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Based on observations from the case studies, interviews with experts, feedback from the consortia, and information gleaned from school district responses to the Becoming Assessment Ready Survey, a list of eight key recommendations for becoming assessment ready was created. Each recommendation is accompanied by a checklist of items for school districts to consider as they prepare for online assessments.

The checklist helps school districts not only learn from the experience and key observations of other districts, but also be intentional and comprehensive in their own planning process. The eight key recommendations include:

### Eight Key Recommendations

1. Create a cross-functional strategic planning team
2. Secure funding sources for modern learning environments
3. Embed technology in instructional practice
4. Invest in robust professional development for teachers, administrators and technical staff
5. Build out a robust infrastructure
6. Select devices meeting instructional needs and assessment consortia requirements
7. Communicate—a lot
8. Pay attention to logistics

“Districts need to have a punch list and make sure they have everything they need to be ready. But they also have to understand that high-stakes testing is a complicated environment. They’re not going to be able to control everything.”

Keith Kruger, CEO, CoSN
Education Week Supplement, October 2, 2013
Recommendation 1:

Create a cross-functional strategic planning team

One of the challenges that school systems must overcome is the silo effect, and the larger the system, the greater the problem. The silo effect occurs when departments within a district act independently of other departments or schools. The silo mentality and cultures of information hoarding are fostered when activities and operations are not well integrated, operate independently and are not transparent.

The CCSS initiative involves the collaborative work of curriculum, instruction, professional development, assessment and technology departments, not to mention school-based teams. In many cases these departments have historically not been working from a common plan but making decisions independently with the hope that it will all come together in the end.

It is important to create a strategic planning team with membership from each of the major stakeholder groups and establish an 18-month roadmap, working back from critical dates. Identify critical “must have” priorities and timelines with metrics to assure understanding and accountability. Ensure that a strong communication strategy is included in the plan. Parents, media, legislators and the community need to understand the difference between proficiency standards on state tests and the CCSS assessments. Communication is imperative. Keeping stakeholders aware of progress and setting expectations for test performance will help reduce problems.

For the spring 2014 practice assessment, establish a cross-functional first response team that proactively monitors both successes and challenges. Create a set of metrics that measures not only technical performance (network, device and systems), but also assessment of professional development, technical training and operational efficiencies.

This team should review school-based scheduling plans and share best practices and lessons learned across the system. Scheduling the CCSS assessments drives how much bandwidth and the number of devices required for student success.

CHECKLIST:

- Make becoming assessment ready a priority for the district
- Create a cross-functional team, including curriculum, instruction, assessment, finance, professional development and technology to create a strategic plan
- Build an 18-month roadmap
- Create a cross-functional response team to respond quickly to issues during the assessment period
- Proactively collect data from 2014 practice assessments on training, infrastructure, device and preparation
- Work with individual schools on assessment scheduling
Recommendation 2:

Secure funding sources for modern learning environments

It is time to recognize that the shift to digital is happening and that online assessment plays a critical role in the future of teaching and learning. Exponential growth in broadband, mobile devices and digital content such as e-books is not a passing fad. No one expects the trend to end or reverse in the foreseeable future. Online assessments will play a critical role in classrooms regardless of whether your state is participating in the CCSS assessment program. Therefore funding is not merely focused on implementing the CCSS assessments but on building the 21st century learning environments today’s students need and deserve.

Districts can reduce costs by inventorying existing digital resources and prioritizing their use. Many districts have multiple tools that perform the same essential function. Examples include multiple Learning Management Systems (LMS) and online courses and content. Narrowing the number of tools that perform the same function can reduce licensing fees, reduce training costs, improve support and reduce the complexity of multiple system interfaces. District staff should evaluate and identify things that should no longer be funded and reallocate those funds to prioritize digital learning environments. The trend toward e-books and the reduction of paper-based resources is a prime area to be considered.

There are a number of quality low/no cost Open Educational Resources (OER) available that can significantly reduce content costs. The money saved can be shifted to support device and infrastructure build out.

Districts need to strategically plan for the shift to digital. The need for every student to have an Internet-connected device and access to a robust network infrastructure is inevitable.

