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1-to-1 Computing Steps to Success

Expert Presenters:

Peter Sanchioni, superintendent, Natick public schools, Mass.

An on-demand archive of this webinar will be available at www.edweek.org/go/webinar in less than 24 hrs.
Natick’s 1:1 Status Report

Peter Sanchioni, Ph.D.
Ushering in the Future
Every Child Every Day
Project Overview

• 1:1 Grades 8-12
• The goal of this project is to increase student achievement. “It’s all about the learning.”
• NOT a Technology Project
• The scope of this project was deploying over 2000 laptops to students in grades 8-12 and over 500 laptops to teachers
Our Generation of Learners

• ..... the brain is extremely malleable. As today’s students have never known a day without these advanced technological tools, their brains have been physiologically conditioned to communicate and learn with these devices.

• If you fail to grasp the needs of this generation, you risk the effectiveness of your educational efforts!
Proper Implementation is the Key

Pct. of Respondents Reporting Improvement

<table>
<thead>
<tr>
<th></th>
<th>Disciplinary action reduction</th>
<th>Drop-out rate reduction</th>
<th>High-stakes test scores increase</th>
<th>College attendance plans</th>
<th>Graduation rates increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper 1:1</td>
<td>82%</td>
<td>81%</td>
<td>85%</td>
<td>86%</td>
<td>86%</td>
</tr>
<tr>
<td>All 1:1</td>
<td>65%</td>
<td>58%</td>
<td>70%</td>
<td>66%</td>
<td>57%</td>
</tr>
<tr>
<td>All Other Schools</td>
<td>50%</td>
<td>45%</td>
<td>69%</td>
<td>56%</td>
<td>51%</td>
</tr>
</tbody>
</table>

SOURCE: Project Red
Current Status & Early Results

• We are in the fifth year of every teacher having a laptop – 500
  o Web Pages, Student Learning Platforms, Email, Online Grades, Tech Courses)
• We are in the second year of all 8th grade students having a laptop
  (360 students)
  o More students have made the honor roll from grade 7 to 8
  o Teachers report more student time-on-task
  o Classroom discipline issues are down as students are more engaged
  o Parents report students are better prepared at home
• We are currently in the first year of all 9-12 students having a laptop
  (1400 students)
  o Teachers report homework completion is way up
Timeline to Success

Milestone 1
- Laptops to Teachers 2008

Milestone 2
- Teacher Training and expectations 2009 - 2012

Milestone 3
- Fall 2011
- Grade 8 Impl.
- 45 day at NHS

Milestone 4
- Parent Meetings
- Student Expectations
- 8-12 Impl.
Making IT Happen

• iWork Suite (Pages, Numbers, Keynote)
• Google Apps for Education
• iLife (iWeb, iMovie, iPhoto, Garage Band)
• Online Streaming from Discovery Education
• NetTreker
• ScanTron & AimsWeb Online Assessments
• Learning Management Systems
• iTunes University
• Net- Texts
• Online Textbooks/Content (My Math Lab)
• DILL
• LanSchool
• EdLeader 21 (4Cs)
• Other Internet based resources
Issues and Resolutions

• Laptop Damage

• Resolved through implementing a 3 tier plan of payment responsibility

• Illegal installation of software “TOR”
  o Daily screening from our filter
  o Student discipline/Working with Parents
Digital Citizenship – It’s not a tool for destruction!

• Policies for safe, legal, and ethical use of digital information and technology

• Promote and model responsible social interactions related to the use of technology and information (Yes You Tube/ No Facebook)

• Model and facilitate the development of the effective use of contemporary communication and collaboration tools
Looking Ahead

• Continued Teacher Professional Development
• Developing Digital Content
• Standard Student Learning System
• Online and Blended Classes
  ○ Virtual Education
Dependencies and Resources

1:1 Project

Apple

Constantly Training new Staff

Producing Results

Parent Engagement

Boston College
• [http://youtu.be/Dm9jas4H7i8](http://youtu.be/Dm9jas4H7i8)
Appendix

http://www.natickps.org/districtinfo/forstudents/onetoone.cfm

Places we visited: Windham, NH, Westhampton Beach School District, NY, Mooresville, NC, Cupertino, CA, Maine

We are happy to help anyone on their journey.
Using technology tools to connect our students

Poway Unified School District
Background

• 35,000 students
• PreK-12
• 38 schools
• 1,400 teachers
• Budget cuts of $60 million in last 3 years
• Class size increases in all grades over last few years
Why Move Towards a 1:1 Environment?

