

TECH & LEARNING

IDEAS AND TOOLS FOR ED TECH LEADERS | FEBRUARY 2014 | \$6

TIME TO TEST



IS YOUR DISTRICT
READY FOR
COMMON CORE
ASSESSMENT? (P.21)



IT01
BEYOND THE HARDWARE

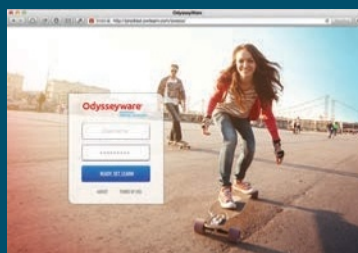
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BACK OFFICE BUSINESS

See page 43



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PUT TO THE TEST
ODYSSEYWARE
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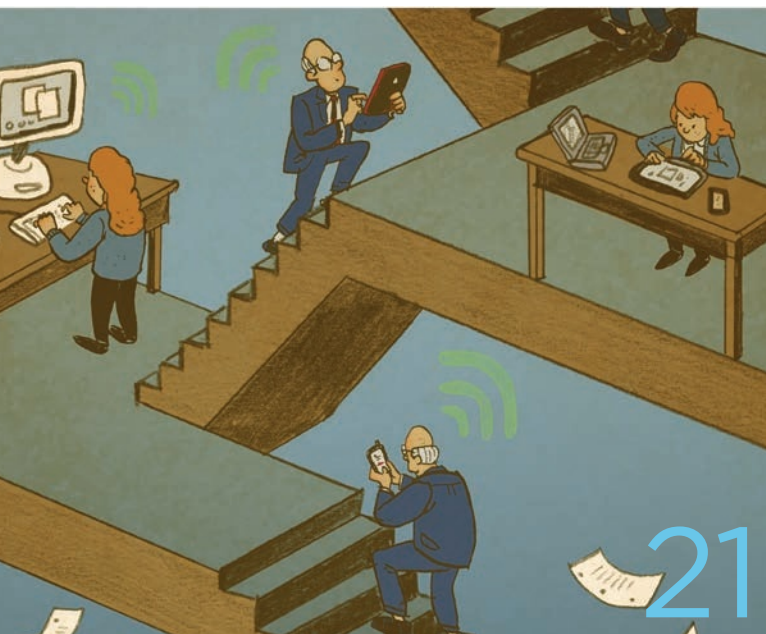


ILLUSTRATION BY ANDREW ROBERTS



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These districts dive into what makes a successful 1:1 and BYOD initiative. Which policies and procedures need rethinking? How do you keep these expensive programs going? Four districts share their stories.

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By Ellen Ullman

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Scan here to access the digital edition, which includes additional resources.



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Publisher: Allison Knapp aknapp@nbmedia.com;
(650) 238-0318; Fax: (650) 238-0263

EDITORIAL

Editorial Director: Kevin Hogan khogan@nbmedia.com
Managing Editor: Christine Weiser cweiser@nbmedia.com
Editorial Intern: Clea Mahoney
Senior Art Director: Nicole Cobban ncobban@nbmedia.com
Associate Art Director: Walter Makarucha, Jr.
Contributing Editors: Judy Salpeter, Gwen Solomon
Custom Editorial Director: Gwen Solomon
gwenso1@earthlink.net
SchoolCIO Editor: Ellen Ullman SchoolCIO@nbmedia.com

ADVISORS

David Warlick, Patrick Higgins, David Andrade, Dean Shareski, Kim Cofino, Darren Draper, Terry Freedman, Cheryl Oakes, Bob Sprinkle, Lisa Thumann, Jen Wagner, Lisa Nielsen, Ben Grey, Michael Gorman, Henry Thiele, Özge Karaoğlu, Kevin Jarrett, Kyle Pace, Steven W. Anderson, Silvia Rosenthal Tolisano, Vicki Windman, David Kapuler, Jenith Mishne, Joyce Valenza

TECHLEARNING.COM

Assistant Web Editor: Diana Restifo

ADVERTISING SALES

East Coast Sales Manager: Cialiann Mitoulis
cmitoulis@nbmedia.com; (215) 370-5813
Business Development Manager: Katie Sullivan
ksullivan@nbmedia.com

MARKETING AND EVENTS

Marketing Manager: Jared Stearns jstearns@nbmedia.com
Director of Events: Diana Milbert diana@dmeeventspro.com
Production Manager: Nicole Spell nspell@nbmedia.com

CIRCULATION

Group Director, Audience Development:
Meg Estevez mestevez@nbmedia.com

LIST RENTAL

(914) 925-2449; danny.grubert@lakegroupmedia.com

REPRINTS AND PERMISSIONS

Wright's Media: newbay@wrightsmedia.com; (877) 652-5295

EDITORIAL AND ADVERTISING OFFICES

28 East 28th Street, 12th Floor, New York, NY 10016
Phone: (212) 378-0400; Fax: (650) 238-0263
For general editorial correspondence:
techlearning_editors@nbmedia.com

NEWBAY MEDIA LLC—CORPORATE

President & CEO: Steve Palm
Chief Financial Officer: Paul Mastronardi
Vice President of Production & Manufacturing:
Bill Amstutz bamstutz@nbmedia.com
Vice President of Digital Media: Joe Ferrick
Vice President of Audience Development:
Denise Robbins drobbs@nbmedia.com
Vice President of Content & Marketing: Anthony Savona

NEWBAY MEDIA K-12 EDUCATION GROUP

Executive Vice President/Group Publisher: Adam Goldstein
Publisher: Allison Knapp
Editorial Director: Kevin Hogan
Online Production Manager: Rob Granger
Web Production Specialist: Ashley Vermillion
Web Director: Ragan Whiteside

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PAST THE POLITICS



Lately, it seems I have been confusing and disturbing friends and colleagues from across the political spectrum. My general support for the charter school movement and the principles behind the Common Core initiatives draw ire from those on the left, while my usual skepticism of corporate “interests” in education via E-Rate and assessment dollars brings smirks from those on the right.

I must admit to enjoying the disruption. The issues are thorny and complex and I have the luxury to avoid particulars. Many of our contributors this month don’t have it so easy. Ronald S.

Chandler, Chief Information Officer, and Dr. Themistocles Sparangis, Chief Technology Director, IT Customer Services for Los Angeles Unified School District, detail their progress in rolling out the largest 1:1 initiative ever attempted (Beyond the Software, p. 34). You can also watch the archived panel discussion they held at our most recent Techforum event here: www.livestream.com/techlearning. Connie White, Director of Technology & Learning, Lakeview Academy, Gainesville, GA, lays out some of the professional development strategies she uses for not only students, but faculty and parents, when it comes to the acceptable use of devices in her school (X:1 How to Manage a Multitude of Mobile Devices, p. 38).

I feel all of our contributing educators this month did a great job of distilling these issues to focus on what I believe *Tech & Learning* does best—share tools and ideas for edtech leaders. We’ll leave the politics to others. Of course, all of these topics are being hashed out online daily at techlearning.com. Come and share your opinions.

— Kevin Hogan
Editorial Director
khogan@nbmedia.com



I MUST ADMIT TO ENJOYING THE DISRUPTION. THE ISSUES ARE THORNY AND COMPLEX AND I HAVE THE LUXURY TO AVOID PARTICULARS. MANY OF OUR CONTRIBUTORS THIS MONTH DON'T HAVE IT SO EASY.



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NEWS AND TRENDS

THE LATEST NEWS & STATS AFFECTING THE K-12 EDTECH COMMUNITY



1

Top 100 Sites and Apps of 2013

David Kapuler cites digital storytelling as one of the most prominent themes in this year's list.

2

Awards of Excellence 2013: Best New Hardware

Tech & Learning's picks for the best hardware of the year.

3

Digital reader is an Excellent Classroom Tool

This "app of the day" is ideal for collaborative, customizable digital reading for all subject areas.

4

Top 10 Sites for Creating a Chart or Graph

These sites are ideal for creating a chart or graph.

5

There's an App for That

Vicki Windman lists apps that align to Common Core State Standards.

6

Top 50 Math Sites and Apps

David Kapuler lists his favorite apps and sites for math.

7

Free Web Sites to Help Meet the Common Core Standards

Vicki Windman's recommendations for teachers who want to use resources with an interactive whiteboard.

8

10 Things School Leaders Do to Kill a Teacher's Enthusiasm for Technology

J. Robinson lists ten things a school leader can do (or not do) to quash teacher enthusiasm for using technology in their classrooms.

9

Flipping Your Faculty Meetings

Based on the popular flipped classroom concept, Nancy Caramanico discusses ways to flip your faculty meeting.

10

Google Cultural Institute: Eiffel Tower

Visit Paris on this virtual tour.

BLOG BITS

Many of us have not accepted that much of what we value and believe about teaching has already been replaced by technology.

—Chad Evans

The art of tweeting as I've come to experience it ultimately means getting others to notice what you have to say. There's no room for the long-winded.

—J. Robinson

Standards alone, even if they are rigorous, do not guarantee rigor in the classroom. Your instructional practices, or how you implement standards, are just as critical as the curriculum.

—Barbara Blackburn



TOP TWEETS

@gcouros: Teachers using Twitter as their superpower via **@SalimaHudani**: <http://huff.to/1chfaap>

@justintarte: Great schools treat a parent walking through the front doors just like they would the district superintendent.

@pasi_sahlberg: Finnish schools are having a chairless January. National campaign encourages teachers to find new ways to avoid seat work. Move to think.

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Ethernet lets you plug direct to your computer for control and uploading graphics.

If you've ever wanted to get into the television industry, then here's how!

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Live Creative Power

ATEM Television Studio operates as a professional M/E style switcher, so you can take your skills into any broadcast TV station! You get the most creative solution for live switching, with cut, mix, wipe, dip and more! You can even load graphics directly from Adobe Photoshop into the 2 built in media players for live keying!



Incredible Features

Only ATEM includes upstream chroma key for green and blue screen shooting. You also get pattern, shaped and linear keying, 2 downstream keyers, 2 built in media players and more! The built in multi view allows all cameras, preview and program to be viewed on a single SDI or HDMI monitor or television, so ATEM is perfect for portable location use! Now you can cover any live event, anywhere!



More Connections and H.264

ATEM Television Studio includes loads of SDI and HDMI connections for professional SDI cameras or HDMI consumer cameras! All inputs feature re-sync so you can plug in anything! You also get SDI and HDMI outputs, plus built in H.264 encoding for generating files for the internet, iPhone, iPad and more! Imagine live production direct to H.264 QuickTime files for instant viewing!



Built to Perform

ATEM uses a familiar M/E style of operation so you get an instantly familiar workflow that's fast and easy to use. ATEM includes a software based control panel for Mac and Windows! If you need a hardware control panel then simply add the ATEM 1 M/E Broadcast Panel for a true broadcast grade solution. Thousands of ATEM switchers are used today for live broadcast events such as sports, music festivals, drama, reality TV and much more!

