



School District No. 57

March 2011

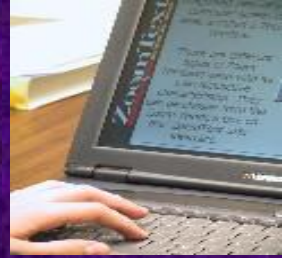


# ENHANCING LEARNING

Using Technology



# Enhancing Learning Using Technology

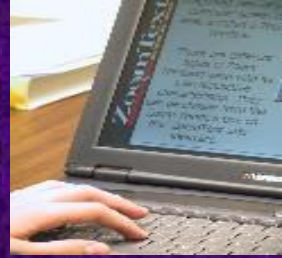


## ▣ Big Picture Presentation

- High level discussion to introduce ideas
- Invite feedback and suggestions
- Implementation planning required



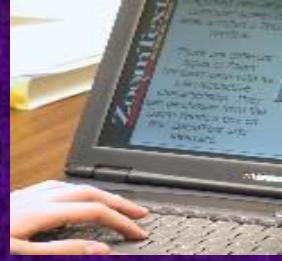
# Enhancing Learning Background



- ▣ Historical perspective:
  - A District Technology Team (DTT) has been active since 1994
  
  - During the first decade, the focus was establishing a technology infrastructure throughout the district
    - Wiring of computer networks in schools
    - Internet connections to schools
    - Acquisition of computers and peripheral devices
    - Development of related technology infrastructure



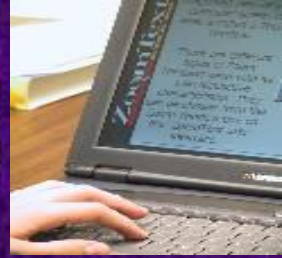
# Enhancing Learning Background



- ▣ Historical perspective – continued
  - Over the last 5 to 6 years, the DTT's focus has shifted from the “nuts & bolts” infrastructure, towards how technology-based tools can be used to improve student learning
  - Ongoing challenges:
    - ▣ Linking technology projects to student learning
    - ▣ For many staff, the use of technology in classrooms represents a significant learning curve
    - ▣ Limited funding for district-wide initiatives



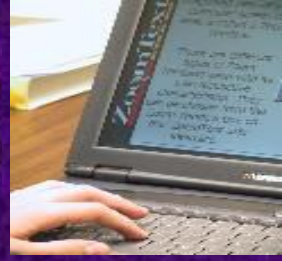
# Enhancing Learning



- ▣ Part of the preparation to meet the needs of learners of the new 21<sup>st</sup> Century learning initiatives is to focus on what technology-related infrastructure will need to be in place to serve their needs.



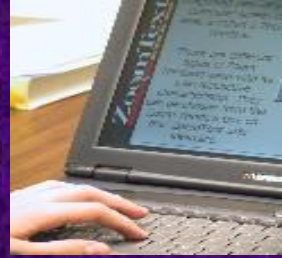
# Enhancing Learning



- ▣ Documents that support personalized learning essentially describe ubiquitous (anytime, from anywhere) access to technology and the web for students and teachers.
- ▣ This type of access is generally available in homes and communities, but not at schools.



# Enhancing Learning

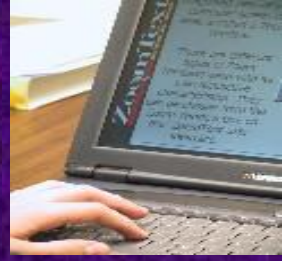


- ▣ Click on the following link to watch a youtube video:

[http://www.youtube.com/watch?v=nIPpwMEA  
Jmc&feature=player\\_embedded](http://www.youtube.com/watch?v=nIPpwMEAJmc&feature=player_embedded)



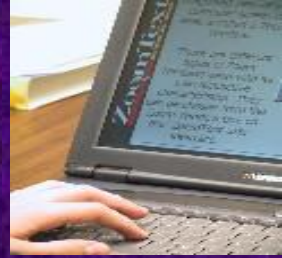
# Enhancing Learning



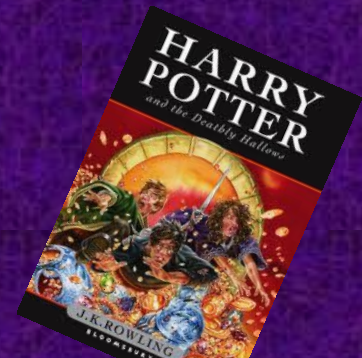
- ▣ To reach this level of support within schools, we have to make some fundamental shifts in what we see as the requirements of our learning infrastructure.
  
