



PROJECT

DIGITAL CONVERSION: GRADE 7 PARENT INFORMATION NIGHT

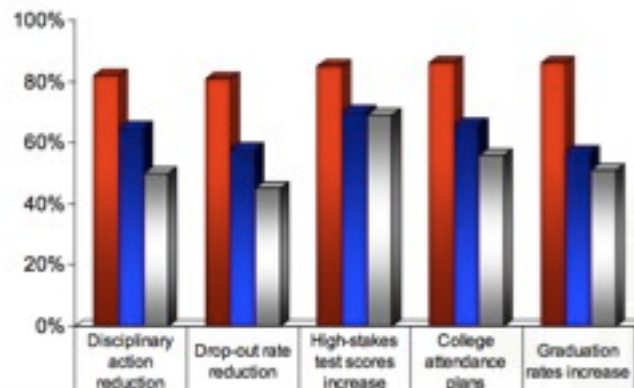
JUNE 9TH

NATICK MIDDLE SCHOOLS

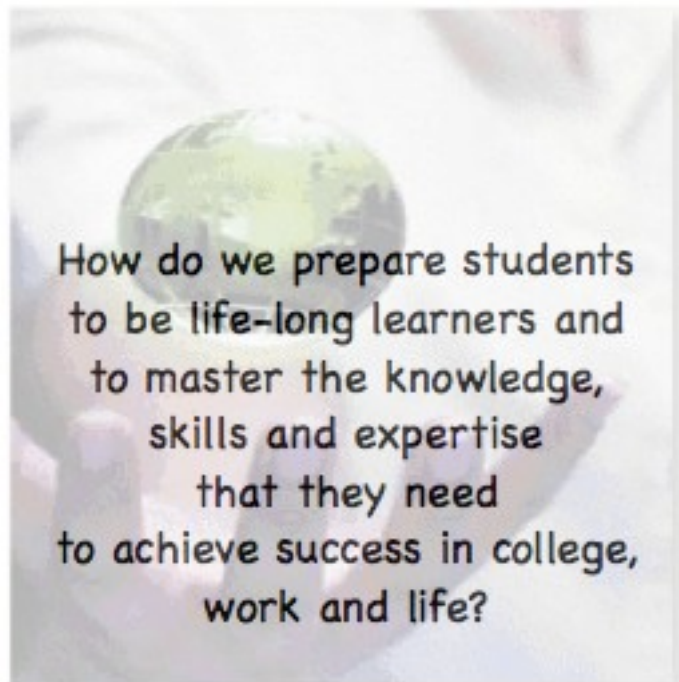
Proper Implementation is the Key

REVOLUTIONIZING EDUCATION

Pct. of Respondents
Reporting Improvement



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Engaging the
iPod generation
Challenges for schools in a digital age



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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



Digital Natives

Digital Natives

"Digital Natives are used to receiving information really fast. They like to parallel process and multitask. They prefer their graphics before their text rather than the opposite. They prefer random access (like hypertext). They function best when networked."

Marc Prensky, Digital Natives Digital Immigrants, 2001.

Native vs. Learner

However,

There is that expression: digital natives. Just because somebody knows how to send a text or get an email, play video games, or surf the internet, does not mean they know how to be digital learners.

We are finding that students do not know how to design a web page, use Google Documents, save a file, create PowerPoint presentations, or find appropriate research.

Digital Citizenship

Schools (Natick) who embrace 21st century skills will produce digital learners.

Vision for the Future

- Anywhere/anytime access to homework with internet connection
- Ability to research topics online, download coursework, check e-mail, work in teams with other students, submit assignments online and apply critical thinking skills as a regular course of action
- Students own and direct their learning through experiential and virtual project and problem based, multi-disciplinary activities in digital formats
- Parents/caregivers communicate with teachers and view daily classroom work, homework and student achievement to help ensure progress and academic growth

Vision for the Future

- Teachers interact one-on-one with students and parents/caregivers, to:
 - update on each student's progress,
 - use online assessment tools,
 - integrate online content and learning resources with curriculum and instruction,
 - expand learning beyond the walls of the classroom
- Teachers determine best classroom management and configuration for optimal teaching and learning for all students with more options available simultaneously:
 - small groups,
 - virtual experiences
 - individualized and differentiated student approaches