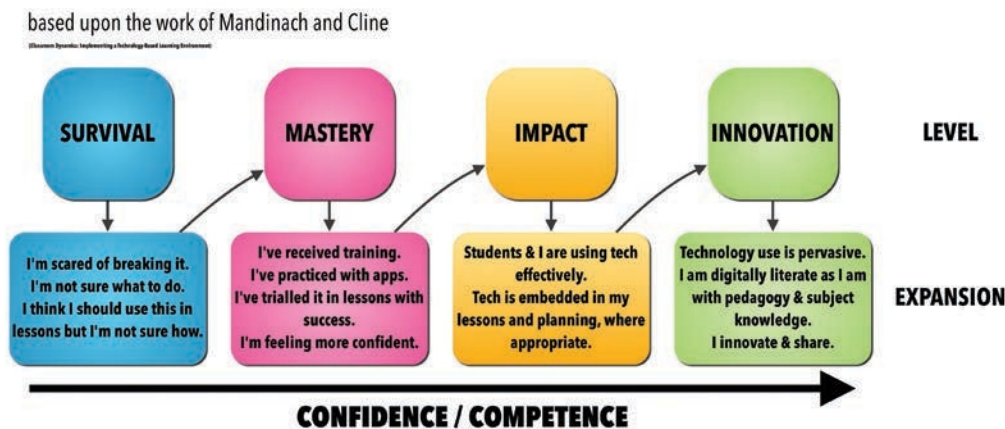
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TEACHER CONFIDENCE IN USE OF TECHNOLOGY

Mark Anderson of the *ICT Evangelist* blog wrote recently that one of his favorite ways to support colleagues is through the use of Digital Leaders. He writes that their non-confrontational and supportive training is the perfect recipe for helping educators. In researching these conclusions, he came across a piece of writing by Mandinach & Cline in which they talked about various stages of confidence related to technology and turned it into the following flow chart:



READ MORE AT [HTTP://ICTEVANGELIST.COM](http://ICTEVANGELIST.COM)

SITE WE LIKE

INTERMATH.COE.UGA.EDU/TOPICS/GEOMETRY/HOMEPG.HTM



This site was developed at the University of Georgia to support middle school math teachers.

READER SURVEY PISA RESULTS: ARE THEY GOOD, BAD OR IRRELEVANT?



I disagree with both of them and think there's something entirely different to be learned from the results.
15%

I agree with **Secretary Duncan** that they are a sign that our standards are too low and we still have a long way to go.
23%

I agree with **Diane Ravitch** that the scores are predictable and irrelevant and we need to focus on the things that can't be tested.
62%

SOURCE: K12BLUEPRINT.COM

FOR MORE SURVEYS, VISIT WWW.TECHLEARNING.COM/FEB14

Classroom management now includes support for Chromebooks and iOS/Android tablets

Monitor entire classroom - Remote control students - Block internet
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for Windows and beyond



Including support for
iOS/Android tablets



Tablet and Smartphone
versions for teachers



Multi-platform support for
Win, Mac, and Linux classrooms



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Classroom technology is evolving ... but is your classroom management software keeping pace?

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GRANTS & CONTESTS

Search for America's 2014 Top Young Scientist

Discovery Education and 3M announce the opening of the 16th annual Discovery Education 3M Young Scientist Challenge for students in grades 5-8. Encouraging students to share their passion for science, the Discovery Education 3M Young Scientist Challenge asks students to create a one to two-minute video communicating the science behind a possible solution to an everyday problem. Through the Challenge, students have the opportunity to compete for \$25,000 and the title of "America's Top Young Scientist."

Deadline: April 22, 2014

Details: www.youngscientistchallenge.com



Peyton Robertson, America's 2013 Top Young Scientist, presents his final project at the Discovery Education 3M Young Scientist Challenge final event at the 3M headquarters in St. Paul, Minn.

Win a Wireless Lab

CDW-G and Discovery Education announced the launch of the 12th annual Win a Wireless Lab Sweepstakes program. The 2014 Win a Wireless Lab Sweepstakes will award two schools \$45,000 each in technology grants, including on-site professional development from CDW-G and Discovery Education and



a \$5,000 Discovery Education digital media reward. U.S. public and private school employees are eligible to enter the sweepstakes once a day or increase their daily entries via Twitter at @WinWirelessLab. CDW-G and Discovery Education will also award technology prizes to 16 weekly winners. Winners will be selected at random from each week's entries.

Deadline: May 1, 2014

Details: www.winawirelesslab.com

Social Media Survey Shows Teachers Still Concerned

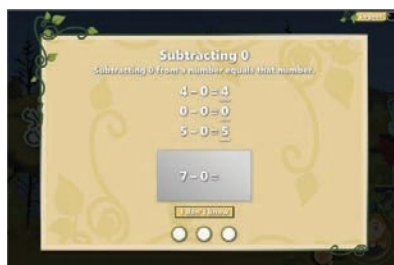
A new national survey from University of Phoenix College of Education suggests K-12 teachers remain unclear about how to integrate social media into the classroom. Here are some of the key findings:



FUNSTOCK/ISTOCKPHOTO/THINKSTOCK

- * Eighty percent of K-12 teachers worry about using social media with students and parents.
- * More than a third who use social media have experienced issues with students and/or parents attempting to connect with them via social media.
- * Only 17% of K-12 teachers encourage their students to connect with them via social media, and only 18% have integrated it into their classrooms.
- * Less than one-third of teachers have received training on how to use social media to connect with their students, or as an educational tool.

TOP APPS FOR TEACHING



Reflex: Math Fact Fluency



Faces iMake



BioDigital Human

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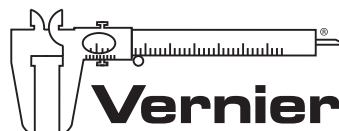
Video Physics
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Video analysis of an accelerating Segway®

"As a teacher, I love the fact that students get their own personal copy of experiment data to analyze and annotate. Using Vernier technology with mobile devices, students can work either in lab teams or individually, but the most critical part, the analysis, is the responsibility of the student." - Coleen Swihart, Middle School Science Teacher, Health & Science School, Beaverton, OR

"Vernier's Video Physics app for the iPad is a great way to not only show students how a physical phenomenon occurs, but help them graph it as well." - Brian Nadel, Scholastic Tech Tools, July 2011



PRODUCT REVIEWS

TECH & LEARNING EDITORS TAKE SOME NEW PRODUCTS FOR A TEST DRIVE

BRETFORD 36-UNIT MDM CART

www.bretford.com ■ Retail Price: Contact Bretford for pricing details at 800-521-9614

By Peter Griffiths

The Bretford 36-Unit MDM charging cart is designed for tablets as well as Chromebook and Ultrabook computers.

Quality and Effectiveness:

The charging cart comes preassembled. When we received it, we only had to readjust the separators that fell off during delivery. The reviewer used the cart for eight laptops (15.6" screens) and six Chromebooks (11.6" screens), but the cart has enough slots for 36 devices. The cart can accommodate device sizes ranging from large-screen laptops to smaller tablets.

Ease of Use: Users can easily fit all of the cords and chargers into the back of the cart and thread the cords through the holes to charge up devices. It is very simple to pull a device out of the cart and place it back after use.

TOP FEATURES

- Holds up to 36 devices
- Allows for ease of mobility and security for devices
- Allows greater teacher involvement by allowing teachers to bring their devices to their classrooms rather than taking the students to a computer lab.
- The Power Manager is designed to charge a full cart of laptops using only one wall outlet. The system constantly re-evaluates the demand for power and concentrates on the devices that need it the most, adding power strips as battery demand drops, until all devices are charging simultaneously.



OVERALL RATING:
This cart can be helpful for both district training and classroom environments. The cart's durability and mobility make it ideal for today's dual-use training/classroom spaces. The cart is a great solution for multiple-device environments.

Creative Use of Technology: This charging cart is perfect for campuses that have multiple devices, such as Dell laptops, iPads, iPad minis, Chromebooks, tablets, or e-readers. Our curriculum department was able to secure the computers by locking them up and could easily roll the cart to other parts of the building without damaging the devices.

Suitability for Use in a School Environment: The fact that this cart can charge many kinds of devices makes it perfect for BYOD and multiple-device environments. This cart could even eliminate the need for a computer lab since it can hold up to 36 devices, which frees up space and funds.

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ODYSSEYWARE

www.odysseyware.com ■ Retail Price: Contact company for pricing.

By Shannon Mersand

Odysseyware provides course materials and a learning management system to deliver courses to students in grades 3-12. Instructors can select courses to supplement the regular classroom, or for credit recovery or advancement. For many courses, instructors can choose which parts of the course materials to include and add customized assignments. They also offer Common Core Assessment and remediation modules for grades K-8 in math and English Language Arts.

Quality and Effectiveness: Odysseyware offers over 160 courses at various grade levels in multiple subject areas. Courses include core subjects such as math, science, history, and English Language Arts as well as CTE courses, electives, Common Core Assessment Readiness, Advanced Placement, and GED prep. Odysseyware translates materials into nine languages and offers text-to-speech software right in the course interface. Course materials are updated frequently and

TOP FEATURES

- **Flexibility:** With the option of using all or part of each course, teachers are able to build courses that meet the needs of their classrooms and their students.
- **Differentiation:** The translation and text-to-speech features of Odysseyware make differentiation and learning style preferences easy to accommodate.
- **Alignment:** The CCSS curriculum maps make it easy for teachers to use Odysseyware to supplement their course materials in areas for which their students may need support or enrichment.

OVERALL RATING:

Odysseyware may well be the answer many districts are looking for as they seek to incorporate blended and online learning into the curriculum. With flexibility in use for re-teaching or enrichment, Odysseyware offers solutions for many schools that struggle to meet the needs of their students.

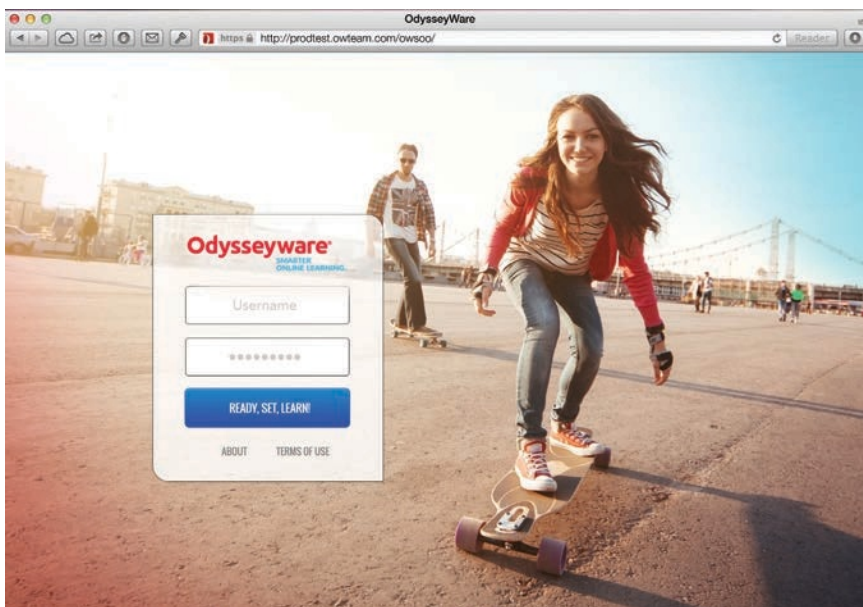
updates are immediately pushed to the user as it is a Web-based interface. The pre-built, well-designed curriculum makes this product a perfect solution for schools and individual teachers.