- ▣ What to add:
  - Internet access for personal (ie: privately-owned) technology devices
  - Shift our focus to the use of web-based software and resources primarily (except for specific applications)



# Enhancing Learning ... on shifting ground

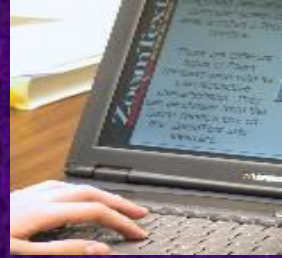


- ▣ The first step is to recognize that our issue is not about the specific devices being used; it is about connectivity and access. On any given day, a new device is available for sale.
  - Amazon has sold more kindles than the last book in the Harry Potter series.
  - The current \$1 billion market for e-readers is expected to swell to \$2.8 billion in the following four years; that's 15 to 60 million units!





# Enhancing Learning ... on shifting ground

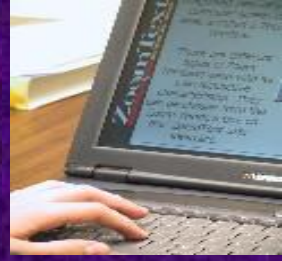


- Apple has sold a staggering 15 million iPads since launched in April 2010.
- Amazon's kindle readers are now 1/3<sup>rd</sup> of their original price from 2006.
- Amazon sold twice as many e-paperbacks than paper- paperbacks last year.





# Enhancing Learning ... on shifting ground

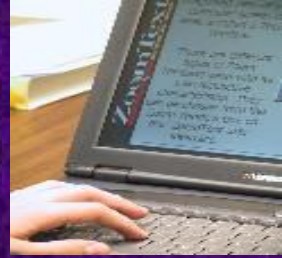


- “According to USA Today’s Best-Selling Books list, e-book versions of the top six books outsold the print versions in January 2011.
- Of the top 50 books, 19 had higher e-book than print sales.
- This is the first time the top-50 list has had more than two titles in which the e-version outsold the print version.” Jan 5, 2011

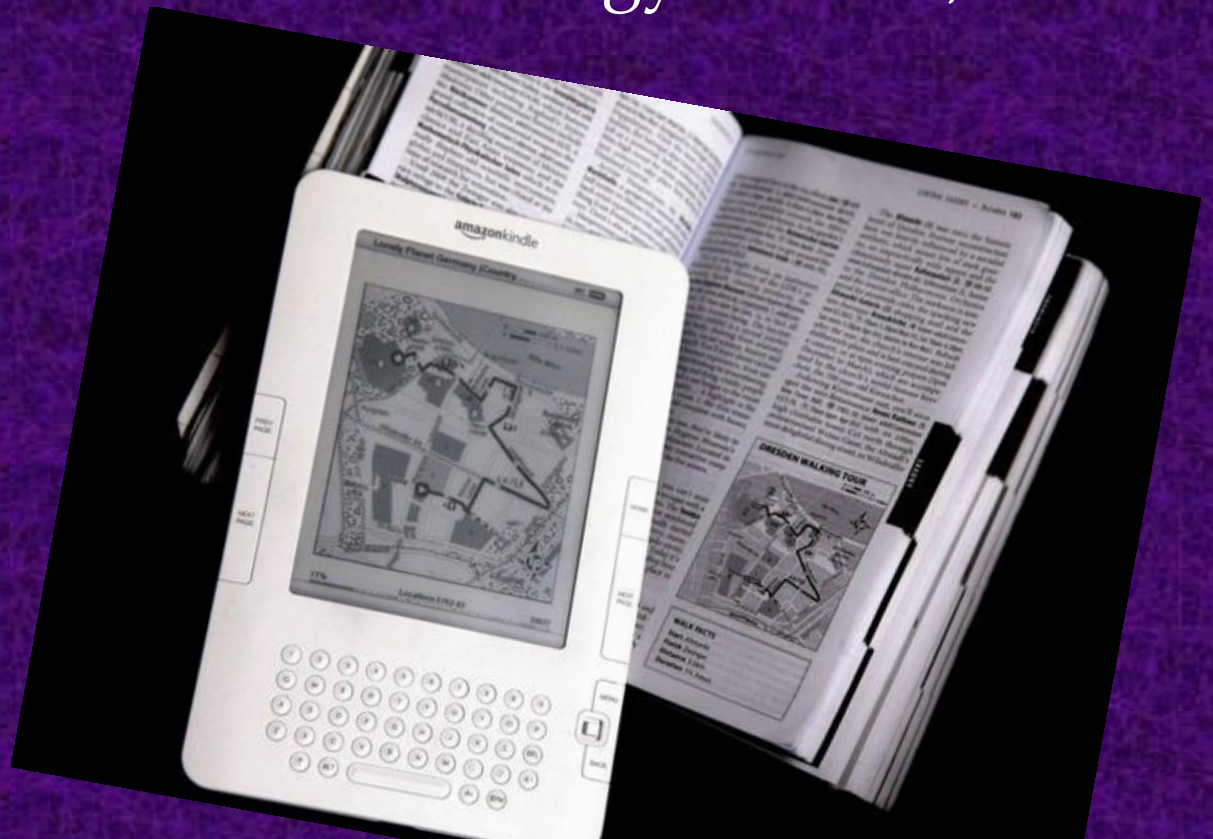




# Enhancing Learning ... on shifting ground



- However, if we look for constants in the digital world, it is a safe bet that our students will have greater access to technology devices, and for less cost.