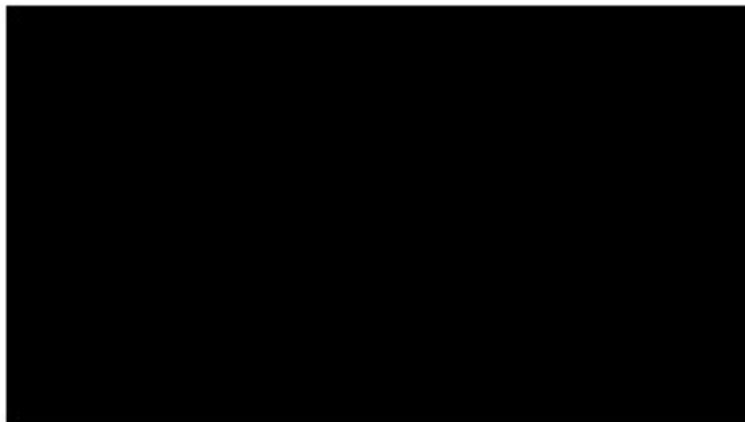
Why Do This?

Improved MCAS Scores
Improved Attendance Rates
Reduced Suspensions and Class Disruptions
AYP Improved
SAT Scores Improved
Better Prepared Students
Higher College Acceptances
Greenfield/ Florida Online Academy

- **Technology is a tool, not the end result**

- Mooresville, NC, Boston, Maine, Windham, NH,
West Hampton, NY, California

Video: What does it look like?



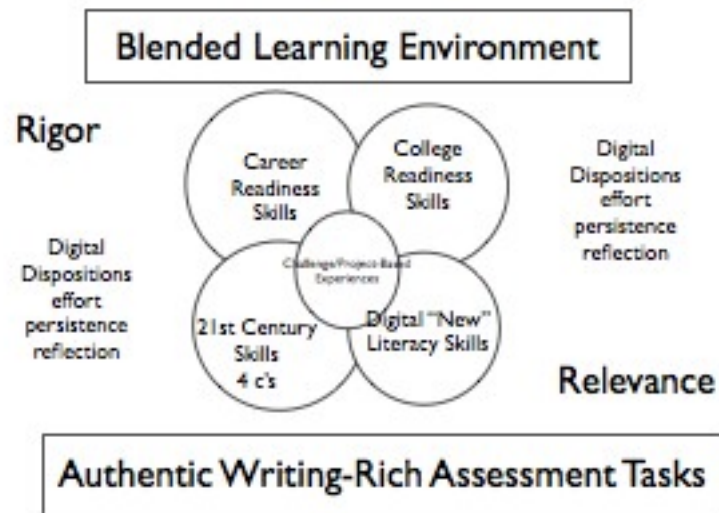
4 C's

A necessary set of competencies
embedded into our rigorous
curriculum:

- Critical Thinking
- Communication
- Collaboration
- Creativity

And an aptitude for technology

I:I Computing--Pulling it all together



Why?

(project goals/measure success)

- Create critical thinkers and adept collaborators
- Enhance our writing program with online portfolios and robust/revised common assessments
- Allow class time to focus on analysis of content, not locating/accessing it
- Prepare to access technology at new NHS, college and work
- Improve MCAS scores and AYP
- Decrease attendance issues
- Decrease suspension rates

Why MS now?

- HS teachers can observe in middle schools
- work out student and instructional implementation prior to open of NHS (they need to open new building!)
- infuse new technologies
- pilot project with 300 kids vs. 1500
- middle school teachers are ready, enthusiastic and prepared to do it!

Mission: Prepare for College

- Most colleges now require students to bring a laptop to college, many ask that families purchase a product they require
- 70% of colleges use Apple products
- Competitive advantage to have online coursework on high school transcripts
- Future is now! Students in grades 6, 7, 8 at KMS and WMS are doing online courses!