Ease of Use: The software is relatively self-explanatory and anyone with prior experience with technology should have no problems navigating. For users who are less tech savvy, support materials are abundant and clear. Because the software is Web-based, there are no servers or maintenance issues to worry about on the user end. You do, however, need to ensure that the latest version of Adobe Flash is installed on any machines using Odysseyware.

Creative Use of Technology: Odysseyware offers curriculum maps for its courses that tie directly to the CCSS, so teachers will know which standards are being met with the curriculum assigned. Some courses appear to be very text-dependent and may be intimidating for some students. Games and simulations at the lower level are appropriate to reinforce the text from the lessons. Most assessments are self-graded and tracked by the program.

Suitability for Use in a School Environment:

Odysseyware can easily be incorporated into existing curriculum as a supplement for re-teaching or as an enhancement for more advanced students. With the variety of courses available, schools can offer electives that were previously unavailable to students, and teachers can incorporate new materials into their classrooms. With very basic training for teachers and students, Odysseyware can be up and running in a school in a few short days.





Dynamic SoundField

A new era in classroom amplification

Phonak Dynamic SoundField offers all the benefits of classroom amplification, such as improved student attention and better teacher vocal health, without any of its traditional problems. Its cutting-edge sound performance is designed to ensure there are no distracting echoes or feedback, while its three transmission modes allows every student access to the speaker, whether they have normal or impaired hearing. Best of all, Dynamic SoundField is simple to use; its single loudspeaker removes installation headaches and its automated settings simplify the teacher's job.

www.DynamicSoundField.com

PHONAK
life is on

BRITANNICA PATHWAYS: SCIENCE

<http://info.eb.com> ■ Price: A subscription for Britannica Pathways: Science is determined by number and nature of access. Contact sales for specifics.

By MaryAnn Karre

Britannica's Pathways: Science is an online, interactive approach to teaching the scientific method in grades 6, 7, and 8 with a framework that is ideal for project-based learning, teacher-led instruction, and STEM programs.

Quality and Effectiveness: Created with the goal of targeting common scientific misconceptions among middle school students, Britannica's Pathways: Science is a lesson package for teaching life, physical, earth, and space science. Rather than just presenting scientific facts like a basic encyclopedia, Pathways guides students through a method of inquiry from the essential question to hypothesis to information gathering and finally to an evidence-based conclusion, which enables students to learn as they conduct research. Students are shown how to reach conclusions by comparing and contrasting information, determining central ideas, evaluating arguments, and analyzing evidence. The user can then view or print the completed lesson responses and notes.

Ease of Use: Since this is a Web-based program, installation is a matter of buying the service and ensuring all computers are equipped with proper supporting programs, Internet connections, and settings. As teachers and students begin to learn with Pathways: Science, obvious and intuitive navigation instructions and lots of support materials make this an easy program to use. There is a teacher dashboard, which outlines various sample implementation models, helps guide instruction, explains the teaching philosophy



that is supported, and indexes lessons by the state standards. These resources are also available and printable through a Teacher Notes link in the "Investigate" portion of a lesson, along with a detailed description of the resources presented.

Creative Use of Technology: Pathways: Science is easy to use. There's no limit on the number of simultaneous users, and the program is fully compatible with technologies such as interactive whiteboards and virtual learning platforms. It also works equally well on PCs, MACs, iPads, and other Internet-compatible devices. This makes the homework and preparation for flipped lessons much easier, and it allows teachers to more easily plan for whole-group, small-group, and individual learning.

TOP FEATURES

- With nearly 100 lessons tied to the Common Core and Science curricula, Pathways: Science uses a consistent Predict-Investigate-Conclude process that teaches inquiry-based learning, critical thinking, and conceptual change, while presenting a wide variety of quality resources from the Britannica Online School Edition.
- A simple Teacher Dashboard makes it easy to manage classes, track student progress, search for lessons by standards, and implement effective inquiry-based lessons.
- Since it is Web-based and equally effective on any Internet-ready device, Pathways: Science can be accessed from school, home, or anywhere that the Internet is available, making it ideal for BYOD programs and flipped learning situations.

Suitability for Use in a School Environment: A wide variety of resources is presented, which allows students to choose their preferred format and addresses many different learning styles. The modules engage students through inquiry-based learning. This method helps them learn to form hypotheses, test their ideas, evaluate data, and reach informed conclusions. Teachers can track students' progress and allow them to restart a lesson. The material and research method support the Common Core standards, foster reading in the content areas, and encourage students to drive their own learning.



active
passive
public
private
digital
analog
formal
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CCSS ASSESSMENTS: ARE YOU READY?

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CCSS ASSESSMENTS: ARE YOU READY?

Will districts be tech ready to administer the nation's new assessments?

By Doug Levin and Geoff Fletcher

The Race to the Top Assessment program is ambitious and has the potential to help make far-reaching changes not only in how students are assessed, but also in how teachers teach and students learn. One important feature shared by both the PARCC and Smarter Balanced assessment systems is that student assessments will be technology-driven. About two-thirds of states currently deliver one or more state tests via technology.

For many schools and districts, however, the shift to computer-based assessment for the majority of students will be new. There are compelling advantages to technology-based assessment systems, when compared to current paper-and-pencil approaches. Chief among these advantages is the ability to capture more robust data about student knowledge, skills, and abilities across the full range of content standards through interactive items that can be reliably scored for a low cost. Technology-based assessment can also ensure that results are made available to educators and students in time to intervene and adjust instruction for students who are having difficulty. Additionally, technology-based assessments can be a marked improvement over paper-based tests for ensuring security of both test items and student responses. Indeed, if the aim is to implement better tests with higher college- and career-ready standards, it is sound policy to accelerate the trend toward technology-based assessments.

Yet, in the absence of direct federal support for the technology needs of districts and schools for the nation's new assessments, the following important questions arise:

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- Can school technology investments in textbooks and digital learning be leveraged for assessment?
- Will this shift disadvantage students who do not have access to technology outside of school?
- Will schools be able to accommodate both instructional and assessment needs for technology?
- Most significantly, will schools be 'technology-ready' to administer next generation assessments?

These questions — and particularly the last — cannot be answered with a simple yes or no for a number of reasons. First, the nation lacks comprehensive, actionable data on school technology access (this is an issue that the PARCC Consortia are helping to address). Second, even without high-quality data, it is clear there are vast differences among school districts across the country in terms of how they have deployed technology in the past and how they are implementing improvements as an engine of school reform.

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CCSS ASSESSMENTS

The ability of the nation's schools to administer the next generation of assessments hangs in the balance.

TECHNOLOGY FOR TESTING: DEVICE REQUIREMENTS

For the initial year of test implementation, the Consortia have set a highly flexible—and arguably low—bar for the adoption of the technology necessary to run the tests. This was done to accommodate the range of technology currently available in schools and the anticipated access students will have to it.

In general, the Consortia have pledged to support nearly every major computer operating system on the market today in a variety of forms (e.g., desktops, laptops, and tablets)—provided that the screen size is sufficient and the system is able to run peripheral devices that may be required. This has required the Consortia to pay special attention to interoperability,

THE TECH DIRECTOR'S CHECKLIST FOR COMMON CORE STATE STANDARDS



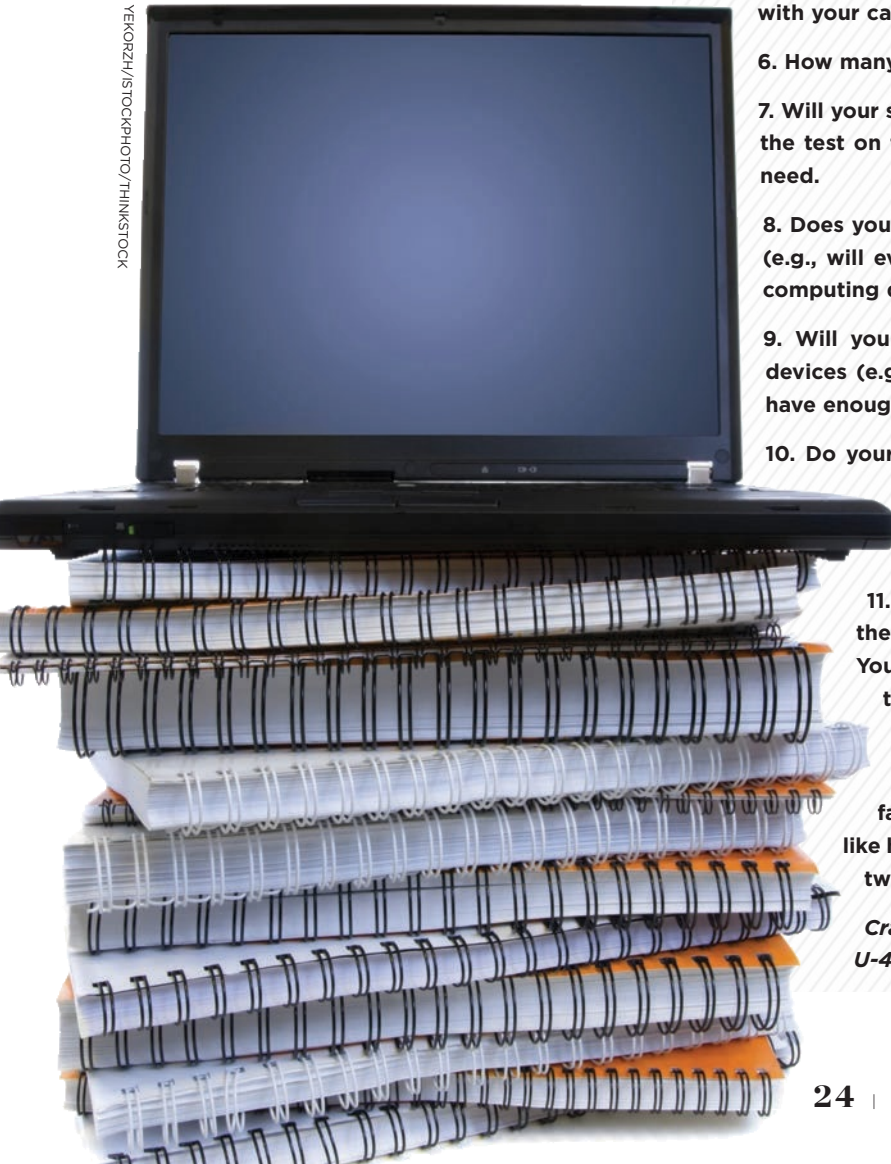
BY CRAIG WILLIAMS

Here is a quick checklist for tech directors for assessment testing to prepare for the Common Core State Standards. This list was created during my preparation for the PARCC test in Illinois, and it is by no means exhaustive. The following 12 tips will be helpful as you prepare:

1. Do you have enough bandwidth to connect to the Internet? The PARCC and Smarter Balance sites have a list of these requirements.
2. Do you have enough bandwidth between your schools and the data center?
3. Do the computing devices for the test have at minimum 10" screens and keyboards?
4. Do you have headphones for every device you are planning to use?
5. Is your state giving all sections of the test on the computer? This will help with your capacity planning.
6. How many students in each grade per building will be taking the test?
7. Will your state or district require that all students from a specific grade take the test on the same day? This will affect how many computing devices you need.
8. Does your district want to test all students within a certain time of the day (e.g., will everyone be tested before lunch)? This will also affect how many computing devices you need.
9. Will your wireless network be able to handle a mass concentration of devices (e.g., up to 30 devices) in any room? This assumes that you do not have enough lab space to give the test only in the lab.
10. Do your students have enough computing skills to ensure that they are using their time wisely during the testing period? This may seem obvious, but the Common Core assessments will involve more mouse and keyboard skills than previous online tests.
11. Will you have enough tech staff available in each building during the testing window to support the test in all locations of the building? You will have to work with your administration to decide how many techs you will need per testing room.
12. Do your teachers have the training to answer basic computing questions on all testing devices? Your teachers may be very familiar with using some devices, but what about the accessories, like headphones, keyboards, or tablets? If the answer is no, that will be two trainings to keep in mind for your teaching staff.

