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Getting the Most Out of Your Interactive Whiteboard, Document Camera, and other Hardware

Guiding Questions:
When considering a new piece of hardware for your school or classroom, start with these questions:

- Who will benefit from the technology?
- How does the hardware fit into the classroom paradigm? Teacher-centered or student-centered model of learning?
- What are the costs vs. the benefits of the tool, including support, upkeep, and durability?
- To what extent does the tool allow for content creation, not just consumption?
- How does it support <u>student</u> learning?

Many companies market their hardware by advertising how it will "save the teacher time." While this is important, it should not be the determining factor in the choice of hardware for a school or classroom.

Common Tools for Discussion

Interactive Whiteboards	Document Cameras
Student Response Systems	Digital Cameras
iPod Touch/iPad	eBook Readers
Netbooks/Laptops	Flip Video Cameras

<u>Interactive Whiteboards</u>

- Frequently serve as "status symbol" of dedication to technology in a school.
- Often used to bridge teacher-centered mode of instruction into technology usage.
- Beware of using the IWB as an expensive projector screen or an oversized mouse
- Most effective when used by the student individually or in small groups
- See if software license allows for installation on student computers. Allow students to create interactive lessons.
- Recording software allows for annotated screencasts. Examples can be seen at http://www.mathtrain.tv

<u>Document Camera</u>

- Also frequently used to "bridge" between old and new technology; updated overhead projector
- As with IWBs the best case use is when students are frequently using to do the presentation of material.
- Excellent for capturing images of student work samples to be imported into VoiceThread for annotation and comments by others.
- Use to create conversation around work samples from students
- Similar functionality can be achieved with some digital cameras and a computer

Student Response Systems

- Allows both formative and summative assessment although largely in multiple choice or matching environments
- "Time Saver" Marketing: Quickly and easily assess student learning...Let the Response system focus on the grading so you have more time to address student learning needs.
- Until recently questions were limited to MC, matching, T/F...newer models allow for text input via cell phone like keypad.
- Best used for ongoing formative assessment during class. As such, don't shy away f rom anonymous responses to gauge where the class is at any given moment

eBook Reader/Kindle/Nook

- Carry your whole library around with you on one device
- Allow for limited Internet access via wireless 3G (Not sure how this fits with filtering and eRate funds)
- No sharing of books. High overhead if you already have a sizable library + cost of eBook reader + digital versions of books
- How does a school leverage student purchased Readers?
- Potential for drop in cost due to the release of the iPad

iPod Touch

- Carry the Internet in your pocket
- Ships with thousands of Apps, many educational
- Preparing for the future: We don't yet know where most people will be accessing the Web in the future. We do know that Latinos and African Americans are foregoing home Internet connections in favor of Internet-enabled cell phones
- Suggested Apps: Stanza/Kindle, MobileRSS, Calculator
- Free podcasts on curricular topics, can record with ThumbTack microphone
- Not just music players, can play Audiobooks or display PDFs and eBooks

iPad

- Full web experience (- Adobe Flash player)
- iPod Touch Apps plus new versions of Pages and Keynote for word processing and presentation creation
- Marketed as the "best way to consume web content" though content creation possibilities are there
- Full color, unlike eBook readers
- iBooks program and iTunes Book Store would allow full color books like textbooks
- Limited to one app at the time
- Wifi and 3G models, additional cost for 3G

Digital Camera/Flip Video Camera

- Allow for rich content creation
- Could set up class Flickr account for documenting class activities, field trips, guest speakers, etc
- Digital Storytelling: VoiceThread, Photostory
- Photo Editing: GIMP (open source version of Photoshop), Picasa (Google's photo editor), Aviary.com (online alternative to Photoshop)
- Flip Video Camera allows low cost video recording possibilities: recording labs, class discussions, guest speakers
- Reader's Theatre recordings
- Look for something low cost, high durability to put in the hands of students frequently

Mp3 Recorders

- Inexpensive audio recording possibility
- Not the highest quality, but perfect for voice (podcasts, interviews, recording lectures/presentations to sync with slides)
- USB allows for quick transfer to computer
- Ability to record in WAV format and edit/convert to mp3 using Audacity (free, open-source, audio editing software)
- Low cost makes them ideal for putting in student hands

Netbooks/Laptops

- Highest upkeep and support needs, but also potential for the greatest classroom shift
- Record audio and video
- Create AND consume content in many formats
- Available in Linux and Windows models (XP and Windows 7)
- In either case, it's a great time to discuss free, open-source software options
- Teacher role MUST shift when everyone has "all the answers"
- Questions for 1:1...Battery life, home and school or school only, technical support, anti-virus issues

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