "*What are the elements of teacher licensure testing for the 21st century?*" A synthesis of the responses from all 3 groups is provided below.

Key design principles for licensure testing

Attendees identified the following key design principles they would like to see in a 21st Century system of teacher licensure testing.

- The system should consist of a continuum of performance-based assessments over the career of the teacher that:
 - Includes multiple points of assessment with multiple measures over time
 - Evaluates performance in authentic or real settings
 - Incorporates 21st century skills
 - Is formative, summative and cumulative
 - Integrates technology (including an option to complete the assessment online)
 - Provides a feedback loop to teachers to inform their individual professional development and to teacher preparation providers to improve their programs
 - Includes an entry level assessment that is diagnostic and informs preparation programs of a candidate's strengths and needs
 - Includes measures of

- Literacy/numeracy
- Content
- Pedagogy
- Actual classroom performance
- Dispositions (e.g., flexibility, cross cultural skills, leadership, collaboration)
- Ethics or professional code of conduct
- Provides feedback to candidates who do not pass the licensing assessment so they know where to focus their remedial efforts

Key Issues to consider in building this assessment system include:

- Cost – One option for addressing the high costs of developing these assessments is regional grouping of states to share expenses.
- Definition of performance – We need to define what performance looks like (quality of practice) at each stage of a teacher’s career.
- Training – Who evaluates and scores the assessment and how do we ensure validity and reliability, particularly with performance items?
- Item bank – How will performance items developed and stored?
- Test security – How are items kept secure in a performance-based continuum system?
- Role of school leader and school culture – Support for the assessment system must exist at the local level. How can we promote this?
- Technology – A key challenge for schools is to keeping up with advances in technology. How can we provide appropriate technology and how will it be funded?
- Career and technical education – We need to keep in mind how these teachers come into the profession (multiple pathways) and the impact of updated teacher standards will have on them.
- Local evaluation systems – How will they fit in with a continuum of assessment system and the multiple roles and responsibilities of state and local staff?
- Pay for performance programs – How will these fit into a continuum of assessment system?

Suggested next steps:

Attendees would like to see a multi-state collaboration to address this topic.

Attendees would like to examine international processes on this topic.

A CCSSO consortium such as INTASC could help us move forward with these ideas.

Saturday, May 10, 2008

Kathleen Paliokas, Director of INTASC at CCSSO, provided a summary of the previous day’s discussion. She also outlined a conceptual framework for a model educator support system that INTASC and True North Logic are working on for a funding proposal. A diagram of the model system shows the relationship among standards, assessment, and the career continuum of the teacher and may be a helpful organizer for the day’s discussion. (See Power Point slide)

Keynote: Building a 21st Century Teacher Licensure System: What is the Relationship Among Teacher Standards, Teacher Evaluation, and Teacher Testing (See Powerpoint presentation)

Mary Diez, Dean of Graduate Studies and Professor of Education, Alverno College began by asking attendees what would a 21st Century school community look like? What would teachers and students be doing and what would evidence of growth look like? She cited a Howard Gardner's suggestion that the ideal elementary school might look like a children's museum.

Diez then went on to say that urban schools are far away from what a 21st Century school would look like and are *not* providing strong instructional support. She cited Jerry Valentine's Instructional Practices Inventory to explain this. The inventory outlines 6 levels of student engagement:

1. Disengagement
2. Student work with teacher not engaged
3. Student work with teacher engaged
4. Teacher-led instruction
5. Student learning conversations
6. Student active, engaged learning

Diez noted that, in most schools, few classrooms do the first 3 well but few are reaching levels 5-6. We tend to manage kids well but don't work on the 21st Century thinking skills that are inherent in levels 4-6.

Diez then cited Nichols and Berliner (2007) who argue that high stakes testing corrupts America's schools because it leads to a prevalence of cheating, exclusion of students from education by design and by neglect, a narrowing of content/curriculum, and negatively impacts the morale of teachers and students. Diez asserted that high stakes testing does not support the type of learning we want. Our system in fact "pushes out" students so instead of calling it a "drop out" rate, which places blame on the student, we should call it a "push out" rate, which puts accountability on the system instead.

How do we get where we want to go?

Michael Fullan's research indicates that successful change cannot be mandated. About 15-20 years ago, the Education Commission of the States called for the "new basics," which incorporated much of what is now in the 21st Century Skills formulation. The lack of success of that effort means public rhetoric is not enough. The critical question is what will move us toward real change.