Craig Williams is Director of Information Services for School District U-46 in Elgin, IL.

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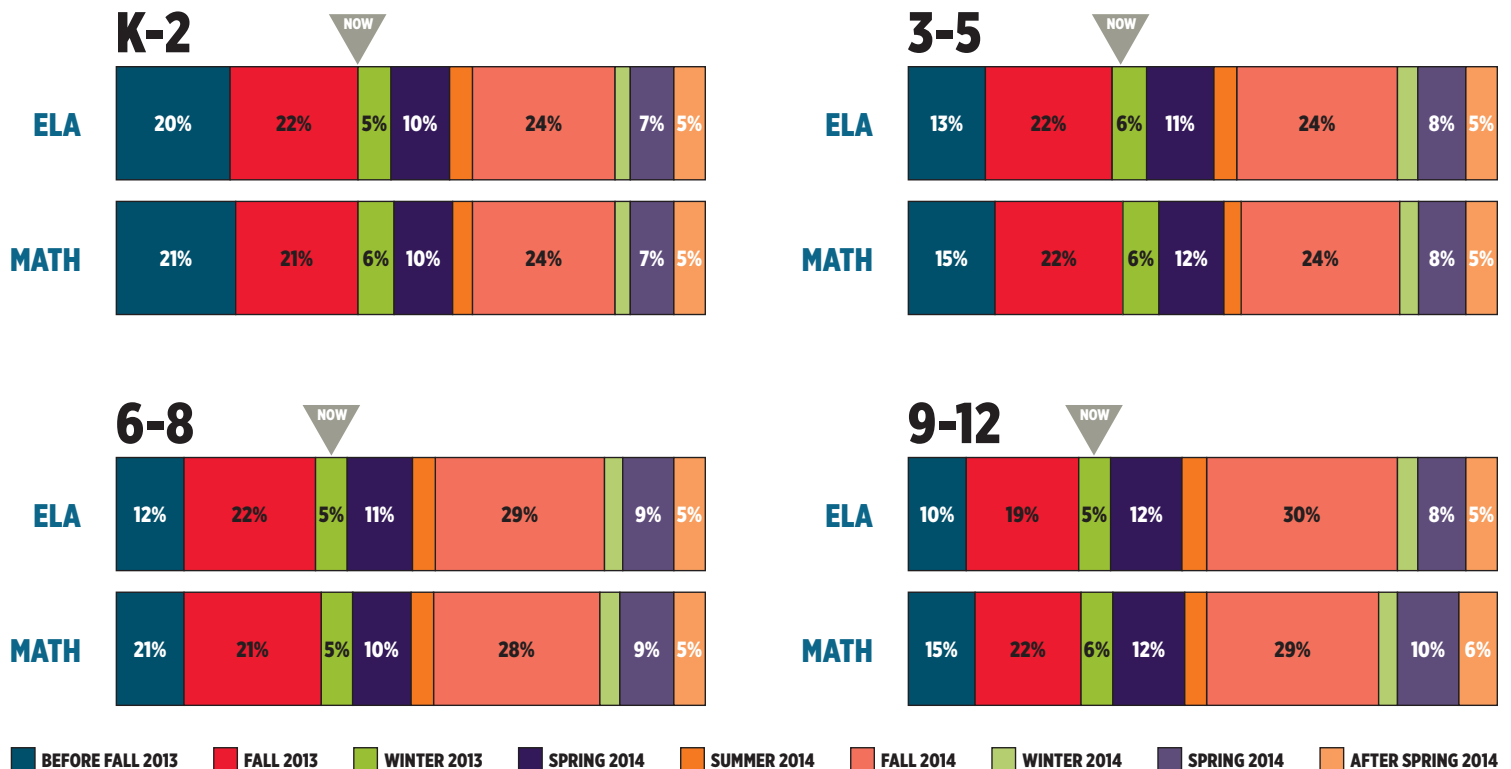
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DISTRICT TIMELINES FOR FULLY TEACHING AND ASSESSING CCSS



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security, and accessibility for students with special needs.

Moreover, the Consortia have pledged to support legacy technology that exists in schools, some of which is more than a decade old. For instance, schools will be permitted to use desktop computers and laptops that rely on Microsoft Windows XP, even though support for XP (e.g., security patches and updates) will cease on April 9, 2014. A primary reason for this is that more than half of the computers reported in the online PARCC-Smarter Balanced Technology Readiness Tool are running Windows XP.

The Readiness Tool, a survey device created by Pearson under a contract with both Consortia, with advice from the State Educational Technology Directors Association, contains data on more than six million devices in use in American schools as of Spring 2013. Requiring those devices to be upgraded or replaced by the 2014-2015 school year would be difficult both financially and politically.



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TOP 5 CRITICAL COMMON CORE-RELATED ISSUES

Ranked as 1st or 2nd in Importance



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BEYOND DEVICE ACCESS

With the Consortia's Technology Readiness Tool, districts in participating states can calculate technology readiness for the new assessments based on the following five interrelated factors:

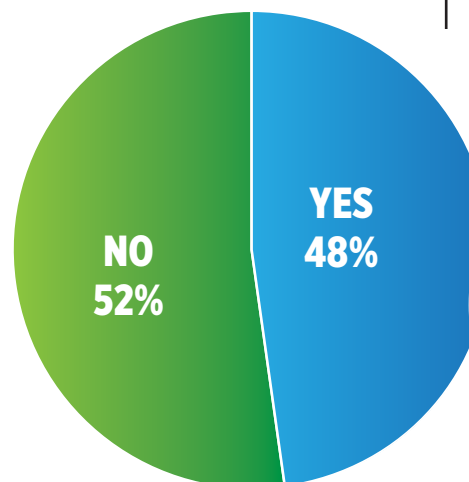
- Number of eligible testing devices,
- Internet bandwidth to a building,
- Network connectivity within a building,
- The number of students to be tested simultaneously, and
- The length of the test and testing window.

Within these factors there are a number of considerations that warrant special mention. They are as follows:

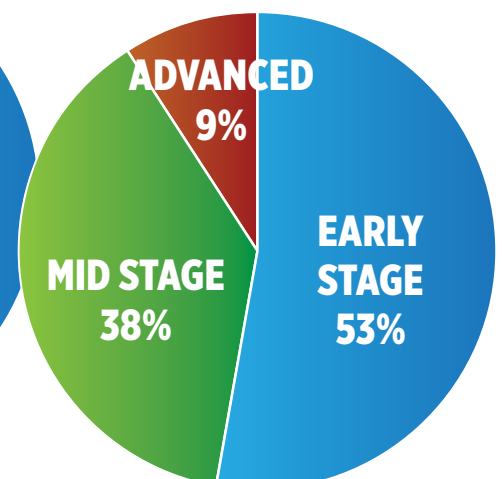
External and Internal Bandwidth:

Many districts, particularly those in rural areas, report they lack adequate bandwidth at schools. However, many districts lack the tools and sophistication necessary to determine the extent of the problem because there are many variables that can affect it. Key factors include the age of the district's or school's servers, the traffic

Have you developed or are you developing rubrics to ascertain quality of curriculum and instructional materials?



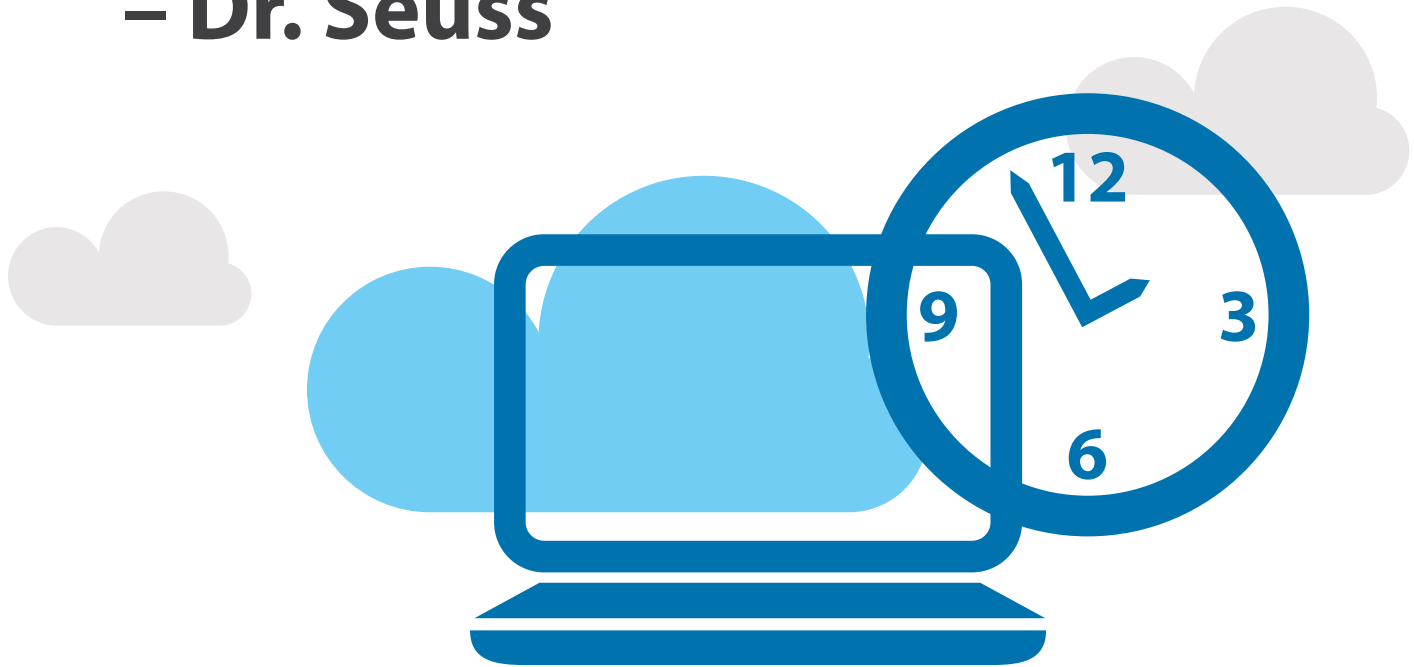
To what degree have you completed vertical alignment of curriculum (backtracking course alignment up and down grades)?



