Achieving district readiness for online assessments

By Michael Droe and Donna Boivin

K–12 districts are gearing up for online assessments, whether driven by Common Core Standards or state mandates. To effectively establish and sustain readiness, leaders must consider processes and people along with district policy and technology.

o support student learning and establish individualized benchmarks, online assessments are being designed to help teachers and administrators determine the necessary curriculum, technology, processes, and infrastructure. A key driver of online assessments is the Common Core State Standards (CCSS), which communicate expectations for proficiency in mathematics and English language arts at different grade levels. The U.S. Department of Education has awarded grants to several multistate consortia to develop these assessments, slated to begin administration in the 2014–2015 school year.

These consortia are releasing guidelines and minimum requirements to help schools establish infrastructure for online assessments that are aligned with the CCSS. The guidelines detail specifications for new and legacy equipment, as well as accommodations for students with special needs.

While all guidelines and specifications have not been finalized, districts in states adopting the CCSS should start preparing



now to meet the defined timelines. Other districts may need to move to online testing as required by their own states. Common challenges districts face include ensuring adequate network capacity and capability for accessing the test environment, providing sufficient access to and security for the student assessment devices, and understanding which devices and peripherals meet testing requirements.

For example, some districts with noncentralized environments may have a mix of managed and unmanaged switches incorrectly connected throughout the network. Or in environments with different switch speeds, multiple network collisions or bottlenecks may occur—resulting in the test environment working fine in one classroom but not in another. With a need for consistency in test administration, such network variances have the potential to negatively impact testing performance.

To meet online assessment requirements, districts must plan to refresh policies, standardize classroom environments, and support a large increase of devices—all while optimizing total cost of ownership. For a successful transition to online assessments, seamless integration of technology, processes, and people is essential (see Figure 1).

Building a sustainable environment

A smoothly running online assessment environment requires reliable tools and equipment, such as client access devices and peripherals; wired and wireless network access and distribution capabilities; security policy enforcement tools to help prevent cheating; and security, reporting, and asset discovery management tools to maintain the student assessment devices. For example, the desktop environment needs to meet the minimum operating specifications for online assessments, and the number and capacity of student assessment devices must meet a school's requirements. Furthermore, districts must address the assistive technology requirements of students with special needs.

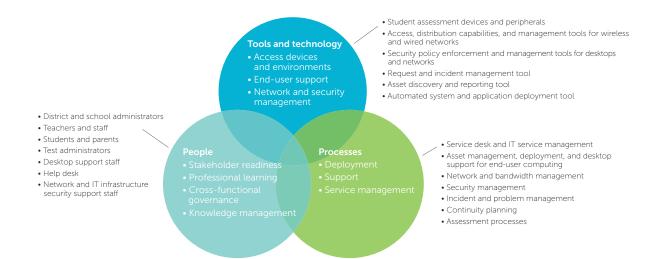


Figure 1. Essential components for establishing readiness

Understanding and preparing for the expected increase in network utilization and management is crucial to success. During testing, assessment traffic must be prioritized without affecting other essential organizational demands. Moreover, network and desktop security is essential to a testing environment, and districts must be prepared to implement security policies specific to online assessment activities. This includes the ability to lock down the system so students are unable to access other sites and tools during testing. Districts also must manage security exposures related to the Web browser and operating system. For effective remote monitoring and management of the assessment environment, IT can leverage security and manageability capabilities that are built into hardware, even when the computer is powered off or not functioning properly.

Processes such as device deployment, desktop support, and service management must be clearly defined and established. Organizations should develop and adopt best practices for deploying student assessment devices and for updating and patching them to prepare for assessments. An evaluation of service management practices includes looking at how incidents are reported and addressed with the goal of keeping the testing environment operational. Organizations should also create effective contingency plans for assessment environments that may be compromised by unexpected disturbances.

Equally important is the readiness of the people involved in the assessment and support processes, including those who manage assets and resources and help ensure that processes are repeatable and fit within institutional practices. Districts must determine whether adequate staff—for example, test administrators, help-desk personnel, network staff, desktop support staff, and security experts—is in place and receiving sufficient professional training. Besides launching and supporting the online assessments, they should also help sustain the environment as its impact on student learning expands.

Getting ready

The Dell Common Core Readiness Assessment service is designed to identify a district's overall maturity to launch, support, and sustain an effective assessment environment, and to scale according to the enrollment of the organization. Assessment includes site visitations to physical buildings and an analysis of the logical core of the network, as well as evaluation of the actual testing environment with respect to capabilities and capacities. Dell performs a detailed gap analysis to identify needs and then presents a solution matrix that fills the gaps with preestablished, validated solutions. Dell offers end-to-end, field-tested solutions that meet the specifications for online assessments as outlined by the Partnership for Assessment of Readiness for College and Careers and the Smarter Balanced Assessment Consortium, including a full range of laptops, desktops, and tablets powered by Intel® processors. Dell also helps ensure that districts have the necessary infrastructure components and support processes in place to keep operations running smoothly during testing, such as network and system management tools, security solutions, and deployment and support services.

In this way, districts can determine how to effectively promote online assessments not only as a measurement tool that complies with state mandates, but also as an instrument that helps guide instruction, boost student learning, and drive achievement.

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