Citing several researchers' work, Diez argued that we know what we should do and we have the tools to do it. We know from cognitive science how to teach cognitive skills, we know from social psychology the role of effort and belief in successful learning, and we know that descriptive feedback on learning improves student growth. We know what to do. As Deborah Meier has said, the question is not, is it possible to educate all children well? But rather, do we want to do it badly enough?

What will it take?

The key question is how can 21st Century Skills, combined with what we know about cognitive science, social psychology, teaching for critical thinking and communication skills, and using formative assessment impact

- Standards
- Teacher Education
- Licensure Testing

Standards

Based on the INTASC experience, we know a robust set of standards, supported by good state policy, can exert pressure for change on teacher preparation programs. We also know, looking back, that the formulation of “knowledge, dispositions, and performances” in the INTASC standards was critical to move folks in policy and teacher education away from knowledge as the only measure. This is important in the 21st Century Skills context.

We know that policy makers and teacher educators alike have not understood the central role of dispositions. Standards call for life long growth. Dispositions play a central role when you grow over time. It is important to see dispositions as not just about the individual, but as building capacity for a *learning community* that embraces 21st Century Skills. We are developing teacher candidates to have a higher level of ethical responsibility by asking them to ensure that ALL students learn. They must be able to work well within a community of educators to achieve this as sometimes one teacher alone cannot reach every child. We need to do a lot more work on dispositions.

The INTASC standards are slated for updating in the next 2-3 years. With 21st Century Skills as one of the inputs to their redesign, what issues do we need to address?

- Reductionism – an approach that sees the standards as “content” to be learned and checked off after it has been addressed in a single class. A good standard is an ever elusive horizon that keeps you striving for excellence. Standards are larger than any one performance and need to be revisited over multiple performances over time.
- Disconnectedness - between knowledge, skills and dispositions. All three must work together.
- Superficiality – we need to set criteria for quality artifacts in portfolios
- A Culture of Compliance – an approach that sees portfolio assessments as “collections of artifacts I have to submit” rather than as documentation of individual development toward the teaching practice that the standards represent. Candidates need to focus on the bigger picture of developing as a teacher who can work with needs of learners and move them forward.

Teacher Education

The challenge for teacher education is how can standards guide teacher educators to do the following:

- To model what the 21st Century Skills look like
This includes the ability to:

- Move from lecture to engagement
 - Scaffold cognitive learning
 - Build metacognition skills
 - Focus on high quality intellectual tasks
 - Use effective formative assessment
 - Nurture reflective practice
- To develop these skills in their teacher candidates

Alverno College provides one example of how to develop these skills in teacher education candidates. The program does not depend on courses but a demonstration of eight abilities integrated into the content of the curriculum. Students must demonstrate each ability at four levels, in varied contexts, as a graduate requirement. The student's growth is scaffolded over time, with clear criteria for performance, and includes feedback and self assessment.
 - To scaffold new teachers' ability to develop these skills in their P-12 learners.

This includes:

 - Designing learning experiences using cognitive science
 - Analyzing real work from K-12 students
 - Intensifying field experiences in schools that model 21st Century learning

Licensure Testing

The question here is how do our assumptions about what learning is and how to assess it make a difference in what we see as evidence? Citing the research of Wolf, Bixby, Glenn & Gardner, Diez outlined two different epistemologies that drive one's view of evidence and how to collect it.

The first is an epistemology of intelligence that leads to a culture of testing, which focuses on narrow bits of information, requires everyone to demonstrate the same thing in the same way, asks for decontextualized information, and expects individuals to work alone and get only one chance. The second is an epistemology of mind that lead to a culture of assessment, which focuses more broadly, widely, and in depth, allows for variation in what is demonstrated and how it is demonstrated, works with information in context, and values ongoing learning and collaborative learning. Diez cited Lorrie Shepard in saying that the second epistemology is consistent with 21st Century Skills and the emerging paradigm.

If we believe that learning to teach is a complex, developmental process and that standards are not something to be "checked off" or "met," but guides to professional practice that require ever deeper understanding and practice, how do we create an assessment system that supports this process?

According to Rick Stiggins, a system of assessment for learning should include: clear targets (including complex and increasingly integrated professional practice targets); practice that leads to the development of knowledge, skills, and dispositions; feedback to support growth; and self assessment/reflection.