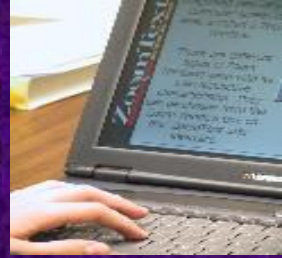
# Enhancing Learning



- ▣ For most students, our goal should be to focus on connectivity.
- ▣ If we hope to approach 1 to 1 student access to computers (ie: every student has access to a computer whenever they need one), we should facilitate the use of personal devices, and start relying on students to supply their own devices.
- ▣ We will need to support a level of district-supplied devices, which can help address equity for our student population



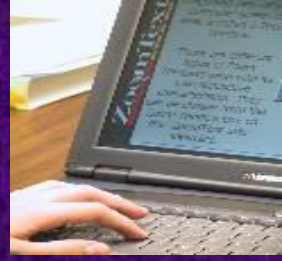
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- ▣ Opportunity: Elementary Greening
  - We have generally been replacing old desktop computer labs with new ones.
  - We need to look at more distributed ways of getting technology into the hands of students:
    - Encourage students to bring their own devices
    - Buy portable computers instead of desktops for student use
    - Target one computer per student in intermediate grades for a substantial amount of the workday
  - Require all buildings to establish wireless access to the Internet for personal devices.
  - Establish netiquette manners and competency in the elementary grades.



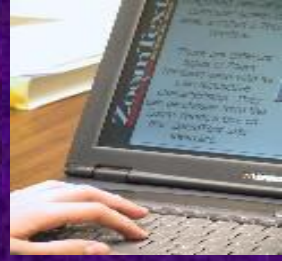
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- ▣ Have discussions with secondary schools to establish standard approaches to access, connectivity, and technology greening.
- ▣ Establish standards for what students use, based on what they need to do: researching, communicating, creating, editing, presenting...
- ▣ School greening plans must reflect district goals.



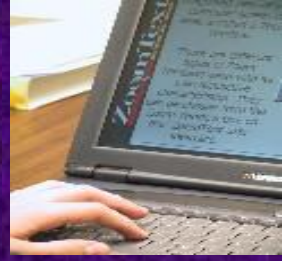
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- ▣ This shift will have implications on many aspects of our daily routines and operations.
  - Examination of school practices on use of technology equipment in and out of class
  - Examination of district supported software, and a shift towards web-based alternatives
  - Issues of on-line bullying
  - Need for better Internet connections at schools
  - District-owned portable computing devices will require higher levels of maintenance/support compared to desktop devices
  - Security and other implications of using privately-owned devices



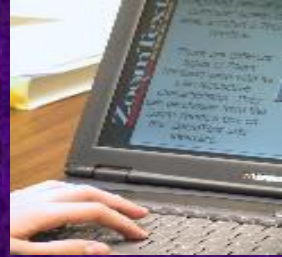
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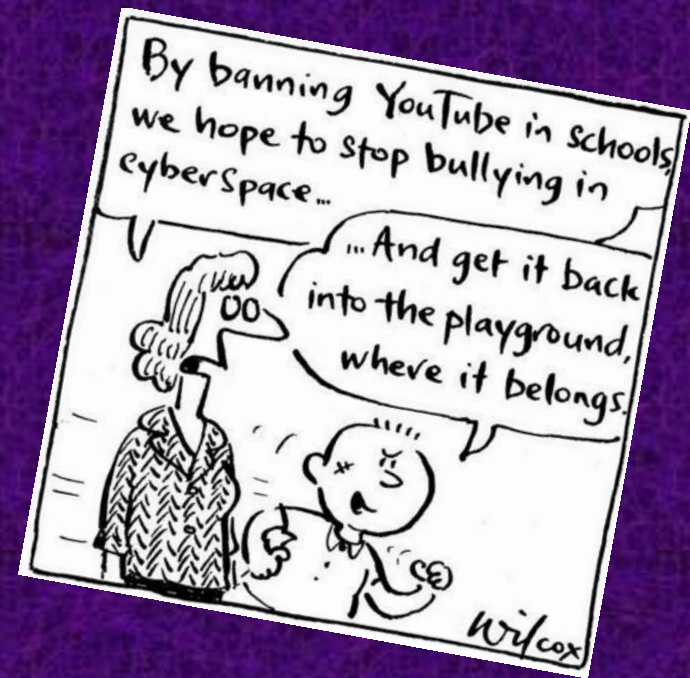
- ▣ Schools will need to continue providing computing devices (ie: netbooks/laptops) to students for the next few years (until privately-owned devices are the norm for students)
- ▣ In the longer term, schools will need to continue to focus on providing solutions for security, data storage, printing, projecting, and specialty applications (mainly at the secondary level)
- ▣ Infrastructure at schools (ie: networks, computers, security) will require existing or greater levels of support for administrative purposes, apart from the educational initiatives



