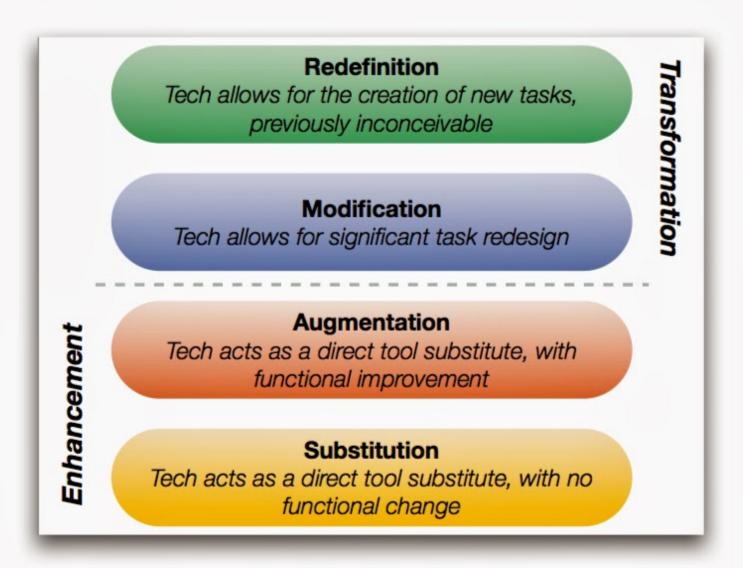
Enhance Learning Through Technology

Strategic Priority Report to School Committee June 7, 2017

Key Goals

- All Pre-K-Grade 4 core classrooms will employ interactive technology daily to improve learning.
- All students in Grades 5-12 will utilize individual digital devices to improve learning.
- All educators will participate in collaborative professional development in the use of educational technology and successfully apply this in the classroom.
- Deploy technology tools and utilize digital content to enhance learning, communication, and customer service for students, staff, parents, and community members.

SAMR



PreK-4 Interactive Technology

- All elementary core classrooms and media centers have interactive projector technology
- 116 projectors deployed across school district
- •4th grade classrooms outfitted with iPads in a 1:2 model, 240 devices deployed



SeeSaw



He continues to need reminders for "is" and "are" but it's better for him to try to get it on his own vs direct imitation

inders for "is" and "are" but it's better for him to try to get it tion

Feb 6, 2017

u for these! We've been noticing how Desmond's been rly and with better grammar than he's done in the past, but I e speed was influencing accuracy. We'll encourage him to he starts dropping his is/are verbs. You're doing such a great t you can send us these videos!

ou! Yes...Desmond's processing of the grammar pieces is slower than his receptive processing so it helps when he can slow down and take the time to plan out the pieces. It's great to hear that he is carrying over the progress at home, too.





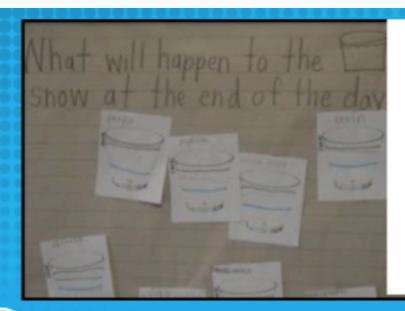




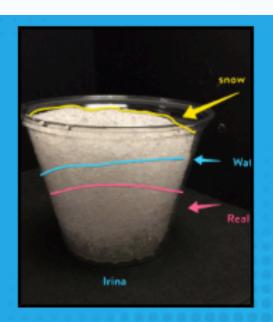








We also filmed melting snow in a cup with the time-lapse video. We predicted where the ice would melt and recorded it with our Annotate app.