Mission: Prepare for Work

- The world of work has moved away from many traditional skills, services and requirements....

Adult occupation distribution 1969-1999

(Levy & Murnane, The New Division of Labor: How Computers are Creating the Next Job Market)

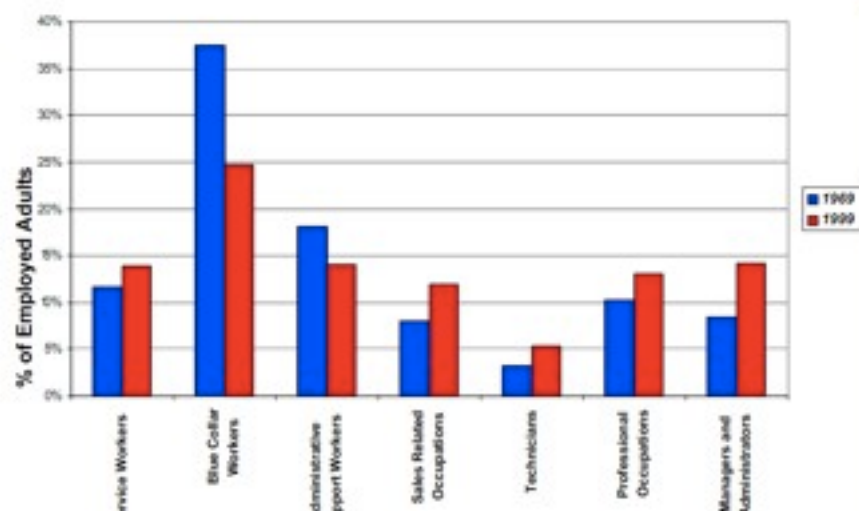
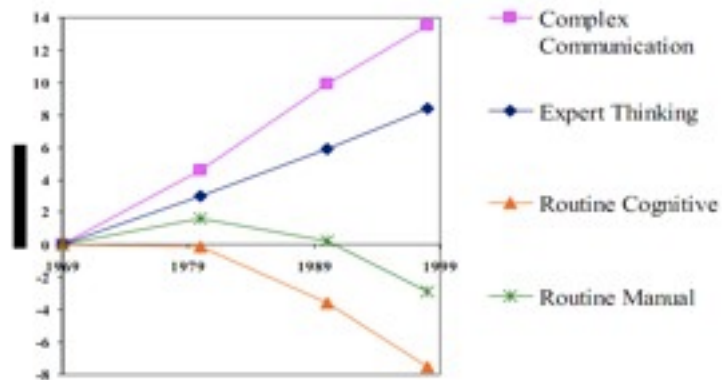


Table 3.5: Economy-Wide Measures of Routine and Non-Routine Task
Input: 1969 - 1998 (1969 = 0)



Elements of Complex Communication

- Observing and listening.
- Eliciting critical information.
- Interpreting the information.
- Conveying the interpretation to others.

Elements of Expert Thinking

- A great deal of well organized knowledge about the problem (not memorized facts, but well understood relationships).
- Skill at pattern recognition
- Initiative
- Metacognition

3-Year Staff Preparation

- technology training days in fall 2009, 2010
- job embedded professional development
- Moodle summer course and coaching during school days
- orientation to mac book
- increased labs for practice with one-to-one computing
- visits to one-to-one computing schools
- reading the research
- training and practice with lesson design (waiting for the technology)
- work with technology department to design conversion to 1:1 computing

3-Year Student Preparation

- revised and expanded technology literacy curriculum
- keyboarding for all
- media literacy through library and other courses
- technology integrated experience through teams

Supporting the Learning Environment

- Tools to Enhance the Learning Process
- Robust and Secure Infrastructure
- Technical Support
- Professional Development

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Tools to Enhance the Learning Process

Student Equipment

MacBook Laptop

13-inch, 2.4GHz Intel Core 2 Duo - White
2.4GHz Intel Core 2 Duo,
320GB Serial ATA Drive @ 5400 rpm,
4GB 1066MHz DDR3 SDRAM - 2x2GB,
SuperDrive 8x (DVD±R DL/DVD ±RW/CD-RW)



