

TECHNOLOGY REQUIREMENTS for the Smarter Balanced Assessment

Stuart Ciske

Need to know if your recent ChromeBook purchase can be used for the upcoming Smarter Balanced Assessments starting in 2014-15? (Yes) Or if you have enough bandwidth to have 60 students take the online assessments at the same time? (Maybe) The Department of Public Instruction has a number of resources to help get answers.

The Smarter Balanced assessment was developed by the Smarter Balanced Assessment Consortium (SBAC), a state-led group working to develop next-generation assessments that accurately measure student progress toward college- and career-readiness. The SBAC is one of two multi-state consortia awarded funding from the U.S. Department of Education in 2010 to develop an assessment system aligned to the Common Core State Standards (CCSS) by the 2014-15 school year.

The SBAC technology framework for schools and districts, released in December 2012 and last updated in February 2013, was developed with input and feedback from SBAC member states (including Wisconsin), work groups, and data from the Technology Readiness Tool, an online inventory of technology resources launched in 2012.

■ Preparing for the Assessment

With the assessment set to be administered next school year, school districts need to begin, if they haven't already, to prepare for the Smarter Balanced Assessment. The good news is that based on the SBACs research and data analysis, they estimate a majority of schools and districts in member states will be

able to successfully administer the assessments with their existing infrastructure and hardware.

Yet schools and districts must keep in mind several things when deciding on upgrades to infrastructure and devices.

To begin with, the SBAC recommends that instruction plans, not the assessment, drive technology choices. In other words, technology needed for today's robust, online classroom use should be significantly higher than the technology needed for online assessment. It is also recommended that hardware be

purchased as part of a plan for instruction not just for assessment.

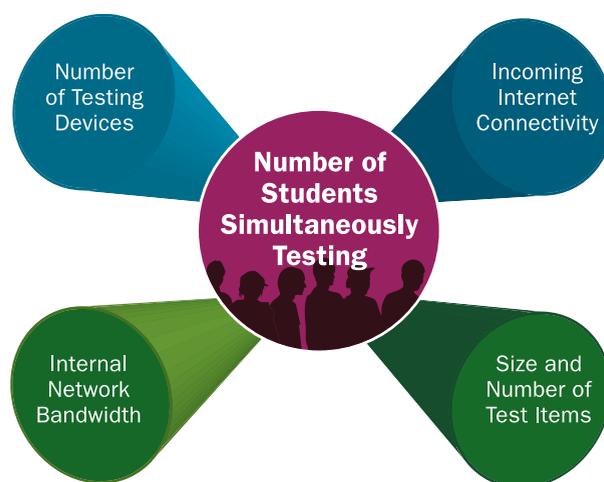
The SBAC reminds districts that technology used for the assessment needs to be equal. Schools and districts should ensure devices used for online assessment are equivalent for all students taking the assessment in a given building.

Also, bandwidth is a higher priority than hardware. When required to allocate resources between hardware and additional bandwidth, plan on using older technology that still supports innovative and authentic measures of the depth and breadth of the Common Core State Standards, and providing more bandwidth.

When looking at the minimum specifications needed for assessment, it should be noted that they may not be the adequate technology necessary to serve the assessment needs of every student, such as English language learners, those with individualized education plans (IEPs) or 504 Plans, or those needing other accommodations.

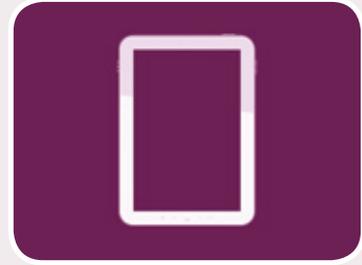
Remember, the SBAC requirements apply only to the Smarter Balanced assessments and should not be considered minimum specifications to support instruction, which may require additional technology. All hardware choices should consider the individual needs of students. Some students may need hardware that exceeds these minimum guidelines, and some students may require qualitatively different hardware.

IMPORTANCE OF BANDWIDTH



The Department of Public Instruction reminds districts that bandwidth will determine how many students can take the test at any one time. A number of factors must be taken into account, such as the number of computers being used and the internal network bandwidth capabilities.

