



Advantages of Handheld Computers in the Media Center

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Other Uses?
Schools have a long history of buying great new tools and technologies that arrive with grand fanfare and promises but end up disappointing.
If I tool or toy proves inconsequential, how can we best put it to use?
"How PDAs can really *great* handhelds can that are *not* being *handheld* for *one* and *gone*!"
Want not. Waste not.

©2004, Jamie McKenzie -- Cartoon by Jerry King <http://www.jerryking.com>


"Types of Handhelds"



Palm Operating System

Comes with basic applications such as an address book, to-do-list, notepad, calculator, clock, and expense tracker.


"Types of Handhelds"



Palm Operating System

The Palm Desktop runs on both PC and Mac computers, although Mac users may need to purchase an additional adapter to physically connect the handheld to their computer.

"Types of Handhelds"




Palm Operating System

Most Palm OS devices also ship with conduit software that allows the Palm OS device to synchronize with Microsoft Outlook.

"Types of Handhelds"

Pocket PC Operating System




Advantages

- Larger screen
- Larger size
- Higher processing power
- Pocket PCs provide clearer displays

"Types of Handhelds"


Pocket PC Operating System

Has more resource intensive applications including "pocket" versions of Microsoft Outlook, Internet Explorer, Word and Excel.




"Types of Handhelds"

Drawbacks of Pocket PC



- One drawback to Pocket PC is that devices running this OS are only able to synchronize with Windows-based computers via the ActiveSync software that comes with each device.
- Users must also be using Outlook as their PIM (Personal Information Manager) software.

"Uses for PDA/Scanner Units"




- Inventory
- Circulate Materials from Anywhere
- Plan Day with Calendar Alarm Reminder
- Address Book
- Instant Calculator
- Record Spoken or Written Memos

"Uses for PDA/Scanner Units"

Add 3rd Party Software for

- Grading
- Classroom management
- Database building
- Ready reference questions
- and a multitude of uses



"Inventory Hardware & Software"



Sagebrush In-Hand

<http://www.sagebrushcorp.com/tech/inhand.cfm>

Symbol Brand Handheld Computer comes preloaded with portable circulation and inventory software for Athena, Winnebago Spectrum, and new Accent.

"Inventory Hardware & Software"




Sagebrush In-Hand

<http://www.sagebrushcorp.com/tech/inhand.cfm>

- Latest version of Sagebrush In-H and allows librarians to search, verify, and cross-check patron and collection data from anywhere in the building.
- Also, a new misshelved materials alert sounds whenever materials placed out of call number sequence are scanned by the device's built-in scanner.

"Access, Track & Manage Inventory Software"



Barcode readers peripherals from other vendors

- Alexandria (Palm)
http://www.alexandria.com/products/scanners/palm_scanner.html
- Concourse
<http://www.booksys.com/www.booksys.com/products/barcodes/scanners.shtml>
- Textbook Inventory Program
http://www.hewlett.com/products/bar_code/symbol1800.htm

"Access, Track & Manage Inventory Software"

iPaq Add-Ons: Bar Code Scanner



- SDIO In-Hand Scan Card
- In-Hand Scan Card Type I
- CF Bar Code Laser Scanner 2104

<http://www.socketcom.com>





Managing the Collection

BookBag Plus

<http://www.wikiinfo.com/bookbag/>

Complete book and personal library organization software for Palm or Pocket PC handhelds.

Keep track of books, magazines, etc. that you own, that you have read, that you have checked out, that you want to read/buy. Great for consideration files or special collections.

Managing the Collection



AudioList

<http://www.wikiinfo.com/audiolist/>

Complete audio, CD, and music organization and inventory software for Palm or Pocket PC handhelds.

Managing the Collection




VideoList

<http://www.wikiinfo.com/videolist/>


VideoList is a complete movie, video, DVD, organization software for Palm or Pocket PC handhelds.

Excellent for keeping track of VHS tapes, DVDs, videos, etc.

Class Management and Assessment Tools



- Learner Profile for Palm OS <http://www.wikiinfo.com/>
Gives teachers & media specialists the ability to record student's grades, track assignments, organize student information and develop reports.
- mClass for Palm OS
<http://www.wikiinfo.com/web/products.html>
mClass stands for Mobile Classroom Assessment. Observational assessments can be immediately recorded instead of using a paper clipboard.
- Ucompass Educator - Online Knowledge Management System for Palm OS
<http://www.wikiinfo.com/>



Class Management and Assessment Tools

- Teacher's P.E.T. (from Coffeepot Software) \$19.99 For Palm OS
Designed for teachers and offers grading, attendance, and contact information for up to ten classes. http://www.k12handhelds.com/s_showprodinfo.php?prod_43300
- GradeQuick for Palm OS \$89
Tracks grades, attendance, assignments & students <http://www.ixxonsoftware.com/palm.html>




Collaboration

Beam to Others with

- Documents to Go
<http://www.documents-to-go.com/>
Use your Word, Excel and PowerPoint files on your handheld anywhere, anytime regardless of your operating system
- Quick Office
<http://www.quickoffice.com/quickoffice/details.html>
Sync, View, Edit and Create with Word and Excel
- Send Information with a Wireless Card or Built-in BlueBerry

"E-Books"





"E-Books"


"The Open eBook Forum, the electronic publishing industry's trade and standards organization is reporting eBook sales revenues are up by 30% and unit sales up by 40% over the same period in 2002. This compares to an annual growth rate of just about 5% in traditional print publishing."