3 Year Warranty



External 500 GB USB Backup Drive



Protective Bag



Laptop Charger




Tools to Enhance the Learning Process



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Tools to Enhance the Learning Process



Integrated communication	"Anywhere, anytime"	Security and protection <small>powered by Postfix</small>
<p>7+ GBs of email storage lets you stop worrying about a full inbox.</p> <p>Integrated calendar manages your schedule, and reserves resources like lab rooms or laptop carts.</p> <p>Web-based applications are accessible from any computer, so students can work outside the classroom.</p>	<p>Work on documents together, at the same time, from multiple locations. Everybody can participate.</p> <p>Sharing and privacy controls include domain-level security, to protect student information.</p> <p>Build class or project websites without using HTML, so everyone can contribute and learn.</p>	<p>Define email filters to limit messages delivered to student or staff accounts.</p> <p>Customized email policies for different groups like faculty, staff and students.</p> <p>Email archiving available at a 66% discount with Google Message Discovery.</p>

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Robust and Secure Infrastructure

School Wide Wireless
ARUBA
networks

Internet Filtering
M86
SECURITY

LanSchool
CLASSROOM MANAGEMENT SOFTWARE

Robust and Secure Infrastructure



Students will not have administrative rights to the laptop!

Standard software image is maintained district wide.
Allows faster deployment and fewer surprises in the classroom!

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Robust and Secure Infrastructure

Roaming Internet Filter

The same filter in school and at home



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Robust and Secure Infrastructure



Teacher's view of student screens



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Robust and Secure Infrastructure

Carts for Secure Storage and
Charging while in School



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Summary of Student Safety & Security

- No Administrative rights to the laptop
- Roaming Internet Filter at School and Home
- Email provided to students archived for 1 year
- Anti-Virus Software provided
- External Backup Drive provided
- LAN School for Classroom Management

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Technical Support

- Each Middle School will have a dedicated technician to support the 1 to 1 initiative.
- Will be able to perform warranty and non-warranty repairs on-site.
- Spare equipment will be stocked at each Middle School for loaners as needed.
- After hours support is provided by Apple through the Apple Care Program by phone or by visiting the any local Apple Store.



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Professional Development

- Faculty & Staff
 - Annual Technology Days for Faculty & Staff
 - Workshops offered during school day, school breaks and over the summer.
- Parents
 - Digital Literacy and Digital Citizenship
 - Mac for Windows Users
 - Internet and Technology Safety

Parent Laptop Training

- Wilson Middle School
 - Sept 15th - 8:30 am
 - Sep 20th - 7:00 pm
- Kennedy Middle School
 - Sept 16th - 8:30 am
 - Sept 19th - 7:00 pm

Insurance

- Annual insurance cost of \$75 per student
- Will allow students to bring laptops home
- Will help us pay for:
 - Stocking spare parts
 - Repairs over and above those covered under Apple Care Warranty
 - Guarantees a loaner

What Happens When the Laptop Breaks?

- Tier 1 - Minor wear and tear covered by annual usage fee. No additional charge.
- Tier 2 - Moderate claims or replacing parts such as a broken DVD drive. (\$100)
- Tier 3 - More expensive claim due to negligence. Items such as spill damage, crack screen or dropped laptop. (\$200)
- Tier 4 - Lost or stolen device. Cost will be for full value of the device (asset recovery).

Handbook & Contract

- Hard copy hand out
- Please review with your child
- Please review contract
- Come to our fall training sessions with signed contract and insurance

Parent Responsibility

- Reinforce the proper use of the computer at home
- Help the student care for their laptop when not at school
- Provide supervision of computer use
- Help protect the computer and charger
- Help the student get the computer and charger back to school
- Report loss or theft to the school as soon as possible •Be aware of the student's need for internet safety if they use the internet at a future date

Digital Conversion Site

- visit:
www.npsdigitalconversion.wordpress.com

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Our Partnership = Our Future

- Your questions and answers
- Where to find additional information
- FAQs from parent focus groups and surveys