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CCSS ASSESSMENTS

load on different parts of a district's network, what devices are used, determining whether operations are wired or wireless, and locating the router in relation to the room(s) where testing will be done. The State Educational Technology Directors Association recommends that schools take advantage of free online broadband speed testing tools to help diagnose these and related issues. (For more information, see this association's commissioned paper, which has evaluated a number of these tools: www.setda.org/web/guest/schoolspeedtests).

Technical Support: As states move to new assessment systems, teachers, administrators, and students must have confidence that the technology will work for the assessments so they can focus on what is important—students demonstrating their knowledge and skills.

Preparing the devices and infrastructure for the assessments by installing a secure browser or applications, for example, and testing each to ensure they are in working order, will take time and expertise. And if a computer breaks or a network goes down, districts must have adequate personnel and back-up devices so that disruptions are minimal.

Professional Development: All teachers of students in grades that will be assessed, as well as other test administrators, will need to be trained on how the assessment system works, how to ensure students are correctly logged onto the system, and how to proctor the exams.

A much more difficult professional development task will be ensuring that teachers employ the very different pedagogies demanded by the Common Core standards. A key element of these pedagogies is seamless integration of



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TECHNOLOGY READINESS FOR ASSESSMENT IS NOT SEPARATE FROM READINESS FOR INSTRUCTION AND LEARNING. IN THAT LIGHT, IT IS NOT A DESTINATION FOR SCHOOL DISTRICTS, BUT AN ONGOING PROCESS THAT IS VITAL FOR 21ST-CENTURY EDUCATION.

technology throughout instruction to solve complex problems and demonstrate mastery in ways similar to the assessments. While this is often not considered a part of technology readiness considerations, there may be no greater threat to readiness than the preparation of teachers to teach the Common Core effectively.

Given the compelling advantages of a technology-based assessment system as compared to paper-and-pencil approaches, schools and districts will need to ensure they are technologically ready for the 2014-2015 school year.

More importantly, technology readiness for assessment is not separate from readiness for

instruction and learning. In that light, it is not a destination for school districts, but an ongoing process that is vital for 21st-century education.

Many districts will be ready when the assessments are administered the first time, and some may bridge their readiness gap with a paper-and-pencil approach for a few more years. Yet as districts move forward, there is no question that it will take a concerted effort and focused leadership to ensure that all K-12 students are provided the opportunity to learn and demonstrate their learning with tools that are already commonplace in both colleges and workplaces across America.

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Interview with **Rod Smith**



Title: Director of Technology
School District: Clayton County Public Schools
City/State: Jonesboro, GA
District's Web site: www.clayton.k12.ga.us

Description of your District's Program

The Clayton County Public School system has been a wireless environment for approximately five years, and individual schools have BYOD policies in place. When we began, mobile devices were not so readily available. District leaders were not considering outfitting schools or classrooms with these devices, nor were they considering how many students and teachers would own their own mobile device.

As we increase BYOD, which adds many devices to our environment, we require changing our infrastructure from using wireless access points to increased wireless density and capacity. With so many devices requiring access to the network, we have to create more capacity. We will use our next big budget to upgrade our wireless infrastructure to better provide 1-to-1 and BYOD initiatives.

The district has had an investment in a video conferencing solution with a plan for what the district could achieve. We are now in the process of developing a new plan to take even greater advantage of the system. We've used it for foreign language classes, distance learning, and collaboration across district leaders. Because we have this system at every school and at our central office site, we feel we can leverage this solution even more.

What instructional technology accomplishments are you most proud of?

Although I am new to my current role, I started my teaching career in this district almost 20 years ago. Coming back to the district, I am impressed with the progress they made to keep up with technology for students and teachers and to use it for instruction and to increase student achievement. Teachers are fully invested in using social media, tools like Edmodo, and others.

What has been the greatest change you've seen at your district as a result of teaching and learning with technology?

Students are more engaged and invested in their learning when they have the opportunity to use technology in their instructional tasks. I have seen dedicated teachers making the shift to put technology into the hands of students. And for me, it's not about the technology; it is about teaching and learning and how best to serve our students. We give students access to the tools and technology they need to increase standardize test graduation rates and being more prepared for college and careers.

How do you measure success?

We start with asking ourselves if the initiative is increasing student achievement. If the answer is no, then we question why are we doing it and reassess. It is more about teaching and learning than about technology, so we look for increased graduation rates, higher test scores, greater student attendance, and decreased disciplinary issues. However, we do not focus on these alone. We take other factors into consideration in order not to miss some students' achievements. For example, students who don't test well may have other strengths that they can demonstrate.

What was the biggest lesson(s) learned throughout the process?

The district's strategic plan should be the guide for implementing technology programs. We've learned that it is necessary to have a fully developed strategic plan and technology plan that are explained and discussed across the district. As planners, we must make everyone involved aware of the equipment and applications and our expectations of their uses in the classrooms. We know not to purchase technology for the sake of having technology so district leaders should communicate how technology is expected to improve teaching and learning. We need to state goals clearly so everyone knows what we expect to happen when this technology is implemented.

If you could offer advice to other districts that are getting started with technology, what would it be?

Districts should plan thoroughly and carefully and make their technology program match strategic goals. A series of steps includes:

- | | |
|--------------------------------|-------------------------------|
| Setting Goals | Reviewing Available Resources |
| Aligning to the Strategic Plan | Communicating the Plan |
| Identifying Stakeholders | Establishing a Timeline |
| Understanding the Benefits | Rolling Out the Project |
| Calculating Cost | Sharing Information |
| Realizing the Risks | Encouraging Adoption |
| Considering Logistics | Measuring Success |
| Determining Vendor Criteria | |

Rod's Advice: Key Factors for Success

- Vision - Define and share your vision for success.
- Foster Collaboration - Identify key stakeholders - including leaders, teachers, community members, and students - who all have a vested interest in the success of your vision. It's important that stakeholders believe that they have a voice. Then you have a greater chance of success.
- Calculated Risk Taker - One of my favorite quotes is from Albert Einstein, "Insanity is doing the same thing over and over again and expecting different results." Today's educational leaders have to be willing to take calculated risks. If there is a new technology or assessment application that you believe will have an impact on student achievement, don't charge in with your checkbook wide open. Get your team involved, research the technology, build a pilot program or conduct a proof of concept test with a small group first. Then take the risk, knowing that you still may not get the results you want the first time. That's why I call it a calculated risk.
- Get and Stay Connected - There is no reason for someone in a leadership role in the 21st century to go it alone. I started using social media tools like Twitter to build my Professional Learning Network. This one choice has helped me more than any course or workshop I've ever attended because I'm engaged in what my learning network is discovering and doing to make a difference as a 21st century leader.

These steps are detailed in an eBook I co-authored: From Inspiration to Implementation - A Guide to Planning Successful Tech Initiatives. <http://tinyurl.com/kdbpljn>

What do you hope for the future of your program?

I hope that Clayton County schools will be recognized nationally as a school district on the leading edge of using innovative technology methods. My hope is that other districts will look to us as model for developing their own technology goals.

What keeps you awake at night?

I am concerned about our district being able to keep up with the rapid changes in technology and the need for online and digital assessments. And while this keeps me awake at night, I'm still very excited about what's next. For example, I think about where are we going to be in three years with VDI and MOOC's for K12.

What are the key leadership qualities you believe are needed today?

- Communication - You have to be able to share your vision and inspire your team to give 100% effort for the organization. This is the number one quality needed to be a successful leader.
- Trust - Once you have communicated your vision, you have to trust in the people you've placed around you to carry that vision out. And as a part of that trust, assure the team that when you achieve your goals, you will celebrate together.
- Integrity - It's important that everyone on your team has trust in you and that you'll do the right thing because it's the right thing. In this role my decisions are always centered around what's best for the students and their success.



- Adaptability - Good leaders have to be able to accept change as a natural part of doing business. That is true with regards to technology in the K12 space.

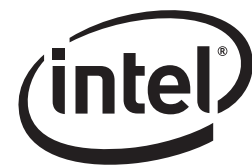
How do you inspire the staff to embrace change?

The main thing I try to do is lead by example. Everyone knows that change as it relates to technology is on going. So if district administrators set an expectation for teachers to use social media for instruction, my role as a technology leader is to embrace that change and start using social media in ways that demonstrate that expectation.

Who or what inspires you?

I'm inspired primarily by the underdog. I was not a straight A student in high school or college. Anyone who starts a successful company after people said it couldn't be done inspires me. I'm inspired by people like John Chambers, the CEO of Cisco Systems, who is dyslexic (as I am) because I know what he had to go through to achieve the level of success that he has. I love a great underdog story!

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<http://tinyurl.com/kdbpljn>

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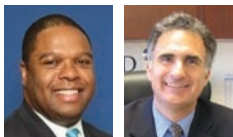
BEYOND THE **HARDWARE**



n the November 2013 issue of Tech & Learning, we asked districts around the country why they chose certain devices for their 1:1 initiatives. In this follow-up feature, we ask other districts to dive deeper into what makes a successful 1:1 and BYOD initiative. Which policies and procedures need rethinking? How do you keep these expensive programs going? Four districts share their stories below.

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LOS ANGELES UNIFIED SCHOOL DISTRICT



By Ronald S. Chandler, Chief Information Officer, and Dr. Themistocles

Sparangis, Chief Technology Director, IT Customer Services

We are at the beginning of our 1:1 program. The LAUSD 1:1 program is better described as an initiative to transform teaching and learning by focusing on the new Common Core State Standards, and implementing the necessary resources and professional development to increase student achievement for all LAUSD students.

As part of the “Common Core Technology Project” (CCTP), we have implemented tablets (iPads) with instructional apps (from Pearson) preloaded in the preliminary and first phases in roughly 50 schools. With the recent approval of phase two, and as this program grows, we are expecting that there will be multiple approved devices and a wide range of instructional materials. This recent approval is a significant expansion of CCTP which will provide the technology needed to all schools to accommodate the new Smarter Balance computer adaptive test as well as increase localized support. This LAUSD Board approval has effectively made the CCTP the largest 1:1 deployment, to date, in the nation.

We are setting up our network infrastructure

to accommodate a one-to-many device deployment. This will likely will be a combination of district-issued and Bring Your Own Device (BYOD) scenarios. We do not currently have a BYOD program in place, but recognize the need to be strategically prepared for this, both from a policy and a technical perspective. Our plan is to continually phase in schools every six months until all schools are part of the CCTP.

We see the following strategies as key to a large-scale 1:1 initiative:

- Build a cross-functional interdepartmental team to address all issues, including procurement, policy, facilities, technology, security, operational management, etc.
- Implement a mobile device management strategy that can accommodate a large implementation.
- Secure support for the program across stakeholders to support funding.
- Implement budgetary mechanisms for the replacement of outdated devices.
- Create policies around good digital citizenship.
- Move away from “acceptable use” and towards “responsible use” policies.

The evolution of our project will be in the preparation for the unknown, especially from an infrastructure perspective. We believe that CCTP, the new Common Core State Standards, and the District’s autonomous schools initiative (which gives greater autonomy to local school communities) all will play a role over the next five years in creating new operational models to sustain CCTP.

