MAXIMIZING the Impact Of Your DIGITAL DEVICE INVESTMENTS
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Maximizing the Impact of Your Digital Device Investments

Expert Presenters:

Eric S. Hileman, executive director of information technology, Oklahoma City Schools, Okla.

Valerie Truesdale, chief of technology, personalization and engagement, Charlotte-Mecklenburg Schools, N.C.
An on-demand archive of this webinar will be available at www.edweek.org/go/webinar in less than 24 hrs.
Computers are for far more than just testing....
77 regular schools, 13 charter schools
40,942 students (2013-14)
50% Hispanic, 25% black
610,613 - Population of OKC (1.2 million in metro)
History Lesson

14 Years with OK SDE

Adopted CCSS 2010

PARCC/Smarter Balanced
## WINDOWS: PARCC ASSESSMENT SPECIFICATIONS FOR WINDOWS DESKTOP AND LAPTOP USERS

<table>
<thead>
<tr>
<th>Operating Systems Supported for PARCC Assessments</th>
<th>Browser Specifications for Windows Operating Systems</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Internet Explorer 9.0</td>
</tr>
<tr>
<td><strong>XP (SP 3)(^1)</strong></td>
<td>No</td>
</tr>
<tr>
<td>Minimum Specification</td>
<td></td>
</tr>
<tr>
<td><strong>Vista</strong></td>
<td>Yes</td>
</tr>
<tr>
<td>Minimum Specification</td>
<td></td>
</tr>
<tr>
<td><strong>Windows 7</strong></td>
<td>Yes</td>
</tr>
<tr>
<td>Recommended Specification</td>
<td></td>
</tr>
<tr>
<td><strong>Windows 8</strong></td>
<td>No</td>
</tr>
<tr>
<td>Recommended Specification</td>
<td></td>
</tr>
<tr>
<td><strong>Windows 8.1</strong></td>
<td>No</td>
</tr>
<tr>
<td>Recommended Specification</td>
<td></td>
</tr>
<tr>
<td><strong>Windows RT</strong></td>
<td>TBD - Not Supported for Field Test.</td>
</tr>
</tbody>
</table>

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1. XP (SP 3) meets the minimum specification for PARCC assessments.
History Lesson

July ’13 - Goodbye PARCC

May ’14 - Goodbye CCSS
“I fundamentally disagree that assessments should drive technology purchasing decisions….Curriculum and instruction should drive it”

@eshileman
“It is instructionally presumptuous to think that one platform or ecosystem will fit all needs. We strive to support multiple pathways for learning”

@eshileman
Digital Game-Based Learning

- Mind Your Own Budget - PC/Mac, ChromeOS, and iOS
- Address financial literacy per OK State law
- Developed by the K20 Center of the University of Oklahoma
Photo Editing

- GIMP
- Photoshop
- Photoshop Elements
- PicMonkey (Chrome app and extension)
Keyboarding

- Dance Mat Tapping
  - http://www.bbc.co.uk/guides/z3c6tfr
Desktop/Web Publishing

- Google Sites
- GAFE
- Scribus
- Microsoft Publisher
Video Editing

- iMovie
- Microsoft Photo Story
- Final Cut Pro 7/X
- WeVideo (ChromeOS)

http://goo.gl/QYrtf0
#GAFE

- Email to secondary students
- Publishing student work
- Collaboration
- Creativity

http://goo.gl/8lXhg0
iPads

- 4000
- Shared/Institutional model
- Carts (130)

http://goo.gl/8lXhg0
iPads

- Educreations
- Puppet Pals
- Nearpod
- Socrative
- Digital Storytelling
- IWB Replacement
Chromebooks

- Dell Chromebooks
- 2100
- Thought Journey

http://goo.gl/lmhU2b
Focus on what matters
Delivering Results
Maximizing the Impact of Your Digital Investments
J Scott Thompson, Instructional Technologist & Education Mobility, Microsoft Education
Enhancing Engagement, Extending Learning

Using Online Testing to Spur Technology Integration and Increase Return on Investment
Charlotte-Mecklenburg Schools (CMS)