- 22 schools in top 10% of state
- One of the highest achieving Districts in state
- Continued pattern of student achievement
- Graduation rate of 97.6%
- Lowest dropout percentage in the county.
- 24th largest school district in CA

If it is not broken, it still might need to be fixed
Setting the Stage for Using Technology

Great opportunity to help students connect in new and different ways
Built Infrastructure

Bond dollars used to remodel all 38 campuses, ensuring each site has the necessary infrastructure to handle the increasing demands of technology use by our students and staff.
• All 1,800 of classrooms have been modernized with multimedia systems.

• Stable network for all 35,000 students and over 4,000 staff.

• Our network is up over 99.7% of the time.

• Cloud hosting
Seeding the push to personalize learning

- Challenge from our Superintendent for ALL departments to “change the way we do school”
- Launch an R & D group in the district to seed change - FutureFocus-PUSD
  facebook.com/FutureFocusPUSD
twitter.com/FutureFocusPUSD
- Launch Crowdsourcing site - InnovationU PUSD
- Opening new K-8 school in 1 ½ years

Building momentum
Pathways for Implementation

Three Models

- Lease to Own/Bring Your Own/School Provided
- Bring Your Own/School Provided
- Bring Your Own

Personalized Learning

Improved student achievement
## Key guiding questions for mobile device selection

<table>
<thead>
<tr>
<th>Question</th>
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<tbody>
<tr>
<td>Does it help students engage in critical thinking?</td>
<td></td>
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<tr>
<td>Does it enhance communication (student to student; student to teacher)?</td>
<td></td>
</tr>
<tr>
<td>Does it enhance collaboration?</td>
<td></td>
</tr>
<tr>
<td>Does it enhance student engagement?</td>
<td></td>
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<tr>
<td>Does it provide access to information anywhere, anytime?</td>
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<tr>
<td>Does it provide for a more personalized learning opportunity?</td>
<td></td>
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<tr>
<td>What is the durability of the device?</td>
<td></td>
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<tr>
<td>Is it portable?</td>
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</table>
Site-based decisions

Standardized choices versus freedom to choose


Training

- TLC (teaching and learning collaborative) - teacher driven professional development which provides points to move up on salary schedule

- District provided trainings

- Site-based training

- Developing a model for sustainability
Future successful 1:1 initiatives

✓ Focus on shifts in teaching and learning, not devices
  • Differentiated instruction
  • Active, engaged learning
  • 21st-century skills and literacies
  • Common Core alignment & assessments

✓ Provide strong support for change management
  • Effective scoping and program management
  • Infrastructure readiness assessment
  • High-quality professional development
  • Ongoing pedagogical support
  • Technical support
Future successful 1:1 initiatives (con’t)

✓ Opt for an open platform that plays well with others
  • Integration with student information systems (SIS) and learning platforms for single sign-on
  • Integration with online assessments
  • Platform that supports multiple content vendors

✓ Allow districts and schools to easily manage a large fleet of devices
  • Manage and control thousands of devices remotely
  • Push out content to schools and classrooms
An all-in-one solution for school systems

Amplify Tablet Solution

- Technical and Pedagogical Support
- Hardware
- Network Connectivity (Wi-Fi or Wi-Fi and 4G LTE)
- Education-Specific Interface
- Implementation Support
- 3rd-Party Content and Reference Tools

Amplify Tablet
Thank you.

www.amplify.com/tablet
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Required Reading from *Education Week:*

**Technology Counts 2013: Building the Digital District**

*Technology Counts 2013: Building the Digital District* takes a major step in outlining the barriers educators and policymakers are facing, and how they are moving beyond them, in building schools that maximize the use of digital tools to improve student achievement.

**Spotlight on Building the Digital District**

In order to build the digital district, ed-tech leaders must ensure that back-end services run smoothly and securely. This Spotlight illustrates how districts can maintain reliable technology programs, like multidistrict online collaborations, effective data-security plans, cloud computing, and virtual-learning environments.