CHECKLIST:

☐ Create a strategic plan that shifts funding from paper-based practices, resources, staffing and content toward digital-based functions
☐ Prioritize operational, categorical, grant and capital funds toward the strategic digital plan
☐ Review and consolidate digital resources and assets
☐ Adopt OER to help defray costs
Recommendation 3:

Embed technology in instructional practice

The best way to prepare for success with the CCSS online assessments is to fully embed the use of technology into daily instruction to meet the teaching and learning needs of individual students. Teachers and students should see technology and assessments as a natural component of great teaching and learning and not as a special event. Ubiquitous access to digital content is especially important for students who may not have Internet-connected devices at home. It is also important to assure that elementary students develop appropriate keyboarding and technology skills early so they are comfortable using the assessment technology.

CHECKLIST:

- Embed the use of technology throughout lesson delivery
- Ensure all students are comfortable using computers and applications such as online calculators
- Ensure early grades have adequate access to technology tools
- Make assessment a natural part of the teaching and learning environment—not a special event
- Participate in field tests and pilots and take every opportunity to become familiar with new online assessments
Recommendation 4:

Invest in robust professional development for teachers, administrators and technical staff

Teaching is a social activity, and the most successful efforts will include robust professional development and training for teachers, administrators and technical staff. Taking the assessment is just one step; creating a prescription from data to customized teaching to meet the unique educational demands of every student is where the benefit will be realized.

As with the CCSS assessments, the focus should be on performance and not just information. Create metrics of your professional development program that provide evidence that staff is prepared and can do the job.

CHECKLIST:

- Assure support staff receive adequate training specific to support the classroom test environment
- Help teachers and students become familiar with the new question format and tools, as the CCSS assessment question format is different than traditional “high stakes” assessments
- Support teachers and administrators in proactive use of technology to personalize teaching and learning, as this will help them be better prepared for online assessments
- Create a technology skills roadmap, such as ISTE Standards for Students (formerly NETS), for each grade level; roadmap should address not only technology, but also assessment format
- Participate in field tests and pilots and take every opportunity to practice with new testing environments

“All of your decisions are about priorities.”

James Aldridge, CTO, MSD Warren Township
Recommendation 5:

Build out a robust infrastructure

Having a robust network infrastructure is a priority for success in the classroom, but not all districts will meet the SETDA recommendations for bandwidth. Getting as close as possible to the recommendations will ensure success during the assessments as well as help districts create a future-ready network. For districts that cannot meet the minimum requirements, there are a number of ways to take advantage of lower levels of bandwidth access:

- Work closely with your Internet service provider to not only advise them of the district’s testing dates, but also and more importantly to project infrastructure needs and develop traffic management and quality of service (QoS) polices that establish priority for key applications traversing the network
- Limit activities that compete for bandwidth during assessments; this can be accomplished through several means, however the easiest is communicating what Internet activities are allowed during testing
- Use network monitoring tools and packet shaping as effective tools in enforcing bandwidth policies and understanding what type of traffic is on your network
- Employ web caching to locally store frequently accessed documents, web pages and images and reduce the demand on bandwidth to the Internet

In today’s modern learning environments, network access is more than just bandwidth. School districts must also assure that the density of their wireless network is adequate to meet the demand. Network design and management is becoming more complex, especially with the increase in mobile devices. Wired, wireless and cellular networks need comprehensive strategic planning, often exceeding the skills and time demands of local school technicians.

Taking advantage of managed network service providers, such an Education Networks of America (ENA), who can work closely with districts to fully prepare their infrastructure is an excellent option for districts to consider. As an example, ENA provides Infrastructure as a Service (IaaS) solutions to alleviate the burden on districts and their staff of managing their own infrastructure.

CHECKLIST:

- Meet SETDA recommendations for bandwidth no later than the start of the 2014 school year
- Consider partnering with a managed network services provider to provide overall IaaS solutions as well as QoS strategies for the district
- Use tools to manage and prioritize existing bandwidth for high priority data traffic
- If implementing the PARCC assessments and bandwidth is a constraint, explore Proctor Caching
- Assure network density is adequate across the system to handle the wireless load
- Plan for increased ongoing technical support to meet increased demands on infrastructure and devices
- Implement strategic scheduling to reduce the number of students tested at one time when adequate bandwidth is not available
- Participate in field tests to determine network capacity real-time to know what to expect on actual test day(s)
Recommendation 6:
Select devices meeting instructional needs AND assessment consortia requirements

There are many factors that must be considered when selecting devices such as cost, maintenance, warranties, peripheral devices, screen size, content availability, battery life, power and professional development, but the decision should ultimately be driven by instructional drivers, not the operational drivers previously listed. Device selection and informed decision making requires input from a variety of stakeholders. Just because a device meets minimum requirement of the CCSS assessments does not mean it meets the academic needs of all students and teachers. The Center for Digital Education (CDE) has developed a helpful review of mobile devices in its 2013 Q4 Special Report Toolkit. For more information, go to http://www.centerdigitaled.com/reports/q4-2013.