# Enhancing Learning

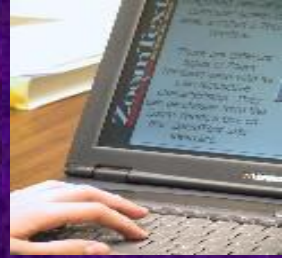


- ▣ It's not so much a change in any of our policies as a proactive response to the emerging issues that have already arisen from the current level of access to technology, both in and out of schools sites.
- ▣ Many of these issues can be examined by drawing upon the examples we have in place within the district and at other sites.
  - A few of our schools currently provide wireless access for personal devices. How do their cyber-bullying issues compare to schools that do not have this connectivity?
  - What lessons can be offered at the elementary levels regarding proper netiquette, which can lead to responsible behaviour at the high school level?





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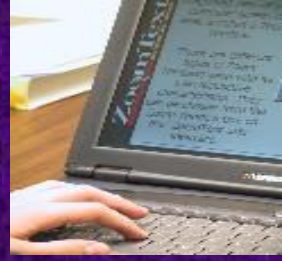


## Key Questions:

- How can staff, students, and parents work together to make a safe virtual learning environment at school?
  
- How many students would be able to bring a suitable device to school today?
  - What could we anticipate the numbers will be next year?
  - How many devices would be needed to bridge the gap?
  - Would there be funds from business, private, corporate, or government sources to assist?



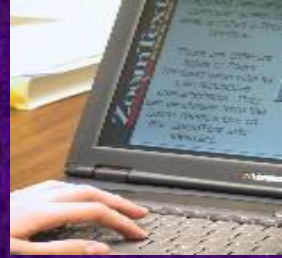
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- What does our current teaching staff need to do, to provide appropriate learning activities to meet the needs of a technology-enabled class?
  - Much of this fits into 21<sup>st</sup> Century – Personal learning planning
  
- Are we using the most appropriate applications for our learning goals?
  - Are we focusing on the right goals?
  - Are we using the right applications to achieve the goals?



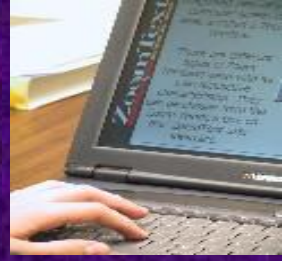
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- ▣ Creating opportunities to learn how to enhance learning through the use of technology will be required.
  
- ▣ District Support of Innovative Ideas/Projects:
  - If funding permits, the district would like to provide support through Technology Learning Team Grants
  - Focus: Using technology to enhance student learning
  - 50/50 grants (school/district)
  - Consistency with district tech goals and vision
    - ▣ Use of web-based /cloud apps
    - ▣ Sharing of resources with, and training of teachers
    - ▣ Internet safety/awareness
  - Application/reporting would include using a wiki and other online tools, for peer review/collaboration/sharing
  - Presentation /Celebration



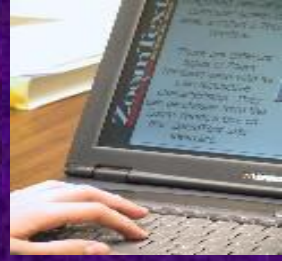
# Enhancing Learning to summarize



- ▣ 21st Century Learning - stewardship - student led.
- ▣ Teacher- technology integration into curriculum
- ▣ Internet access for personal devices
- ▣ Computers – generally more personal-supplied than district-supplied
- ▣ Shift to using web-based applications primarily
- ▣ District support of innovative ideas through grants for technology projects



# Enhancing Learning



- ▣ These questions, plus many others, start the dialogue that forms the initial staging and implementation for a technology-enriched learning environment, that forms the infrastructure for personalized learning.
  
- ▣ Next Steps:
  - Your feedback/comments please by Friday April 15<sup>th</sup>, 2011:
    - ▣ via District Tech Feedback Community on 57WikiSpace or
    - ▣ via First Class e-mail to Morris Scarpino
  - Review and summarize feedback
  - Budget process (spring 2011)
  - Implementation planning