Some examples of assessments that have moved away from a culture of testing and toward one of assessment that models 21st Century Skills include:

- Connecticut's BEST assessment
- the California PACT assessment
- Alverno's Teacher Effectiveness Project
- the National Board for Professional Teaching Standards Portfolio and Assessment Center exercises

Key questions for the licensure system include: how do we change basic skills testing so it requires ongoing growth toward professional literacy skills across areas, and how do we change content area testing so it requires integration of 21st Century Skills across content areas? We also need new assessment approaches that model and mirror the 21st Century Skills. For example what would be appropriate evidence of Collaboration in Problem Solving? This calls for something that looks very different than current testing formats. Finally, how can our assessment system both influence what learning environments need to look like and document readiness to work in those environments? For example, if we're serious about information, media and ICT literacy, what are the implications for using media-based assessment?

As we create a new assessment system, we must also ask what is the role of teacher education, of the state, and of the hiring entity (a 21st Century Learning Environment—which may not be a school district)? How do the various stakeholders show *flexibility* and *adaptability* in taking *leadership* and *responsibility* for providing support for learning as well as documenting it?

Diez concluded by saying that the bottom line is that if we're serious about moving toward 21st Century Skills, we can't be stuck with old technology, old epistemology, and old testing approaches. If we don't reframe the licensure system, but merely tinker with it, we won't bring about the transformation that we desperately need.

Questions from Attendees:

- When you have a paradigm shift like this, how do you move all pieces forward at once and get not only new teachers but existing teachers and the community on board so new teachers do not come out of preparation into a work culture based on the old paradigm?
 - First, we must recognize that we will not have everyone moving forward together all at once. The key questions to ask are: Where is your starting point? Can you build the constituency for this? We need to find the leverage point where we can move everyone to a tipping point and then past it. We must work on many fronts simultaneously while having a vision of where we are headed.
- How do you bridge the gap when states and districts see some value in certain kinds of testing for certain purposes but higher education sees no value at all in high stakes testing?
 - We need to look at both the purpose of what we do and how we use the data. We are skewed too far toward multiple choice testing, even when it does not fit our purpose, because it is cheap. We need to develop more of the constructed

response test because that is what the world looks like now. Regarding how we use the data, a key issue is that teacher educators and teachers have very low assessment literacy. If teachers are only looking at the data as a judgment of the child and as a statistic, this may inform policy but it does not inform teaching. If we can use the data to identify where kids are not doing well and how to adjust teaching as a result, that is helpful. This is capacity building of teachers. Diez is critical of testing when it does not feed back into learning.

- Nowhere in this discussion have we talked about where in the system the responsibility for multiple measures lies. Should they lie at a district or institutional level rather than assume they have to exist at the state level or across all institutions?
 - The most important multiple measures happen in the classroom at both the K-12 and higher education levels. Multiple measures should be diagnostic and this is why they work best at the local level. These measures should not be undone by what happens at another level – it should all be compatible. If you document student performance over time, this could stand in for some of those other measures that we only do because we don't trust what is happening.
- States say it is important to measure in robust ways but they have no mechanism to recognize and reward what is going on at the local level. Teachers are told these robust measures are more important yet they are being held accountable to separate high stakes measures at the state level. We need to shift how we calculate accountability for adults in our state systems. Federal policy is not helping here. In an ideal world results of interactions between adults and students at a local level would be the determinant for institutional capacity and adult behavior at a state level.
 - Nebraska is a good example of this. Chris Gallagher's book "Reframing Assessment" describes that state's focus on local level assessment.

State Panel: Policy Tools for Changing the Licensing System: What is the role of INTASC's Model Core Standards?

Panelists:

- Alexa Posny, Commissioner of Education, Kansas
- Janice Poda, Deputy Superintendent for Administration, South Carolina
- Marilyn Troyer, Senior Associate Superintendent of Education Programs, Ohio

Judy Jeffrey, Director of Education for Iowa, served as moderator and noted that teacher standards are a key leverage tool for states. She asked the panel to address the following question: "*What areas of the INTASC Model Core Standards need to be strengthened?*"

Comments from the Commissioner of Kansas

The Commissioner said that Kansas used the INTASC standards to develop their state standards but they augmented them by adding 3 standards. First, they included a standard on technology and now realize that technology must be infused across all 10 of the INTASC standards. Kansas also added a standard on history and philosophy, which is where the state included ethics, policy and social forces behind education. Finally, the state added a standard for integration across the curriculum. What the state

is not doing strongly enough is career and technical education and they will work to enhance that.