CHECKLIST:

- Intentionally select the appropriate device, based on student academic success, realizing that desktops, tablets, laptops, Chromebooks and netbooks have different strengths and weaknesses and interact differently with online resources
- Although many devices may meet minimum standards, select devices that give students the best opportunity for success
- Avoid smaller screen size, which makes it difficult for students in online assessments and requires more back and forth scrolling, taking time and being distracting for students
- Avoid smaller keyboards that make data entry more difficult
- Consider age appropriate devices, as one district-wide device may not be appropriate for all grade levels
- Move from lab-based assessments to fully integrated classrooms, as it is important for students to test in the same environment in which they are taught
- Protect expensive digital investments with quality maintenance and support programs; digital tools, content and systems are growing exponentially, yet technical support has remained the same or decreased
Recommendation 7:

Communicate—a lot

The CCSS are significantly higher than most current state standards, and the online assessments are new, so the number of students initially meeting proficiency is likely to go down. Some schools are very proactive in understanding the processes and implementation planning required to be prepared for the online assessments, and some schools are waiting to be told what to do. Everyone in your school community has an important role to play in the success of online assessments. Each state department of education is providing information and resources to districts. Districts need to have a mechanism in place to ensure information flows to the schools and then to all key school stakeholders, including students and parents. It is also important to communicate regularly with your testing provider to understand what support they provide and best practices they can share from their experiences with other districts.

CHECKLIST:

- Be intentional about your communication plan to school sites and site-based educators as well as other stakeholders, such as parents and the community, so they know what to expect
- Communicate with your infrastructure service provider(s)
- Communicate with your testing provider
- Create opportunities for parents and community members to take practice questions to increase awareness of the test rigor
- Provide town hall meetings, parent nights or sample CCSS challenge questions on broadcast news and in the newspaper to raise awareness
Recommendation 8:

Pay attention to logistics

The devil is in the details. Small things that you did not expect or plan for can mean big challenges and even failure when you conduct online testing. Take time to think through and address all the logistics well in advance of the testing windows.

CHECKLIST:

- Work out detailed scheduling for assessments well in advance
- Make sure you have ample devices and peripherals that meet minimum or recommended required specifications, including back-up equipment
- Make sure you have developmentally appropriate devices meeting the consortia guidelines
- Test wireless density capacity to be sure there are enough access points to handle the load
- Make sure devices are fully charged and will last for the duration of the test
- Make sure power adapters, power cords and power are available
- Train testing proctors on the devices being used
- Participate in field tests and pilots and take every opportunity to practice with new testing environments
Notes
ENA is the leading provider of managed Infrastructure as a Service (IaaS) solutions to school systems, libraries and governments. In 1996, ENA created one of the first statewide K-12 networks in the U.S. and has earned a reputation as experts in the design, deployment and management of data, voice and video solutions. Today, ENA manages multiple statewide and district-wide education and library networks, including 11 of the largest school systems in the country, successfully serving over 5,200 end sites, 555 school districts and 295 libraries, more than 2.5 million students, educators and administrators, and 3.6 million librarians and patrons. For more information, please visit http://www.ena.com or call 866-615-1101.

The eLearn Institute is a non-profit organization that is dedicated to transforming education through the effective use of digital learning tools. The central focus of the institute is to help schools and districts design, build, and "own" their eLearning programs. The eLearn Institute understands that having the right digital tools is one half of the challenge that educators and schools face, and using these tools effectively to building transformative educational models that support great learning is the other half of the challenge. The institute assists schools to create a facilitated community of online educators to share best practices, effective learning models, and new ideas specific to online and blended learning. For more information, please visit http://www.elearninstitute.org.

CoSN (the Consortium for School Networking) is the premier professional association for school district technology leaders. The mission of CoSN is to empower educational leaders to leverage technology to realize engaging learning environments. For over two decades, CoSN has provided leaders with the management, community building, and advocacy tools essential for success. Today, the CoSN community represents nine million students in school districts nationwide and continues to grow as a powerful and influential voice in K-12 education. For more information, please visit http://www.cosn.org or call 866-267-8747 to find out more about CoSN.