TO: P-12 Education Committee  
FROM: Ken Slentz  
SUBJECT: Approach to Developing Statewide Computer-based Testing Transition Plan  
DATE: March 5, 2012  
AUTHORIZATION(S):  

SUMMARY

Issue for Discussion

New York State is committed to next generation assessment technology that can assess 21st century college and career readiness knowledge and skills with rich, authentic tasks. Transitioning from paper-and-pencil testing to computer-based testing (CBT) facilitates these changes as well as improvements in test delivery, test integrity, scoring validity, turn-around time on testing results, and overall costs. To transition New York State assessments to CBT, and to be positioned to adopt the computer-based PARCC assessments in 2014-15 (pending Board approval), a statewide transition plan is required. We are seeking Board advice on the development of a strategy to transition to CBT.

Reason(s) for Consideration

Policy review.

Proposed Handling

This issue will come before the P-12 Education Committee for discussion at the March 2012 meeting.

Background Information

In February 2010, the Regents approved a Statewide Learning Technology Plan to harness the collective power of the University of the State of New York (USNY) to ensure New York’s education system meets the needs of 21st century learners. The
primary goal of the Plan is to ensure that learning technologies are seamlessly integrated into teaching and learning. To achieve this vision, the Regents established the following goals:

- Provide policies, standards, and guidance on quality digital content development and delivery; accessibility; information literacy; and ongoing, sustained professional development in pre-service and in-service education.
- Develop a performance measurement, determine current capacities, and explore ways to ensure the reliability of a digital technology infrastructure.
- Implement a process to track technical support for technology integration.
- Determine and continuously review the benchmarks for USNY institutions to demonstrate how they are achieving the actions of each goal, and the degree to which they meet the respective standards in technical support for technology integration.
- Identify and/or develop incentives for the expansion of digital learning across USNY.
- Promote and enable effective technical supports to implement the plan, and advocate as necessary to ensure that all learners have access to equitable and sustainable resources.

In March 2010, the Regents received an update on current statewide initiatives to provide sufficient broadband access to all school buildings in New York State. A bandwidth of 100 megabits per second (100 mbps) was a recognized minimum standard by the Regional Information Centers (RICs) and the State Educational Technology Directors Association (SETDA). Through their statewide data collection, the RICs determined that approximately 86 percent of school buildings met this minimum standard. The remaining schools did not have this capacity primarily due to geographic location (e.g., mountainous or rural areas) and the expense of a large initial capital investment to build broadband infrastructure to the surrounding community. The costs to fully connect a school building at 100 mbps can range from as little as a few hundred dollars to almost $5,000 per month, depending in part on location and current infrastructure.

In October 2011, the Regents discussed several proposals to improve the integrity of the NYS Testing Program. It was recommended that $200,000 be requested in the 2012-13 State Budget for a CBT pilot to learn more about the benefits of this testing model, the possible cost efficiencies, and the challenges that the State and districts will face in implementation. The Regents discussed that a strategic shift toward computer-based testing would help resolve many of the test integrity issues discussed by the Board, while also allowing for just-in-time assessment results and the use of innovative assessment items that are aligned with career and college readiness. While this shift will require a major investment in the State’s computer and broadband network infrastructure, this initiative will have long-term advantages, not only for the administration of assessments, but also for supporting innovative uses of educational technology to support instructional improvement.
Developing a Five-Year Plan

A transition to administering a majority of summative assessments by computer or electronic device is very complex. Capacity will be built building by building, and it will be crucial to have annual milestones that help identify which schools are unprepared and may need the most support. Setting annual goals for the next five years will ensure that we push forward and make progress in increments, with opportunities to deliver support and adjust course, rather than to plan for a single year in the future when we will go from zero buildings in the State administering computer-based summative assessments to all buildings in the State administering them. Evidence from other states suggests that we would be well advised to take a phasing approach to CBT adoption with a small percentage of schools being fully ready early, the majority being ready in a second phase, and a small percentage that will continue to struggle to build the necessary capacity over the coming years.

We are currently anticipating that PARCC assessments will be available in 2014-15 and so we recommend that any plan targets year 3 (SY 2014-15) as the first year that all schools should have a basic capacity to execute CBT. This suggests that the contour of any plan should use the 2012-13 school year to seek voluntary LEA and regional partners to pilot elements of CBT either in an operational assessment or in a field test. The 2013-14 school year should be used to require LEA and regional entities to deploy elements of CBT statewide, with an exemption process for buildings that have a demonstrated lack of capacity. As stated above, the 2014-15 school year will be targeted for transition of the 3-8 and secondary ELA and Math assessments to CBT across the State with very limited exceptions. The 2015-16 and 2016-17 years would then see the transition of the majority of the remaining summative assessments to CBT.