Comments from the Deputy Superintendent for Administration in South Carolina

South Carolina has been using standards since the 1990s for high-stake decisions to determine recommendation for certification after preparation, as a basis to move from initial to professional certification, and for making employment decisions. State-mandated teacher evaluations have been in place since 1979 and have gone through 4-5 different iterations. The newest evaluation will be piloted in 26 districts this fall. The evaluation process begins with teacher preparation and student teaching. The state collects data on every teacher who goes through teacher preparation programs in the state and receives information on each of their 19 standards. The IHEs get feedback and know if their teachers met the standards or not. The evaluation in the classroom includes a team of 3 observers who observe the teacher a minimum of 6 times per year. This is compiled into one judgment that is fed to the state who then feeds it back to the preparation programs. In 2004 outside evaluators were asked to critique the evaluation system and as a result some changes have been made in statute followed with regulations and guidelines. Standards are very important because they define the expectations for teacher performance.

The key areas where South Carolina is focusing on updating its standards include:

- Special needs students - The state needs teachers who can teach special needs students, especially in light of an increased state focus on inclusion, and on English Language Learners.
- Student outcomes - South Carolina is looking at how their standards impact student outcomes. They are taking intermediate steps to address this issue. One initiative is to have teachers do an analysis of student work samples and reflect on their teaching. South Carolina is piloting 2 Teacher Incentive Fund grants around this model as well as performance pay issues. Because South Carolina has no teacher unions, these initiatives are seeing less resistance.
- Collaboration - Because the state recognizes that a teacher candidate can not learn everything in a 4 year preparation program, they are piloting in 10 schools a model that uses teams of teachers. Each team consists of 4-5 teachers who work with the same students for 2-3 years. This is not turn teaching where each teacher takes a turn. Under this model, there is never a single new teacher alone in the classroom. Preparation programs do not provide the skills to work collaboratively. The state has not yet conceptualized how to address this but expect the team teachers will tell them how it works. South Carolina is looking at moving to a team approach for mentoring to induct new teachers into the profession. Each team will have a person with expertise on ELL, another on working with students who have disabilities, etc. All will have specializations as well as being generalists. This process will be a challenge in how we license.
- Parent Involvement - The other piece that needs strengthening in our standards is parent involvement and working with parents.

- Reflection – South Carolina added more on reflection to the standards. All evidence that is collected includes self evaluation and reflection.

Comments from the Senior Associate Superintendent of Education Programs in Ohio

Ohio adopted the INTASC standards early on and in the last couple of years the state created a new set of standards. The state placed an increased emphasis in four skill areas for teachers: (1) working within a standards-based instructional system using local curricula based on state standards; (2) analysis and use of student achievement data --this was driven by legislation that requires teacher preparation programs incorporate value added data for their graduates into program improvement. The state is already getting positive feedback on this change; (3) working within school improvement teams to use student data and standards and to create authentic learning experiences to improve outcomes; (4) strengthening professional conduct.

It will be important for INTASC in updating the standards to frame them for development of the teacher over the career. Ohio created descriptors of teacher performance with indicators at 3 levels--proficient, accomplished and distinguished—so teachers can see where they should be headed. The New Teacher Center at Santa Cruz is looking at bridging the linkages between pre service and induction. A good set of teacher standards can help with this effort.

Ohio does not have a state-wide teacher evaluation system because that system is bargained at a local level. Locals are adapting the 3 descriptor framework and using that to modify their evaluation processes. This shows that strong standards showing a teacher's development over time will be used. Ohio is planning to revamp their induction program based on this framework.

The moderator next asked the panel, *“What are the critical components needed to gain consensus on a set of standards?”*

Comments from the Commissioner of Kansas

Everyone agrees on the standards for the most part. How to implement them is the real question. Kansas is at critical juncture where timing could not be better. The will to agree is there but Kansas is a strong local control state. The portability of licenses is more critical than ever so this is driving the need for consensus. For the first time last year Kansas licensed more teachers from out of state. A pressure exists to lower standards so more teachers can be licensed. Kansas needs a common set of standards that all preparation programs address.