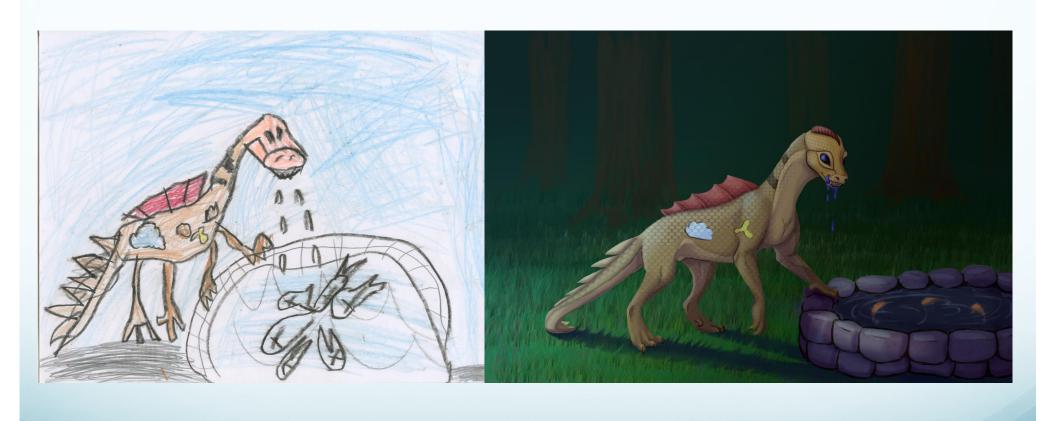




5-12 Use of Digital Devices to Improve Learning

- All students in grades 5-12 have access to a digital device and use these devices to improve learning
- A total of 3,778 iPads deployed
- 77% of 5-12 educators report that their teaching has benefitted as a result of having access to iPads
- •82% of students in grades 5-12 report that they know how to or could teach someone to import and edit video.
- •93% of students in grades 5-12 report that they know how to or could teach someone to create a multi-media presentation