MINIMUM HARDWARE REQUIREMENTS & RECOMMENDED OPERATING SYSTEMS



Smarter Balanced Minimum Hardware Requirements for Current Computers

Windows

- Windows XP (service pack 3)
- Pentium 233 MHz processor
- 128 MB RAM
- 52 MB hard drive free space

Mac OS X

- Mac OS X 10.4.4
- Intel x86 or PowerPC G3 (300 MHz) processor
- 256 MB RAM
- 200 MB hard drive free space

Linux

- Linux (Ubuntu 9-10, Fedora 6)
- Pentium II or AMD K6-III 233 MHz processor
- 64 MB RAM
- 52 MB hard drive free space

Tablets

- iOS: iPads 2 running iOS6
- Android: Android based tablets running Android 4.0+
- Chrome OS: Chromebooks running Chrome OS (v19)+

New Desktops or Laptops

Windows 7+ | Mac OS X 10.7+ | Linux (Ubuntu 11.10, Fedora 16)

- 1GHz processor
- 1GB RAM
- 80 GB hard drive or at least 1 GB of hard drive space available

Recommended Smarter Balanced Minimum Requirements

New Tablets

- iPads 3+ running iOS6
- Android based tablets running Android 4.0+
- Windows-based tablets running Windows 8 (excluding Windows RT)
- Chromebooks running Chrome OS (v19)+

Challenges

While the SBAC estimates that most districts already have adequate technology infrastructure in place, smaller school districts in Wisconsin may need to upgrade their technology. And for some, it may pose a challenge given staffing, funding, and the limitations of older schools' infrastructure.

Brad Saron, superintendent of the Cashton School District, a small school district located about 30 miles east of La Crosse, said the challenge of administering the assessment is about more than just technology requirements.

"It's not just bandwidth, it's the amount and quality of your band-

width, is the amount and quality of fiber optics between buildings, the amount and quality of licenses to support those access points, and it's the amount and quality of computers," Saron said.

While larger districts may have technology staff and resources to provide support, Saron, who was

UPGRADING TECHNOLOGY

Here are several things to keep in mind when deciding on upgrades to infrastructure and devices:

- **Instruction plans** should drive technology choices – technology need for today's robust, online classroom use WILL BE significantly higher than the technology needed for online assessment;
- **Hardware should be purchased** as part of a plan for instruction not just assessment;
- **Schools and districts should ensure devices** used for online assessment are equivalent for all students taking the assessment in a given building;
- **Bandwidth is a higher priority** than hardware. When required to allocate resources between hardware and additional bandwidth, plan on using older technology that still supports innovative and

authentic measures of the depth and breadth of the Common Core State Standards, and providing more bandwidth;

- **Online assessment** is a VITAL reason to ensure schools have adequate bandwidth along with other web-based systems and services, primarily driven by instructional needs;
- **The minimum specifications** listed may NOT be the adequate technology necessary to serve the assessment needs of every student, such as English language learners, those with IEPs or 504 Plans, or those needing other accommodations.

For more links to documents and resources for understanding the specifications for technology and devices, visit wasb.org and select "Smarter Balanced Assessment Resources" under the "Quick Links" section. □

featured as one of *eSchool News*' tech-savvy superintendents for 2012, said smaller districts may have trouble.

"I think school districts across the state are going to struggle to bolster their systems to support the standardized testing," Saron said.

■ Preparing for Test Day

The Kenosha Unified School District, which is one of the pilot districts working with the DPI to test components of the new assessment, reports the district's bandwidth and technology will be ready for the new assessment. Tanya Ruder, executive director of community partnerships and media relations for the district said planning needs to be done on how to administer the test.

"From a practical standpoint, we will need to make a schedule and stagger testing times so that students in each building will be able to utilize the computer lab," Ruder said. "We're going to have to learn

how to stagger testing times so each student gets through the testing process."

When the testing takes place, the district is planning on having staff available to provide any needed support.

"It's going to be new and we can't predict all the issues that might come up but we want to have staff on hand and deploy human resources as needed," she said.

■ Help for Wisconsin School Districts

To assist Wisconsin schools and districts in understanding the implications of the announced Smarter Specifications for Device Technology, the DPI has created a website to provide information in a clear and consistent manner. The website, <http://tinyurl.com/wiscsbac1>, provides information regarding the implementation of online testing starting in 2014-15. The site also includes a



For Questions About...

Technology, bandwidth, devices, tech readiness tools and other hardware information contact **Stuart Ciske**, (608) 267-9289, stuart.ciske@dpi.wi.gov.

Smarter Balanced Online Assessment content and other projected forms of online assessment (e.g., ASSETS and DLM) contact **Philip Cranley**, (608) 266-9798, philip.cranley@dpi.wi.gov; or **Phil Olsen**, (608) 266-8779, philip.olsen@dpi.wi.gov.

discussion group to post questions about the assessment and to see what others are doing for readiness. ■

Ciske is an educational consultant with the Wisconsin Department of Public Instruction.

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