Comments from the Deputy Superintendent for Administration in South Carolina

The INTASC Standards were provided to states as a guide and were never intended to be adopted lock, stock and barrel. They were presented as a tool for states to examine their own standards. The INTASC standards should serve as a place where we can address the research regarding what knowledge and skills teachers need to produce student learning. It is important to show that the standards are tied to student achievement and why we are identifying these specific knowledge and skills.

Comments from the Senior Associate Superintendent of Education Programs in Ohio

A strong emphasis on student learning must be present in the standards for consensus. Also, the standards should not address a single point in time of the teacher's career but take a developmental approach and promote growth over time. When the INTASC standards first came out in 1992, many states did not have standards, but many have developed them in the intervening years. Like Ohio, if states recently completed a revision of their teacher standards and have developed assessments aligned to those standards, they may be less inclined to revisit them again.

The final question posed to panelists was: *"What have been the challenges in creating an aligned teacher assessment system in your state?"*

Comments from the Commissioner of Kansas

Funding has been a challenge but technology should help with that issue by streamlining costs. Kansas has in place the Kansas Performance Assessment and also uses the Principles of Learning and Teaching test and the Praxis II tests. In addition, the state legislature requires that teachers pass a performance assessment in their first two years of teaching that includes a portfolio and a reflective piece. Concerns regarding the performance assessment centered on the fact that the process did not engage anyone in the district -- the preparation programs oversaw the process with little outside engagement and a group separate from the process scored the portfolio. Kansas is in the process of changing regulations to address these issues. We are hearing that the performance assessment needs to be in multiple places in the system—that the assessment should start in preparation and then move into the school building where a mentor can oversee the process. It will be a challenge to create a multiple system with multiple levels and multiple pathways.

Comments from the Deputy Superintendent for Administration in South Carolina

South Carolina is facing several key challenges in creating an aligned performance assessment system. First, observing teachers should ideally work in a group but this kind of teamwork is logistically a challenge. Second, the pressures of teacher shortages often means evaluators are reluctant to evaluate stringently because it is difficult to replace teachers. Third, principals need to understand that teacher evaluation is important and they cannot say they don't have the time to do it.

Teachers do not have a property right in teaching until they receive their permanent license so up to that point they can be counseled out of the profession. It is the school district's responsibility to diagnose and help the teacher improve and gain the skills needed.

We need to have multiple assessments over time that will include some tests that look at content. The most challenging piece is content pedagogy; there are no commercial tests that get at this well. Performance assessment is more than a paper/pencil test. Incorporating teamwork into the process and feeding this into the licensure system will be a challenge. In building this assessment system, cost will be a key factor. South Carolina puts \$2 million into its system, which is not enough, so it falls on the backs of districts to provide the personnel and time to do it effectively.

Comments from the Senior Associate Superintendent of Education Programs in Ohio

In Ohio, we started by asking ourselves “How can we create a system so that assessment does not become an end in itself?” How can we change the focus of the system and the teacher from “How do I get through this particular assessment?” to the larger view of how does this assessment foster the goals of induction and the ongoing development and growth of the teacher over time?

Judy Jeffrey, Director of Education for Iowa, and moderator agreed that assessment should serve as an ongoing developmental tool rather than being a “gotcha” event for the teacher.

Questions from Attendees:

- As we work through teacher standards, we may end up with knowledge, performance, and dispositions such that it becomes a huge endeavor and it becomes impossible to stay focused on the right work. How do we address this?
 - We look at student content standards and there are so many and this is difficult for teachers to deal with. We need to structure the teacher knowledge and skills in a way so it does not seem so huge but provides depth. Ohio created 7 teacher standards with elements under each that articulate the elements more clearly and include a rubric with illustrations of what they should look like over the career of the teacher.
 - We need to devise a system to measure where teachers are over time. Michael Fullan writes about the stages in a teacher’s career and says teachers come to a fork in the road where they either coast or get better. We must stimulate them to want to improve. We can provide incentives that encourage teachers to grow and stay in the profession (i.e. give teachers an option to opt out to raise a family and then return).
- If your state is out of cycle in terms of reviewing your teacher standards, would revising the INTASC core standards still have impact?
 - Yes. In Kansas it took us 10 years to get our standards done. They came out in 1992 and were revised in 2001.
 - The revised INTASC standards would be a good way to stimulate a national dialogue.
 - South Carolina is always looking at ways to improve.

What are the Council’s role and the state education agency’s (SEA) role in assuring our children are taught by a 21st century teaching workforce?