Digital Imaging II Class



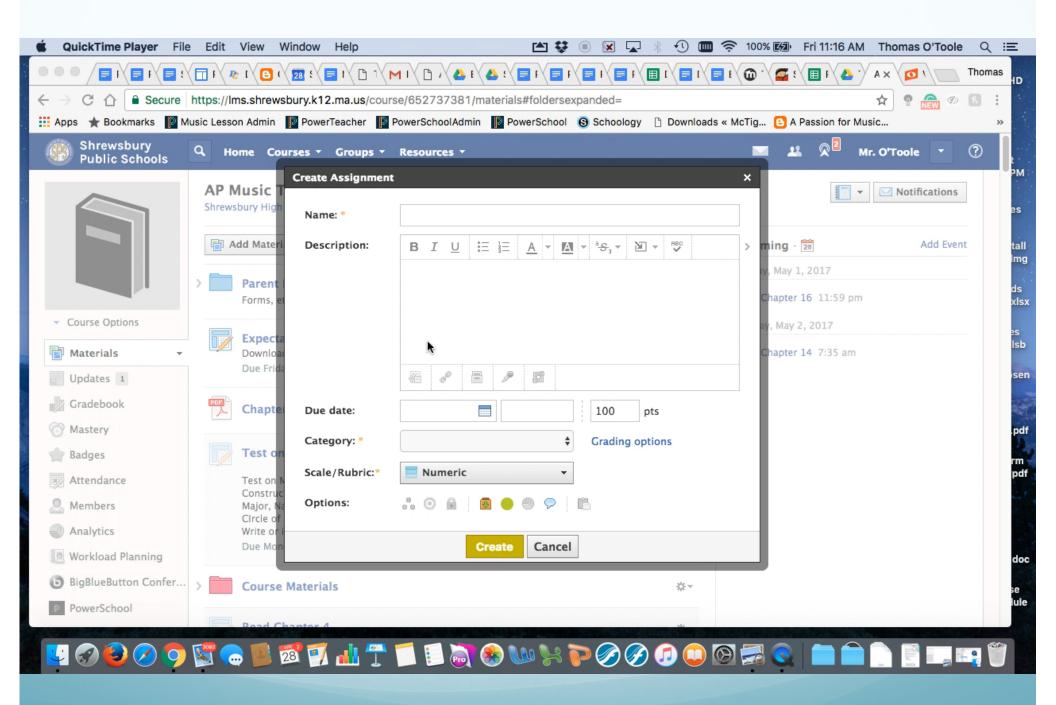
Hack-a-thon



WWII Museum



After visiting the International Museum of World War II in Natick, MA in early May, students in my 1st and 2nd period World Civilizations formed research questions based on an area of interest from the museum. Over the next several weeks, they combed through sources and refined the scope of their research. Then they planned and created projects to showcase their findings. Students were given wide latitude with what topics they could research, and with what format their final product could take. This "Digital WWII Museum" showcases those projects that made use of digital media, falling into three broad categories: written projects, video projects, and website projects. Please take some time to enjoy what the students produced.



ENHANCING LEARNING THROUGH TECHNOLOGY

Please click on the icons below to see the ways students are using their individual digital devices daily at the middle level.

All students in grades 5-12 will utilize individual digital devices daily to improve



1 WORKFLOW

Utilizing the learning management system, Schoology, teachers can post assignments and resources. Students can access these materials and submit completed work for review. Due to 1:1 access, students are provided with a consistent and efficient means of workflow.

2 COLLABORATION

1:1 technology promotes collaboration among students and between students and teachers. Using Google Drive, students have the ability to share their work and receive critical feedback. The technology also provides the opportunity for students to work together to create a common project allowing for everyone's voice to be heard both within and outside the classroom.



Research is an important skill that is developed at the middle level. 1:1 technology provides students with direct access to online resources including websites, data bases, and teacher curated content. Applications like NoodleTools are used by students to create and organize notes and sources. Through the research curriculum, students are taught how to evaluate online sources.



Google Presentations, Infographics, and iMovies are just a few of the ways students use the 1:1 technology for producing high-quality presentations. Students are provided opportunities for voice and choice in demonstrating their learning. Productivity apps also help students to express their creativity in meaningful ways.

5 ORGANIZATION

4 PRODUCTIVITY

Students are able to use their iPads to organize and maintain their assignments and resources without having to manage unwieldy binders. They access Schoology to download assignments and submit work. Students also use folders in Notability and Google Drive to sort and categorize information from their various classes.

6 COMMUNICATION

1:1 technology supports the high level of communication required in 21st century learning environments. Apps such as Google Drive, Schoology, and Explain Everything are the roads students travel on to develop these skills. The technology also allows students and teachers to communicate and engage both inside and outside of the classroom.

7 STUDY TOOLS

Teachers in the 1:1 learning environment can utilize a variety of applications and features to promote effective study skills with their students. Students have easy access to notes and presentations from class that can be used for review. Online games and flashcards promote reinforcement of concepts and skills.

8 OWNERSHIP OF LEARNING

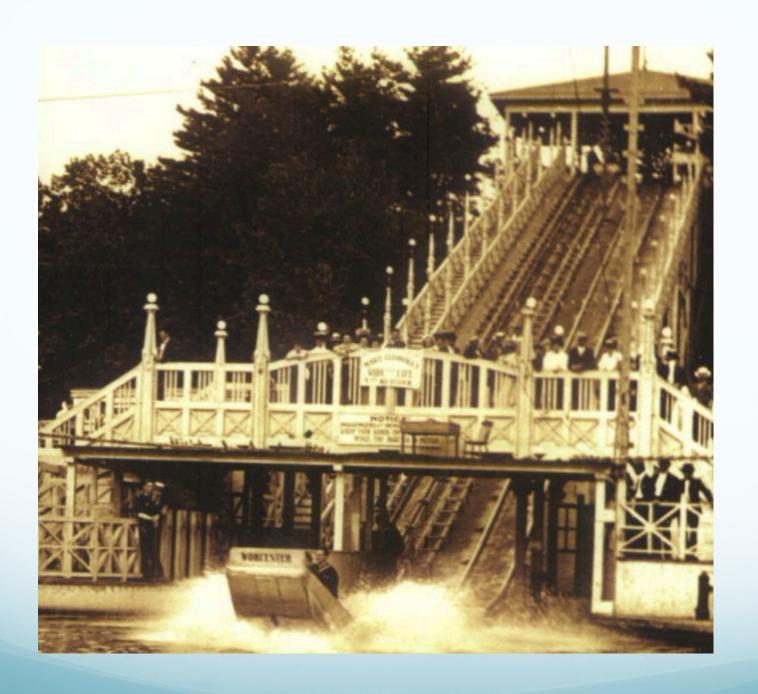
Tools such as Schoology, Google Drive, and Notability empower students to be in control of their learning, organization, and work habits. Teachers post homework, project assignments, rubrics, study guides, and reference materials on these platforms. With open access to these resources, the responsibility shifts to the student to figure out how to utilize these tools to drive their own learning and organizational process