- Serves over 145,000 students PK-12th grade in 164 schools
- Serves diverse student body representing 160 countries and ethnic backgrounds
- Magnet programs in 37 schools
- One of largest employers in Mecklenburg County with more than 18,000 staff
- Tremendous support from business and faith communities, with more than 90,000 mentors and volunteers supporting learning
CMS students are preparing to be leaders in a technologically savvy and globally competitive world

Strategic Plan 2018: developed by 22 task forces

Goal One:
Maximize academic achievement in a personalized 21st-century learning environment for every child to graduate college- and career-ready

Goal Six:
Inspire and nurture learning, creativity, innovation and entrepreneurship through technology and strategic school redesign
Comprehensive Plan for Digital Learning Conversion

Strategy:

Use preparation for online testing as an opportunity to redefine, even upgrade, every aspect of schooling to convert to a 21st century learning environment and foster personalized learning for each student.

Leverage online testing to drive technology integration, increase engagement, and extend learning for:

Every child, Every day, Everywhere
Comprehensive Plan:

Expand Online Testing

Expand use of NWEA’s Measures of Academic Performance (MAP) from pilot schools to all elementary and middle schools, three times a year.

Build capacity of school teams to use data generated by online testing to analyze student performance and intervene at the time of need.
Comprehensive Plan: 
Maximize Benefits of Online Testing

MAP is computer adaptive so no two students ever see the same exact test.

Test automatically adjusts with each question, getting harder as students answer correctly, and getting easier when they miss a question. Each student’s achievement level is identified, regardless of the grade of the student.

Analyzing data allows personalized academic intervention and progress monitoring.
Comprehensive Plan: 
Build Capacity of Instructional Leaders

Provide intense training for teachers in expectations set by essential standards

Demonstrate how tech tools can increase student engagement, use of online testing data

Convert to Google Apps for Education (GAFE), increasing ease of using devices

Use blended professional learning: Summer institutes, webinars, wikis, PLCs, Atomic Learning, App of the Week
Comprehensive Plan: Develop Models

Develop pilot schools to demonstrate personalized learning strategies

Identify early adopter digital learning schools to demonstrate digital learning in 1:1 setting

Work with teams on school redesign to rethink use of people, money, and time
Systematic Preparation: Infrastructure

In July 2012, no school was fully wireless and able to support all learners online for classroom learning or for online testing.

Goals:

By opening of school 2013:
   --All classrooms in 164 schools would have connectivity to world’s classroom with “good” coverage (defined as 1.5 access points/classroom to serve 30 students)
   --All classrooms with projection systems (1/3 did not)

By opening of school 2014:
   --All 1,000 portable classrooms would also have connectivity
   --All computers upgraded to Windows 7
Systematic Preparation: Infrastructure

Increasing standards for bandwidth:

- elementary from 10 MB
- middle from 50 MB
- high from 100 MB

to a gigabyte per school in 2014
Systematic Preparation: Logistics

Identify and share methods of scheduling large number of children for online testing with goal of testing all in three weeks

Run simulations to test interoperability

Schedule readiness checks/refresh of plan
Systematic Preparation:
 Equip Teachers with Tech Tools

Laptops for teachers
 HP Revolves – 4,202 + iPads – 12,515

Communication tools: CMSLearns.org, Atomic Learning, App of the Week
Systematic Preparation: Equip Learning Spaces

- Acquire digital content
- Provide mobile learning labs in middle schools to support digital content with Discovery Education’s Techbook in Science and Social Studies

Chromebooks – 14,830 + HP 215s – 960
Extend Learning Beyond School: Before- and After-School Programs

Use mobile learning labs in before- and after-school programs to extend learning for students, using digital content, increasing confidence in reading and math.
Extend Learning Beyond School:
Engage Community

Build awareness of expectations of technology integration so community knows what to expect with access to instructional tools and using online testing to inform teaching