Ken James, Commissioner of Education for Arkansas, facilitated a discussion with attendees to address the question above. A synthesis of responses is below:

CCSSO Role

Coordinate Efforts and Disseminate Information

- Create the imperative for a set of action steps in the area of teacher effectiveness and teacher quality. We need to move from a sense of urgency to an imperative.

- Influence the legislative agenda under NCLB reauthorization so it targets more resources for teacher quality.
- Coordinate and disseminate what is going on in other states on the issue of teacher licensure and testing. Create a framework of various state strategies and their link to research.
- Continue to convene SEAs nationally and/or regionally for common actions on cross-state issues such as teacher license portability.
- Identify regional collaboratives that are working with IHES in writing teacher standards and performance assessments.
- Create an inventory of state teacher standards and make them available as a resource to states that are rewriting their standards.
- Lead an examination of what we can learn internationally from other countries on the teacher issue, and how we can link international work to our teacher standards.
- Bring futurists into the discussion, particularly around technology issues.
- Continue to support collaboration across states and increase partnership involvement.
- Begin the stakeholder buy-in process by bringing in higher education and the teacher unions to build linkages across the teacher continuum.

Update the INTASC Standards

- Fund INTASC so we can “refresh” the model core standards.
- Use the updated standards as a leverage tool to drive change of the system, including performance assessments.
- Work with researchers to determine if we can separate out the novice from the master level and identify the critical indicators for these pre-requisite skills, which will help reduce the number of teacher standards.
- Infuse the use of technology throughout the INTASC Standards and use business partners to help define this.

Assist States in Developing Standards and Performance Assessments

- Lead focused work in states to share the cost of developing a continuum of assessments and collecting data around this work. Involve business partners in this endeavor.
- Provide external reviews of state teacher standards and assessments and provide feedback to SEAs.
- Assist states in determining how to link the teacher standards and performance assessments to alternative route programs and the impact of the assessment on non-traditional programs.
- Determine how the National Board for Professional Teaching Standards fits in this conversation.

SEA Role

Considerations in Building Assessment Systems

- Keep in mind as we rewrite teacher standards how career and technical education (CTE) teachers come into the profession (multiple pathways) and the impact the revised teacher standards will have on this.
- Consider how local evaluation systems fit in with the revised standards and the continuum of assessment system and the multiple roles and responsibilities of state and local staff.
- Consider how pay for performance programs fit into the continuum of assessment system.

Include Business Partners

- Expand and incorporate knowledge, skills, and resources from business partners to support building the teacher assessment system.
- Work with business partners to examine state driven policies and the impact of assessment development on non-traditional programs.
- Work with business partners to develop a continuum of assessment system (pilots/data collection).
- Work with business partners to build the right system that will collect the data needed.
- Career and Technical Education (CTE) is a pathway for many states to include business partners.

William Gorth, CEO of Evaluation Systems group of Pearson, summarized by saying the challenge now is to define the tasks related to teacher licensure across the whole continuum of the teacher's career. He noted we may need a different assessment at each stage of a teacher's career to measure the appropriate level of performance. We have one step already in process and that is the revision of the INTASC model core standards. CCSSO has an opportunity to lead this discussion as we move forward to the next stage.

Gene Wilhoit said CCSSO will work immediately on the vision piece of this work particularly in identifying the critical elements of an educator continuum with the goal of providing a roadmap for states. Specific next steps include:

- CCSSO will update the INTASC standards so they reflect an alignment with today's conversation, 21st Century skills, and additional discussions with key stakeholders.
- We will take the opportunity to influence the thinking around reauthorization of NCLB. Bipartisan support exists for creating a new working partnership with states around key issues like teacher policy.
- CCSSO is moving a similar conversation forward in its three additional strategic areas of student standards and assessment, data systems, and supports for student learning. In terms of teacher data there is a great void. EIMAC is pursuing this agenda around what data to collect to inform practice and how to collect it at the local, state and federal level.

- CCSSO will continue this conversation around performance-based assessments for teachers. The models developed by Connecticut and California in this area are pioneering efforts and provide a nucleus of work for our conversation. What we need is a demonstrated measure of teacher effectiveness and a design that is cost effective.
- In terms of partnerships, CCSSO is working to bring K-12 and higher education together around these conversations. The Council has invited the State Higher Education Executive Officers (SHEEOs) to participate in its summer institute in July and we have engaged and work closely with AACTE to bring schools of education into the dialog.