

# Transitioning to Tablet Computers and Digital Content: Highlights from the Virginia e-Learning Backpack Initiative Summer Institute

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# Purpose

- Assist school divisions as they transition to tablet computers and digital content.
- Focused on key issues including parent and community engagement, policy, infrastructure, devices and device management, digital content and textbooks, and professional development.

# Parent and Community Engagement

- Launching a one-to-one program can be expensive and complicated.
- A comprehensive strategy is required.

# Parent and Community Engagement

- Schools must communicate why they elect to use particular devices.
- Teach parents to use the devices and how to take care of them.
- Keep parents and school boards up-to-date.
- Showcase student work.
- Offer opportunities for expanded learning, community services, and civic participation with the school as a hub.

# Policy

- Policies can be both stumbling blocks and stepping-stones.
- Teachers need policies that support innovation.
- School boards often rush to implement new policies that cover problems posed by technology, but in reality, many existing policies cover these issues.

# Policy

- School boards should craft policies as broadly as possible.
- Acceptable use policies largely reflect federal law.
- Access is a significant policy issue that must be considered.
- Policies regarding content need to help students become safe and responsible users.
- Policies should be flexible enough to allow teachers to appeal on a case-by-case basis to unlock certain sites.

# Infrastructure

- The mobility and personalization afforded by tablet computers will be realized only when students and teachers have consistent and reliable Internet access.
- The shift toward online learning, the concurrent use of digital content and textbooks, and online testing are driving the need for broadband.
- Speed can be affected by a variety of factors.

# Infrastructure

- The State Educational Technology Directors Association has set two targets for broadband in schools:
  - By 2014-15, all schools should have an Internet connection of at least 100 Mbps per 1,000 students/staff; by 2017-18, they should have a least 1 Gbps per 1,000 students/staff.
  - By 2014-15, internal WAN connections--from the district to each school and among schools in the district--should be at least 1 Gbps per 1,000 students/staff; by 2017-18, they should be at least 10 Gbps per 1,000 students/staff.

# Infrastructure

- In making this shift, educators should consider five factors:
  - The infrastructure/broadband must come first, both in and out of school.
  - The devices schools adopt must be flexible, taking into account their multiple uses by various populations with different needs. Broader deployments will require districts to consider enterprise management and address whether the rollouts of new technology can be centralized.

# Infrastructure

- Districts must consider integration and interoperability with new software and apps.
- Instructional and technical support are essential.
- The shift must be integrated into long-range planning, budgeting, and policies.

# Devices

- Tablets provide immediate feedback to teachers and numerous opportunities such as learning analytics, personalized learning, game-based learning, augmented reality, collaborative problem solving, and peer-to-peer communication.
- Tablets also present challenges--best practices are not clear, and device management, security, safety, and legal requirements are ongoing concerns.

# Devices and Device Management

- Schools should focus on pedagogy, allowing the curriculum and learning goals to drive the use and management of the devices.
- Schools are exploring BYOD options--planning is essential to success.
- Internet safety and security are a continual concern. The community should be informed about problems with inappropriate material, cyberbullying, and similar issues.
- Teachers need training to ensure they are properly prepared to address problems. Parents need training if students are using devices at home.

# Content

- Schools need a comprehensive set of applications and online services for teaching and learning, productivity, learning management, collaboration, and assessment.
- Consistent access to digital resources is a primary challenge--highly-interactive multimedia resources require significant bandwidth.

# Content

- Divisions should purchase some hardcover textbooks.
- Divisions should expand lab times at least in one community school.
- Students should be able to check out devices and “smart spots.”
- Staff at public libraries and community centers should be familiar with digital textbooks so they can help students.
- Digital devices can enable more student-driven learning and computer-adapted curriculum.
- Accessibility for students with disabilities should be a major focus in every school.

# Professional Development

- Despite the ease of use of most tablet computers, professional development is still essential to ensuring that educators learn to use these technologies and digital resources in transformative ways.

# Professional Development

- Teachers should have access to hands-on training customized to their individual learning needs.
- Professional development should provide actual tools that teachers can use with their students and offer follow-up assistance as needed.
- Online professional development is becoming increasingly prevalent because it can occur throughout the school year and can be flexible enough to fit teachers' busy schedules.

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