Build understanding of infrastructure need, involving business and community leaders: Tech Summit, Wifi Deserts IToLogy: nonprofit focused on building pipeline of IT workers Cyber Saturdays, Day of Code, STEMersion, Microsoft DigiGirls Geek Squad from Best Buy
Extend Learning Beyond School: Engage Parents

Communicate proactively: parents, teachers, community, business and civic leaders, media

Provide online parent links with transparent, real time data and feedback on students’ learning

Teach parents about new expectations for student work, implications of online testing results

Provide schools with updates for newsletters, talking points for parent meetings, guidelines for device purchase
Extend Learning Beyond School: Engage Parents

Use volunteer coordinators to help parents extend learning beyond the school day with instructional resources free to any student, accessible anywhere with Internet access.

Examples of resources procured for all students:
- DreamBox Math
- Reading A to Z (RAZ Kids)
- Compass Odyssey Learning

Provide guidelines for preferred BYOD tools, using Smarter Balanced specifications.
College and Career Readiness Anchor Standards for Speaking and Listening

The K-5 standards on the following pages define what students should understand and be able to do by the end of each grade. They correspond to the College and Career Readiness (CCR) anchor standards below by number. The CCR and grade-specific standards are necessary complements—the former providing broad standards, the latter providing additional specificity—that together define the skills and understandings that all students must demonstrate.

Comprehension and Collaboration

1. Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others’ ideas and expressing their own clearly and persuasively.

2. Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.

3. Evaluate a speaker’s point of view, reasoning, and use of evidence and rhetoric.

Presentation of Knowledge and Ideas

4. Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.

5. Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.

6. Adapt speech to a variety of contexts and communicative tasks, demonstrating command of formal English when indicated or appropriate.

Note on range and content of student speaking and listening

To build a foundation for college and career readiness, students must have ample opportunities to take part in a variety of rich, structured conversations—as part of a whole class, in small groups, and with a partner. Being productive members of these conversations requires that students contribute accurate, relevant information; respond to and develop what others have said; make comparisons and contrasts; and analyze and synthesize a multitude of ideas in various domains.

New technologies have broadened and expanded the role that speaking and listening play in acquiring and sharing knowledge and have tightened their link to other forms of communication. Digital texts
College and Career Readiness Anchor Standards for Speaking and Listening

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Note on range and content of student speaking and listening

To become college and career ready, students must have ample opportunities to take part in a variety of rich, structured conversations—as part of a whole class, in small groups, and with a partner—built around important content in various domains. They must be able to contribute appropriately to these conversations, to make comparisons and contrasts, and to analyze and synthesize a multitude of ideas in accordance with the standards of evidence appropriate to a particular discipline. Whatever their intended major or profession, high school graduates will depend heavily on their ability to listen attentively to others so that they are able to build on others’ meritorious ideas while expressing their own clearly and persuasively.
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Resources

Tech readiness assessment

School speed test
http://www.schoolspeedtest.org
Beyond *Substitution*

**Support the dynamic instructional setting**

Instructional technology should not only support a redefined vision for learning, but also support educational standards and proven pedagogy that is known today.

Extends the heterogeneous technology environments consisting of existing technology investments such as software, printers, whiteboards, older digital projectors, microscopes...

Online and offline access to vibrant instructional content, apps, and instructional tools.

Form factor should be flexible to support the instructional goals and educational standards. Rich software, modern apps, and diverse instructional ecosystems.
What if students knew if they were writing on grade-level?
Meaningful Instructional Technology

Activate Your Future Today:

No Cost Microsoft Office for qualifying Students and Teachers

Microsoft Office Pro Plus & Microsoft in the Classroom

http://office.microsoft.com/en-us/students

http://aka.ms/edevents
Thank You
An on-demand archive of this webinar will be available at www.edweek.org/go/webinar in less than 24 hrs.
Maximizing the Impact of Your Digital Device Investments

Required Reading from *Education Week*:

**Spotlight on 1-to-1 Computing**

1-to-1 computing programs require a coordinated strategy to both implement and manage students and their laptop and tablet use. In this Spotlight, take a look at how some districts are using 1-to-1 computing, explore how students are learning in “1-to-many” environments, and learn about device management concerns and solutions.