To prepare for the development and execution of a five-year plan, we have named a CBT State Readiness Coordinator and are planning to convene a New York State CBT Workgroup composed of statewide representatives to help us take our first steps toward development of a plan and deployment of the PARCC provided Technology Readiness Tool. Concurrently, we are working to collect research, independently and within PARCC, that will help us develop a plan addressing the many important questions about test validity that will come during the transition to assessments on diverse devices and modes of input (e.g., keyboards, touch screens, mouse, etc). Finally, we are exploring potential ways to pilot CBT statewide. Other states have used field testing, accommodations testing and retesting as initial trials in CBT. Pilots of this type over the next two years will help position us to maximize state participation in the PARCC CBT field tests in 2013 and 2014.

Statewide Readiness Coordinator

As part of New York’s membership in PARCC, each state was asked to designate a Statewide Readiness Coordinator (SRC) to assist in the implementation of computer-based testing (CBT) in each state. According to a recent webinar hosted by the State Educational Technology Directors Association (SETDA) on behalf of the PARCC and SMARTER Balanced assessment consortia, the SRC’s role is to:
• communicate regularly with local education agencies (LEA’s), including technology personnel;
• facilitate training of LEA technology personnel and others within the LEA who may use the tool to input local technology or readiness data;
• answer questions from LEA personnel;
• communicate with the Technology Readiness Tool vendor (see below) including participating in trainings and configuring state/district/school organizational data and state/local accounts; and
• coordinate with internal state teams working on assessments and on technology.

Lawrence Paska, NYSED’s Coordinator of Technology Policy, has been designated as New York’s SRC and is scheduled to meet with the Regents Technology Council at their next meeting to discuss New York’s CBT transition plan.

Statewide CBT Technology Readiness Tool

The Technology Readiness Tool is jointly issued by the PARCC and SMARTER Balanced assessment consortia, with the State Educational Technology Directors Association (SETDA) as a partner, and developed under contract with Pearson. The consortia will provide the tool to each member state for deployment in six data collection windows from 2012 to 2014. The tool enables local data collection that rolls up to district and statewide data sets. That data can then be used to determine technology readiness for online assessments, and to provide a gap analysis. This data will be used to support local, state, and national planning for the transition to the consortia’s assessment systems. It is important to note that schools and districts will have the ability to conduct their own analyses and to support planning for their own instructional technology initiatives.

The tool will enable the collection and analysis of data along four separate dimensions:

1. Computers and other devices (evaluating device specs against minimum system requirements)
2. Ratio of devices to test-takers (including testing window and session scheduling)
3. Network and infrastructure (bandwidth, network utilization, size of content)
4. Personnel (staffing and training)

Each dimension will have specific parameters for data collection. For example, in spring 2012, data collection parameters for LEA’s will include device specifications readiness; device-to-tester readiness; network infrastructure readiness; and staff and personnel readiness. Automatic, calculation, and survey data collection methods will be used. A designated contact person for each school building in the State will input or upload data into the tool. School names and contact people will be entered into the tool in advance by NYSED.
A communications campaign to LEAs, largely conducted through the New York State CBT Workgroup, will occur through the completion of the spring 2012 data collection window. LEA personnel will be invited to an online training organized through the assessment consortia, prior to entering information into the Technology Readiness Tool. New York is projecting its data collection window to begin on or about April 9 and conclude on June 14. Future data collection windows would occur in fall 2012, spring and fall 2013, and spring and fall 2014.

New York State CBT Workgroup

NYSED will create a statewide CBT Workgroup to support the implementation of PARCC’s Technology Readiness Tool beginning in spring 2012, advise on CBT pilots, and provide strategic input on the five-year transition plan, with specific focus on how to build capacity (e.g., hardware, bandwidth, human capital, etc.). Workgroup participants will be drawn from the following stakeholders:

- the Regional Information Center (RIC) Directors
- the “Big 5” city school district technology and data coordinators
- the Staff/Curriculum Development Network (S/CDN) Educational Technology Committee
- a statewide professional association for learning technology (e.g., NYSCATE)
- other relevant stakeholder groups

A confirmed list of workgroup participants will be shared with the Board of Regents at a future date.

Recommendation

That the Board of Regents direct staff to continue the development of the transition plan as articulated in the item and report back periodically on progress.