TUSTIN UNIFIED SCHOOL DISTRICT



Crystal Turner, Assistant Superintendent, Administrative Services and Robert Craven, Senior Director, IT

Our 1:1 rollout encompasses supplying students in grades 5-8 with iPads and a ClamCase keyboard. Students in grades 9-12 will be issued laptops. In grades K-2, we are issuing one iPad mini for every three teachers, and for grades 3-4 one full-size iPad with keyboard case will be available for every three students. This initiative covers all 24,000 students in our district.

The project is being phased in over the course of this school year. In addition, classrooms are being updated with new projectors, Apple TVs, interactive whiteboards, voice amplification systems, new teacher computers, and an iPad for each teacher. A Cisco access point covers each classroom. We are currently adding additional access points to in-demand areas. Students are also permitted to bring their own devices to campus. While we aren’t seeing enormous utilization of this, there is certainly growing interest.

In 10 weeks, we’ve gone from supporting 500 devices distributed in small pilots at the high school to distributing more than 3,000 devices. Supporting these devices with this brisk pace of distribution is an ongoing challenge. Here are some strategies we used to ensure this was a success:

- For PD, we hired 13 digital literacy coaches who work with 5-7 teachers each on deep levels of technology integration. This model has had a great impact in the classroom. We expect to see the value of the work of our digital coaches increase as the teachers they work with begin to take leadership positions within the district and guide other teachers on the use of technology within the classroom.
- We used communications tools to involve our families and community in the planning



THE EVOLUTION OF OUR PROJECT WILL BE IN THE PREPARATION FOR THE UNKNOWN, ESPECIALLY FROM AN INFRASTRUCTURE PERSPECTIVE.

BEYOND THE **HARDWARE**

of this initiative, garner their support, and assist in moderating expectations. The result? This community helped Tustin secure a 25-year bond that will fund these technology upgrades on an ongoing basis every five years. The bond includes another \$5 million dollars available every five years for technology integration.

- We recognize that instruction is going to change dramatically over these next five years as students move up through the grade levels with better skill sets and teachers fine-tune instruction to move to greater levels of technology integration. We follow the SMAR model for our PD efforts to prepare our teachers for these changes.
- We are preparing for a near future with students using both their district-supplied device, as well as a device they bring from home. This is certainly going to have an impact on both our instruction and our infrastructure.
- The rapid rollout was accomplished through extensive pre-planning by the technology department in collaboration with the district digital coaches, the curriculum department, maintenance department, and site leaders. It was essential that all departments, schools, and groups participated in the planning and deployment.

SADDLEBACK VALLEY UNIFIED SCHOOL DISTRICT [MISSION VIEJO, CA]

Michael Morrison, Chief Technology Officer

We call our 1:1 initiative “Door to the Core,” because we believe technology opens the door to the Common Core State Standards (www.doortothecore.org). We currently have about 6,000 iPads and iPods, and we recently added 1,500 Chromebooks in pilot classrooms.

The pilot Chromebook projects have gone very well. These devices have become a natural part of the class and the teachers have embraced the paperless workflow as well as designing lessons that are more engaging through technology. We intend to go to a 1:1 model in our 4th, 7th, and 10th-grade classes by October 2014. This will add an additional 7,000 Chromebooks to our district.

The four biggest challenges for the “Door to the Core” initiative are funding, sustainability, training, and infrastructure. Here are the ways that we are attempting to address these challenges:

- We used CCSS monies to purchase the Chromebooks and secured commitments from our administration to add additional grade levels as we show success.
- We garnered additional funding by cutting

costs on toner and paper. These funds will go to support replacement costs and expansion of the project.

- For PD, we plan to train 30 teachers each month. We will not leave a school until we have success for our training initiatives. We’ve committed 3-3.7 hour classified staff to assist and one teacher on special assignment. We’ve informed staff that if a particular school or set of schools needs more time we will push back all the other schools. The idea is that there will be No Teacher Left Behind in our rollout.
- Teachers help build curriculum materials that we are distributing on Haiku sites.

We also have about 6,900 students bringing their own devices to school. While our BYOD programs are still running strong, we find the programs that offer more direction to the parents have been more sustainable and affect education in a more powerful way.

NEWPORT-MESA UNIFIED SCHOOL DISTRICT COSTA MESA, CA



Jenith Mishne, Director of Educational Technology

We are now in the fourth year of our largest 1:1 implementation.

We rolled out 650 HP netbooks in grades 5 and 6 with a focus on improving writing across the curriculum, especially in science. We think the following steps were the keys to the success of this program:

- For the first two years, we had a dedicated IT support person working with the edtech department and the teachers to support the implementation.
- Before the rollout, we crafted a well thought-out plan that included objectives for both students and teachers.
- We had specific metrics that would be used to measure the effectiveness of the program.
- We provided ongoing and timely professional development for teachers as well as a coaching/mentoring model in the classroom. However, despite all the PD, some teachers still struggle with making the paradigm shift needed to make the 1:1 program work in their classrooms.

For the first three years, ET and IT purchased replacement netbooks and kept the netbooks working, but we are now at a place where too many of them are breaking and we don’t have a good replacement model in place. We are now looking at replacing the netbooks with low-cost laptops and Chromebooks.



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X=1 HOW TO MANAGE A MULTITUDE OF MOBILE DEVICES

Districts have been trying to figure out the best way to implement 1:1 programs for a while now, but what happens when students use two or more devices? As we try to help children learn to use multiple types of hardware for various purposes, the IT department's role gets even more challenging. Here, a handful of district leaders share how they are handling this issue.

"Our IT staff is made up of a CIO, a full-time tech, a full-time network admin, a part-time intern, and a part-time network engineer. School devices have full support and warranties, and students who BYOT can bring their devices to IT for questions. IT staff will walk students through troubleshooting and problem solving, but they do not touch the device—the student pushes all buttons. This supports the learning objective that students will learn to critically solve their own technology needs and does not void any warranties that the student purchased. Students can log in to our student wireless network with their network ID and password. We host BYOT Tech Petting Zoos at all information nights, parent coffee sessions during placement testing, and open houses. The community can also contact us directly. This is our second year of full BYOT and we are seeing a lot of students sharing information with their siblings. We require device authentication through a firewall to access the Internet, our Google Apps domain, our LMS, and BlackBoard Engage, so they can communicate, collaborate, and create. As the years progress, students are choosing more full OS laptops than other devices. The rigor of coursework and expectations of academic departments are influencing decisions more than any policy the IT department delivers. Students sign a responsible use policy acknowledging the school's right to monitor and check personal devices on request. We require a digital citizenship course for all students that covers privacy, personal identifiable information, ethical online behavior, and more. We can back topics up in Health and Religion courses later in student coursework."

—JEN LAMASTER, DIRECTOR OF FACULTY DEVELOPMENT, BREBEUF JESUIT PREPARATORY SCHOOL, INDIANAPOLIS, IN



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The screenshot displays the Tech & Learning Careers website. The top navigation bar includes 'SEARCH JOBS' and 'EMPLOYERS'. The 'SEARCH JOBS' section features a search bar, a dropdown menu, and a 'Search Jobs' button. Below this, there are links for 'Search Job title only', 'Advanced Search', and 'Browse Employers'. A 'Browse Education Jobs' section lists various roles like 'Assistant Superintendents/CIO/CTO', 'Corporate-Ed Tech Managers', 'Instructional Media', 'Instructional Technology/Curriculum Director', 'Technology Coordinator', and 'Technology-Special Education'. A link to 'Create a Job-Seeker Profile' is also present. The 'EMPLOYERS' section includes 'Quick Links', 'Advertising', and 'Contact Us' with a phone number '(617) 921-9650' and links for 'E-mail Sales' and 'E-mail Support'. The 'EMPLOYER REGISTRATION' section prompts users to 'POST JOBS, SEARCH FOR CANDIDATES AND TRACK APPLICATIONS' and provides a form with fields for 'Organization Name', 'First Name', 'Last Name', 'Your Email Address', 'Your Password', and 'Confirm Password'. The 'TECH & LEARNING BLOGS' section lists several articles, and the 'FEATURED JOBS' section highlights positions at 'Wisconsin Jobs' and 'Democracy Prep Public Schools'.

- * Employers: Post your latest jobs to our database
- * Search for top-quality candidates to fill positions
- * Track applications as they come in

WWW.TECHLEARNINGCAREERS.COM

If you're an ed tech leader looking to fill open positions on your team or a leader-in-training wanting to advance your career in the K-12 education technology field, Tech & Learning Careers is for you.

Hiring technology talent through general education job boards can be difficult, expensive and frustrating. Tech & Learning Careers solves that. Brought to you by the team behind Tech & Learning magazine,

Tech & Learning Careers is the only place specifically and strategically designed for those who are looking for top-quality K-12 ed tech candidates. And those candidates can search the latest job postings on Tech & Learning Careers to find the best job suited to their skills, qualifications and desires.

Tech & Learning Careers is your only go-to source for top ed tech talent and up-to-the-minute job openings.



“We are a PK-8 school with wireless capabilities throughout both buildings. We provide each administrator and teacher with a Microsoft Surface Pro with Windows 8.1, and students in grades 2-8 receive a Microsoft Surface RT with Windows 8.1. Our tech department—a network administrator and me—provides full support for any school-issued devices. We do basic services such as connections to the WiFi [network] or adding a printer for school-related materials. All students take a technology class one day per week to learn how to use the software. We do not provide support to personal devices if the device is failing to function properly. This generally is not an issue as all teachers and students use a school-provided device. All BYOD devices need to be brought to the tech department to connect to the network. If a teacher or student is using a personal device we can provide access to their networked documents, but that requires them to enter their credentials each time. When the devices are brought home (for students in grades 5-8), the parents are responsible for ensuring their students use the technology appropriately.”

—DAVID DILEO, TECHNOLOGY TEACHER, TUCKAHOE (NY) COMMON SCHOOL DISTRICT

“All students in grades 3-12 have access to a school-issued mobile device. High school students and some middle school students take the devices home. We manage 21,000 Chromebooks as well as some tablets. Our IT technicians repair Chromebooks and take care of other technical issues. The Chromebook Management Console makes it possible for our IT staff to easily push down policies to all Chromebooks in the district. Students must log in to a student wireless network that has content filtering in place. Internet access on Chromebooks that are taken home is filtered using policies in the Chromebook Management Console. In addition to providing students with devices, we also have a BYOD policy. Students may bring their own devices to school and access the student wireless network (with their login and password), but our tech staff offers minimal support for those devices.

We also have a guest network for visitors. It requires a password that is changed daily and made available at each school. Our parent advisory committee, which has one parent representative from each school, created a parent handbook that is available on our Web site. With any BYOD device, students have access to the student wireless network, which is filtered. Students using personal data on cellphones are accessing unfiltered content and must comply with our district policy (<http://goo.gl/Ih1b3>), which states that students should not access sites that are otherwise blocked for students at school.”