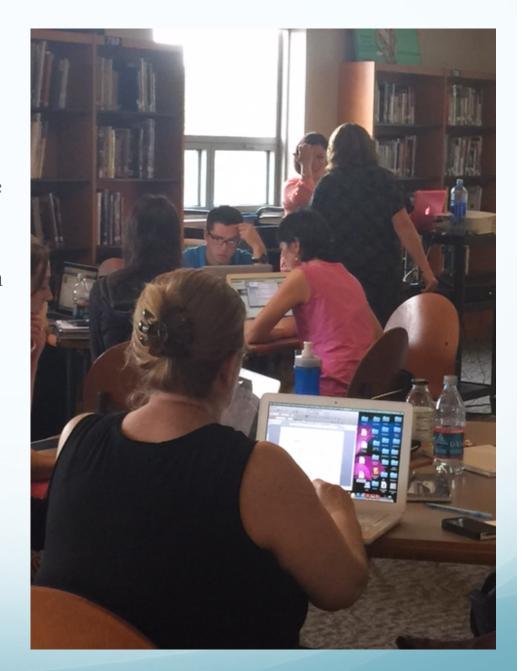


Collaborative Professional Development

- Teacher led Innovation Team for studying and problem solving1:1 implementation at SHS
- Teacher led 4th grade 1:2 training
- Teacher led EdCamp model at middle levelOn-going
- Teams of teachers and administrators annually attend/present at MassCue conference and/or iPad Summit or Innovation Summit
- Student Innovation Team at SHS provides support to teachers on implementing specific technology tools in classrooms

Summer Institute

The Advanced iPad Classroom (2013)The iPad Classroom (2013, 2016) Teaching Elementary Grades with Technology (2013, 2016)Passion Driven Leadership in a Digital Age (2014)The Google Infused Classroom (2014) Utilizing technology to Improve Teaching and Learning in Secondary Mathematics (2014)Video Creation in the Classroom (2015)Integrating Schoology into Your Professional Practice (2015, 2016) Navigating the Complexities of On-Line Information (2017)Cultivating Creativity Through Problem Solving in Secondary Math (2017)



Deploy Technology Tools

- Enhance Learning
- Enhance Communication
- Enhance Customer Service

Enhance Learning

- Schoology
- Aleks
- Apple Classroom
- Notability
- Noodle Tools
- Digital Probes and microscopes
- All students have Google computer accounts



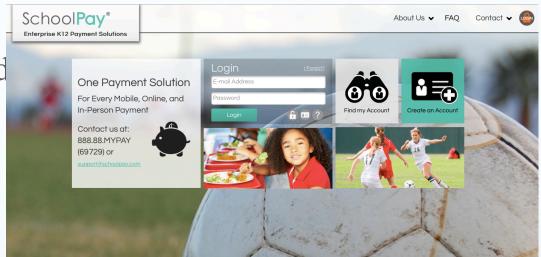
Enhance Communication

- New website (2015)
- Schoology
- School Messenger



Enhance Customer Service

- SchoolPay
- Power School Portal enhanced and customized
 - Bus registration
 - Music Lessons
 - Athletics
- Point-of-sale systems in each school cafeteria



Big Ideas

- Technology now ubiquitous across the district; fades to the background
- Continued focus on using Technology at the "Redefinition" levels
- Ongoing conversations around the benefits and challenges of working in a digital environment

Questions?