—DONNA TEUBER, TEAM LEADER FOR TECHNOLOGY INTEGRATION, RICHLAND (SC) SCHOOL DISTRICT TWO



PREVALENCE OF BYOD IN CLASSROOMS

GRADE LEVEL	ALLOW MOBILE DEVICES IN THE CLASSROOM NOW	PERCENT THAT ALLOW WITH RESTRICTIONS	PERCENT THAT ALLOW WITHOUT RESTRICTIONS/ DON'T KNOW
ELEMENTARY	20%	79%	21%
SECONDARY	48%	88%	12%
K-12 DISTRICT	46%	80%	20%
POSTSECONDARY-2 YEAR	83%	50%	50%
POSTSECONDARY-4 YEAR	95%	40%	60%

SOURCE: SIIA'S 2013 VISION K-20 SURVEY



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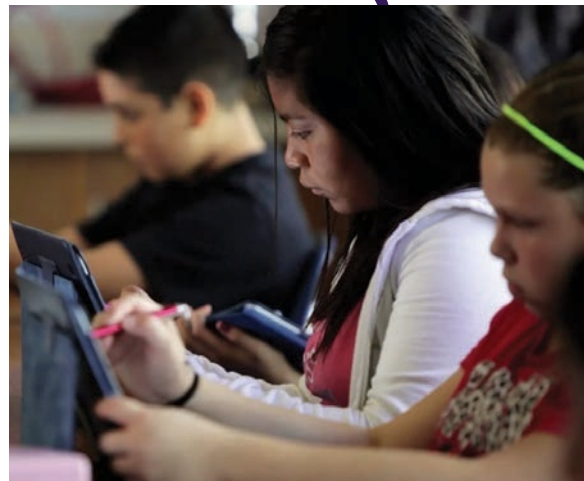
Program announced
Feb. 11, 2014

Super early bird pricing
Ends March 31, 2014

Conference
June 28 through July 1, 2014

"We use the train-the-trainer model, and all teachers and principals can typically help students with a variety of troubleshooting needs. Our tech staff 'touches the glass' and helps troubleshoot issues. We use Lightspeed Systems' mobile manager with our 1:1 iPad deployment. It has a WiFi profile and automatically connects to the network. All users are required to authenticate with a username and password that allows them to have a safe and productive network experience. Visitors are given temporary credentials to gain access to our network. We have two or three dedicated support staff to help with problems. We also have a guest network that can be enabled on the fly for conferences, meetings, and the like. Anyone gaining access to our network is protected through our Lightspeed Systems content filter, the blazing-fast Bottle Rocket!"

— HENRY DANIELSON, DIRECTOR OF TECHNOLOGY, COAST (CA) UNIFIED SCHOOL DISTRICT



"Sixth- and 7th-graders receive Lenovo Thinkpad X131e, 8th-graders get Lenovo Thinkpad Tablet 2s, and our 9th-graders are required to purchase or lease a tablet to use during their high school years. This year, we purchased rising 9th-graders the Lenovo X230 tablet with solid state drives. We are a Lenovo self-maintained site, and we complete all repairs. Our tech staff and classroom teachers will help students log into our network and various programs. We use LDAP to optimize single sign-on for several programs across our secure network. Issued devices log in through our secured network. We also have a partitioned, password-protected guest network for parents. Students can use their network passwords to log in with their BYOD devices, but these devices are put into a separate VLAN and are set at a lower bandwidth priority. We use Xirrus as our wireless and management system, and it allows us to identify the types of devices that are connecting to our network. This information automatically puts the different devices into the separate VLAN.

In addition to our email and Web site communications, we require an annual laptop and tablet launch training for students and parents in each division upon entry into our 1:1 program. We discuss the goals of our technology program to partner with parents to help students learn our responsible use policy and to make smart choices. We also provide parenting tips and answer questions regarding home network setup during this time. Our first line of support is for the school-issued devices, but if time allows, our staff is always more than willing to help students set up their school email and calendars on their personal phones or devices. I think the key to successful support is to hire great service-minded people. We work very hard to secure our network by using a Sonic Wall firewall with application, spyware, and Web filtering as well as packet shaping. This enables us to assign different access filtering levels for different user groups. We are also able to give higher bandwidth priority to classroom-essential programs. In addition, we use Web Root to enable cloud filtering and a mobile Web security client for offsite filtering for



middle school student laptops. This allows parents to select the level of filtering for home access. We have an Internet Safety curriculum and give a faculty acceptable use presentation each year. Students are trained to give presentations to other schools and civic groups and advise on our responsible use policy. Finally, we have developed policies to communicate expectations to students, parents, and faculty. Policies are updated annually and are shared. Additional copies can be located on our Web site and in our handbooks."

—CONNIE WHITE, DIRECTOR OF TECHNOLOGY & LEARNING, LAKEVIEW ACADEMY, GAINESVILLE, GA

MOBILE LEARNING

In a recent qualitative study of mobile learning implementation in 6-12th grade classrooms, SIIA learned the following from a small pool of schools surveyed:

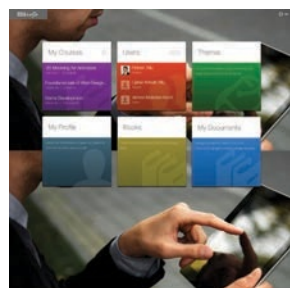
- Multiple device operability was a major concern for those who either had a limited number of devices supplied by the school/district or relied on BYOD for the classroom.
- Many participants simply used a mobile version of a Web site to provide information.
- Several interview subjects indicated that they used students' personal devices or that their school had a BYOD policy.
- Of the schools that relied on student-supplied devices, many teachers struggled with using technology while not alienating the students without personal devices. Some strategies educators used in these instances included group work or creating alternative assignments.
- Generally, educators were hesitant to assign homework that required the use of a device when BYOD was the main source of technology in the classroom.

BACK OFFICE BUSINESS

PENNSYLVANIA DISTRICTS GET LOW-COST ETHERNET SERVICES

Challenge: Several school districts across three Pennsylvania counties needed infrastructure upgrades to support a variety of cloud computing and disaster-preparedness initiatives being developed.

Solution: The districts will receive Comcast Ethernet services through the Lincoln Intermediate Unit, which offers educational and technology resources to more than 96,000 students and teachers. Comcast Business will connect the districts to PAIUnet, an online, statewide, private network that allows teachers and students to communicate, collaborate, and share resources. “Comcast has allowed many of our districts to increase their bandwidth exponentially—and in some cases for half the price—which has given them access to cloud computing, video conferencing, and other online educational tools that had previously been cost-prohibitive for them,” says Jared Mader, director of education technology for the Lincoln Intermediate Unit.



FLIPPED CLASSROOMS CHOOSE A PLATFORM TO SUPPORT THEIR INITIATIVES

Challenge: One school in Connecticut and another in Michigan needed to find platforms to support their flipped learning initiatives. They were both seeking something that would encourage collaboration and communication among students.

Solution: Both schools chose EDUonGO. “Our students responded really well to the flipped learning model, but I knew that was just the beginning,” says Greg Green, principal of Clintondale High School in Clinton, Mich. “I needed to take flipped

learning to the next level and make it a real success at our school. With EDUonGo we are receiving a straightforward, intuitive platform for teachers to create the collaborative and customized learning environments necessary to generate higher-level thinking and participation among students.”

SIX NEW JERSEY DISTRICTS SELECT A DATA SOLUTION

Challenge: The AchieveNJ educator evaluation and support system relies on multiple measures of performance to evaluate teachers. Six New Jersey districts needed to find a way to manage the onslaught of data from these measures—including Student Growth Percentiles, Student Growth Objectives (SGOs), and classroom observations.

Solution: Butler Public Schools, Cherry Hill Public Schools, East Brunswick Public Schools, Franklin Township Public Schools, Freehold Regional High School District, and Garfield Public Schools all purchased Performance Matters, which offers an assessment and data management system, along with the newly released SGO module to assist in the creation, management, and monitoring of SGOs. Three of the districts will also implement FASTe (Formative Action System for Teacher Effectiveness), a turnkey system for evaluating educator effectiveness with a framework that can be customized for each school system.



SPRING ISD DELIVERS COLLABORATIVE LEARNING EXPERIENCE

Challenge: Spring (TX) Independent School District



wanted to provide students with more personalized and blended learning opportunities inside and outside of the classroom.

Solution: The district partnered with itslearning, a cloud-based learning management system that lets teachers differentiate and deliver instruction. The learning platform lets teachers share instructional resources, assignments, activities, and assessments with students and parents via personalized dashboards. “We assessed our current standing and felt there was more we could do to prepare our students for digital 1:1 learning, collaboration, and truly self-directed academic experiences,” says Regina Owens, executive director for instructional engagement at Spring ISD.

THE FOURTH-LARGEST U.S. SCHOOL DISTRICT EXPANDS ITS DIGITAL OFFERINGS IN CLASSROOMS

Challenge: Miami-Dade County Public Schools is working



to transform teaching and learning by providing dynamic and interactive learning opportunities to all students.

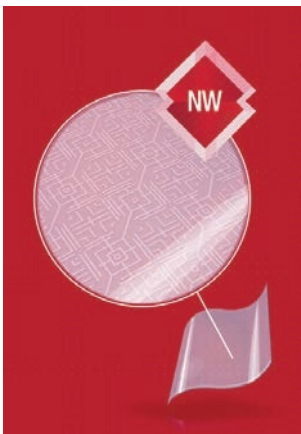
Solution: As part of its continued digital conversion, the district expanded its partnership with Discovery Education to provide all of its 348 schools with Discovery Education Streaming Plus, a collection of rich multimedia assets aligned to state academic and testing standards, as well as Discovery Education Science, a multimedia curriculum supplement for elementary and middle school science education. In addition, district educators will be provided with extensive professional development preparing them for life inside a digital classroom.

WHAT'S NEW

TECH & LEARNING ROUNDS UP A SUMMARY OF NEW TOOLS FOR SCHOOLS



Bretford Manufacturing, Inc. (www.bretford.com) has announced its **MOTIV Soft Seating** products, available with a complete daisy chain-style power system that increases the number of mobile devices that can be charged from a single electrical outlet. Fluid Power for MOTIV allows up to six power units to daisy chain off of one electrical outlet.



3M (www.3melectronics.com) has launched the **Patterned Silver Nanowire Film**, a touch sensor film for touch-enabled devices such as tablets, laptops, all-in-ones, and monitors. The film can support touchscreens with diagonal sizes suitable for phones and tablets, as well as large area touchscreens over 46" (diagonal) for applications such as signage and gaming. The flexible silver nanowire material can conform to angles and rounded surfaces, enabling next-generation curved and rollable touch sensors.



Vuzix (www.vuzix.com) has launched the **M100**, the first commercially available "Smart Glasses." The M100 is an Android-based, wearable computer, enhanced with a wearable monocular display and computer, recording features, and wireless connectivity. Pre-installed apps can be used to record and playback still pictures and video, track timed events, manage your calendar, link to your phone, and more. The M100 is also compatible with many existing Android apps. Users can also access developer resources to create their own custom apps.



DynaVox (www.mydynavox.com) has released the **DynaVox T10**, a purpose-built, speech-generating communication tablet. The device and its accompanying DynaVox Compass app provide instant access to content developed by clinicians. The tablet includes an easy-to-grip frame, dedicated speakers, and a Web-based platform that lets users instantly connect with the entire communication team.

Dell (www.dell.com) has launched its first **Chromebook** for education. The Dell Chromebook 11 features an easy-to-use, Web-based console that enables centralized configuration and tracking. The management console allows IT administrators and teachers to quickly push or remove applications and enforce safe browsing practices across all Chromebooks in a school's network or in a specific learning environment. The Dell Chromebook 11 features a 4th-generation Intel Celeron 2955U processor, 11.6-inch screen, up to 10 hours of battery life, and 16GB embedded solid state drive.



FOR MORE OF THE LATEST PRODUCT RELEASES, VISIT US ONLINE AT TECHLEARNING.COM.



NEC Display Solutions of America (www.necdisplay.com) has announced the addition of the V423-TM display to its Touch-Integrated V Series portfolio. Its commercial-grade panel and components promote extended use and deliver high-quality touchscreen capabilities for learning, digital signage, and way-finding applications in education. Within the Touch-Integrated V Series bezel is an integrated, low-profile, four-camera, optical-imaging technology that allows for up to four simultaneous touches. Its anti-reflective glass coating protects the panel and allows for higher brightness transmittance.

Marshall Electronics (www.marshallelectronics.net) has released the **CV500-MB Miniature 2MP HD-SDI Camera**, providing full HD 1920x1080i/59.94 video for filming a variety of broadcast applications. The CV500-MB features a 1/3" Panasonic 2.2 Megapixel CMOS sensor producing crisp HD images from a camera body less than 1-inch x 1-inch. This small footprint easily integrates into areas where other cameras could not fit or would be obtrusive. The CV500-MB is supplied with a removable 3.7mm Prime HD lens with a variety of other lens options available. Additional CV500 models are available in 1080i/60, 1080p/60(3G), and 720p/60 (NTSC & PAL).



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ACTIVATE

(www.c8sciences.com)

C8 Sciences has rolled out a new HTML5 version of ACTIVATE, a program for children with ADHD, as well as a school portal for teachers and program administrators to manage the program and access student data. The



program works on any mobile device, and offers “gameplay” to keep kids engaged while challenging their ability to sustain attention. A new rewards system motivates kids to stick with the program.

The program also offers on-demand professional development resources.

CHRONOZOOM

(www.chronozoom.com)

Microsoft Research has released ChronoZoom, a free, online educational tool



that helps visualize historical events over expansive periods of time. ChronoZoom allows students and teachers to create their own timelines, projects, and exhibits through an authoring guide. The digital educational tool can be used in coordination with a series of new curricula that integrates ChronoZoom technology with traditional teaching resources. There are currently three separate curriculum modules: one on World War I, a second on the impact of European colonization on the Americas, and a third, more general, module that helps students learn how to “think historically.”

CLASSFLOW

(www.classflow.com)

Promethean has launched ClassFlow,



a cloud-based platform that enables teachers to create lessons, deliver interactive content across multiple devices, and assess students’ understanding. ClassFlow connects mobile devices such as tablets, smartphones, and laptops to classroom displays and interactive whiteboards. This allows teachers to use real-time student responses to instantly adjust lesson plans.

COMMON SENSE MEDIA DIGITAL PASSPORT

(www.common sense.org/educators)

Common Sense Media released Digital Passport for iOS and Android. Based on



...beyond The Common Core.



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- Google App Tips and Tricks
- Lessons from the Flipped Classroom
- Listen to the Students: The Ultimate Smackdown
- Professional Learning: One Size Doesn't Fit All
- Technology in the Early Grades
- The Flipped Classroom: What's Next?
- The Ins and Outs of iAuthoring
- The Other Two Letters in STEM: Technology and Engineering, K-12
- Walking the Walk: Transforming Learning in the Secondary Grades
- What Should We Buy? Picking the Devices that are Right for Your District

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lessons from Common Sense Media's K-12 digital literacy and citizenship curriculum,

Digital Passport uses engaging games and videos to address the key issues that kids face online: safety and security, cyberbullying, responsible cellphone use, safe search and respecting creative work.



CREATIVELIVE 24/7 BROADCAST EDUCATION NETWORK

(www.creativelive.com)

creativeLIVE has launched a 24/7 broadcast education network. The network will carry five free channels of original content, with expert instructors teaching



creative skills. The channels include Photo & Video, Art & Design, Music & Audio, Maker & Craft, and Business & Money. Students can watch live classes at no cost, and teachers can later purchase the recorded versions.

EDUONGO

(www.eduongo.com)

EDUonGO offers users the ability to launch an academy and share knowledge, through a simple and personalized learning environment that supports flipped learning in the classroom. Teachers can create a customized, collaborative learning environment that offers flipped learning lessons and incorporates game-based learning.



FLEXCLOUD HOSTING

(www.earthlinkbusiness.com)

EarthLink Business has launched a new FlexCloud Hosting service to help organizations create secure IT environments to optimize server utilization. FlexCloud Hosting enables an organization to track and manage computing utilization across business units within a single IT environment. FlexCloud Hosting also offers full, weekly backups and daily incremental backups to safeguard data.



GOALBOOK TOOLKIT

(www.goalbookapp.com)

Goalbook has released a Toolkit to help educators personalize instruction for students with special needs, English language learners, and students requiring academic and behavior interventions. Goalbook offers teacher resources and professional development based on leading research from Universal Design for Learning (UDL).



PREY DEVICE-WIPE

(www.preyproject.com/education)

Prey announces a new level of information security with the addition of Device-Wipe for Android users—the ability to wipe all the data from missing or stolen devices. Device Wipe allows Prey users to protect sensitive data on Android devices by simply logging in to their Prey Pro accounts and identifying the missing device.



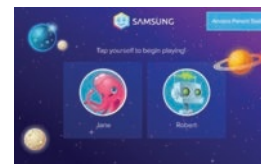
SAMSUNG KIDS' PLAY-AND-LEARN

(www.samsung.com)

Samsung has teamed up with Fingerprint, a kids' mobile technology company, to

develop a mobile app network that offers play-based

learning for students ages 3-7. The service, available on select Samsung devices, allows parents to create a family account for multiple children and receive personalized reporting, content recommendations, and access controls for each child. The new network is part of Samsung's Kids' Play-and-Learn Content Initiative, a developer-focused program in collaboration with Fingerprint that is designed to drive the creation of play-and-learn Android apps for kids in Southeast Asia and Oceania.



SIMON & SCHUSTER ON TITLEWAVE

(www.folletlearning.com)

Follett has announced a partnership with Simon & Schuster to offer over 450 PreK-12 titles in ebook format on Titlewave, Follett's collection development, search, and ordering tool. Content is available for students of all ages, from preschool picture books to chapter books for early readers to higher-level fiction and nonfiction for young adults.



SNAPSTREAM 6.1

(www.snapstream.com)

SnapStream has announced the 6.1 release of its TV monitoring and search tool. The release features language intelligence delivering the most relevant TV search results, new TV playlists for sequenced playback of

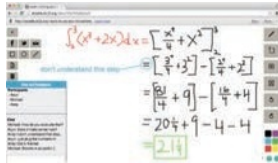


multiple pieces of content, expanded cloud-sharing functionality, and enhancements to the recording manager for easier management of recording priorities.

STOODLE

(www.stoodle.org)

Technology startup Stoodle.org, created by a group of tech-savvy teens, offers a free, collaborative classroom environment available on the desktop and iPad. The ad-free, collaborative, digital classroom is built in HTML5 and features a real-time whiteboard with tutoring tools, voice conferencing, and text chat. Students and tutors can invite others to



join via URL or social media to begin the tutoring experience, and no account set-up is needed. The program's design tools also enable users to highlight particular concepts.

SWIVL CLOUD

(www.swivl.com)

Swivl Cloud is a connected service for Swivl's robotic mobile accessory for creating and hosting learning video content. The service is a companion to the company's second-generation robot designed for tablets, smartphones, and handheld cameras. Swivl Cloud will be available for public beta in January, with



free and premium levels to be offered depending on individual needs.

TEQ ONLINE PD COURSES

(www.teq.com/courses)

Teq has launched a series of over 50 live, interactive, online professional development courses for K-12 educators. Teq Online PD courses are broadcast live and online, providing a format that allows educators to interact with the instructor, then review the recorded video at their own pace. Teq Online PD is aimed at tackling the biggest challenges facing teachers within a framework that supports a Common Core curriculum, to better prepare students for future achievement in college and their careers.



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Tuesday, February 11 @ 2 pm ET
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Sponsored by Dreambox Learning

RESOURCES

Whitepaper: Increasing Achievement with Adaptive Learning

Sponsored by Dreambox Learning

Tech & Learning Careers Job Board

Check techlearning.com for update

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AMPLIFY GUIDE TO K-12

(www.amplify.com)

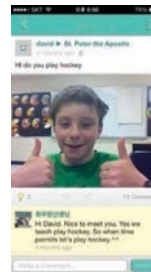
Amplify has partnered with Common Sense Media to create a free guide to K-12 educational apps, which contains more than 160 apps, organized by subject. The guide offers a short description of each app that includes subjects, skills taught, and the Common Core standards covered.



CLASSTING

(www.classting.com)

Classting is a social network, available as an iOS and Android app, designed for teachers, students, and parents to support interclass collaboration. The tool allows teachers to post everything from homework assignments to class-related reading and gives students the opportunity to share course materials. Classting's private chat-rooms encourage online parent-teacher meetings, while its "Ting Service" keeps students in touch with their peers locally and worldwide.



DOOR 24 IPAD APP

(www.i-ready.com/ipad-apps)

Curriculum Associates has announced an addition to the i-Ready Diagnostic and Instruction product line, the Door 24 iPad app. Designed for grades 4-8, the app focuses on computational fluency to support problem solving and higher-order thinking. Door 24 builds the mathematical processes and proficiencies that the Common Core State Standards



(CCSS) identify in the Standards of Mathematical Practice (SMP).

HAKITZU ELITE: ROBOT HACKERS

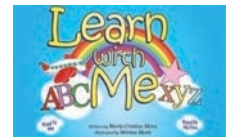
(www.kuatostudios.com)

Kuato Studios has released the latest version of its Hakitzu Elite: Robot Hackers app, available for free for iOS and Android devices. Students can learn to code by battling giant robot warriors. By using the app, they can move to the next level in their coding skills with four different styles, from simple code recognition "tap and play," to inputting the code itself from memory with the customized coding keyboard.

LEARN WITH ME

(www.readconmigo.org)

The Read Conmigo campaign recently launched its first mobile app for Apple and Android devices, Learn With Me. The app features an interactive book for children at the Pre-K reading level. Parents can touch the screen to bring up animations and sounds to keep their children engaged in both English and Spanish. The Read Conmigo campaign Web site offers ebooks, games, reading comprehension tools, activity kits, and more.



PLAYRIFIC TECHSTARS APP

(www.playrific.com)

Playrific recently released the TechStars STEM and Arts App for preschoolers to support the Computer Explorers' TechStars program. The free iOS app enables 3- to 5-year-old students to continue their TechStars science, technology, engineering, art, and math learning experience outside the classroom.





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*Compared to leading 1-chip DLP business and education projectors based on NPD data, July 2011 through June 2012. Color brightness (color light output) measured in accordance with IDMS 15.4. Color brightness will vary depending on usage conditions.

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