<http://www.finnroad.com/articles/2003/9/2003-0-17-eBook-Sales-Rivets-print.html>

"Pros and Cons of E-Books"



- One access point to thousands of books
- Automatic check-in; no reshelving; no lost, stolen, damaged or overdue books
- Supports current learning methods – including distance learning and learning management systems
- Handhelds becoming more common in schools for cross-curricular projects





"Pros and Cons of E-Books"

- Cost Effective, but batteries can be problematic
- Allows for mobility
- Integrated dictionary can be available
- Note pages can be added
- Can be used in a multitude of other ways (Stand-alone, chapter entries from encyclopedias, integrated into online courses)

"Organizations Setting e-Books Standards"

- Open eBook Form (OEBF)
<http://www.openebook.org> is an international trade and standards organization for the electronic publishing industries.
Consists of hardware and software companies, print and digital publishers, retailers, libraries and related organizations.

"Organizations Setting e-Books Standards"

DTBook (NISO Z39.86-2002)



(Digital Talking Books)
http://www.niso.org/standards/resources/Z39_86-2002.html

This standard defines the format and content of the electronic file set that comprises a digital talking book (DTB) and establishes a limited set of requirements for DTB playback devices.

"Organizations Setting e-Books Standards"


- National Center on Accessing the General Curriculum, National File Format Initiative

http://www.cast.org/ncaac/index.cfm?i=3_1_3_8


"Organizations Setting e-Books Standards"

- The U.S. Department of Education's Office of Special Programs (OSEP) provides leadership in how new curricula, teaching practices, and policies can be woven together to improve access to the general curriculum by students with disabilities.




"Organizations Setting e-Books Standards"

Daisy Consortium
<http://www.daisy.org>




is establishing digital standards that permit everyone, but especially people who are blind, visually impaired, or have another print disability, to experience a better way to read. Allows a person to listen to a DAISY book on a computer while reading the text with a Braille display.

"Organizations Supporting E-Books"




- The Association of American Publishers (AAP) Digital Policy/E-book Project
<http://www.publishers.org/digital/index.cfm>
- American Association of University Presses (AAUP) Electronic Publishing Resources
<http://aaupnet.org/resources/electronic.html>

"Marketing E-Books to Libraries"




An online book sale requires a credit card number and then the books are transferred to the user's computer with certain protections in place that prevents the user from providing a usable copy to others.

"Marketing E-Books to Libraries"



Change the credit card number to a library card number, add an expiration date to the protections and you have the beginnings of a library lending system.

E-Book Technology Companies




The Adobe Content Server
<http://www.adobe.com/80/products/contentserver/main.html>
allows libraries to lend books to their patrons via Adobe PDF format. This is the technology behind netLibrary and Baker & Taylor's e-book lending function.

E-Book Technology Companies




OverDrive Technology
<http://www.overdrive.com>
allows the sale and transfer of e-books in any of their popular formats and allows the seller set file protection and other conditions of the sale. Overdrive allows public libraries to deliver popular frontlist titles. It's now in use at the CLEVNET Library Consortium, Cleveland, and King County Library System, WA. Overdrive has been added to the OCLC Cataloging Partners.

E-Book Sources




- BookSource: Nonfiction from EBSCO Services**
<http://www.ebsco.com/school/ebooksource.asp>
<http://www.ebsco.com/school/s-booksource.asp>
for elementary and for high school.
- Fiction Wise has developed a library solution called LibWise** <http://www.libwise.com> that allows users to download e-books onto their handheld devices using an infrared beam from a computer at the library.

E-Book Sources




- netLibrary = www.netlibrary.com – offers a comprehensive approach to manage and delivering eContent. It is now owned by OCLC. It's the first company to systematize the lending of digital books in a one book one loan model like physical objects which satisfies publishers' desire to limit simultaneous users. It provides circulation statistics on usage and turnaway and full MARC records are available.
- Gale Virtual Reference Library <http://www.galegroup.com/eBooks/> delivers access to reference sources as individual titles via the subscribing institution's web OPAC as well as via a customized database collection.
- Books24x7 <http://www.books24x7.com> Referenzware is the largest collection of current online reference content.
- Many major online book vendors like amazon.com have e-book sections.



Free E-Books

Project Gutenberg is the Internet's oldest producer of EBEE electronic books. This project was started 33 years ago by Michael Hart and Greg Newby. Their goal is to make nearly any public domain work available online in digital format.

- **Project Gutenberg** is a unique collection of thousands of documents (databases, literature, maps, technical references, lists, etc.) <http://www.gutenberg.org>
- **Union catalog of e-books** <http://onlinebooks.library.upenn.edu>
- **University of California Press Books** <http://escholarship.cdlib.org/ucpress>
- **University of Virginia Electronic Text Library** <http://etext.lib.virginia.edu/ebooks/ebooklist.html>



Ebrary

<http://www.ebrary.com>

ebrary created databases of books, maps, sheet music, reports and other authoritative content from leading publishers, which they license to libraries and other institutions worldwide.



ALA Chooses ebrary's Platform

ALA members will soon be able to access a full, searchable, digital database of *American Libraries*.

<http://www.ala.org/online>




Digital Book Index

<http://www.digitalbookindex.com>

Provides access to more than 80,000 titles records from more than 1800 commercial and non-commercial publishers, universities, and various private sites. About 48,000 of these books, texts, and documents are available free.

E-Book Readers Software

To read an e-book on a handheld, a different version of an e-book reader is needed than the one needed for a desktop computer.



E-Book Readers Software

- **Palm Reader** <http://www.palmdigitalmedia.com/product/reader/bravesoft>
- **Microsoft Reader** <http://www.microsoft.com/reader/default.asp>
Integrates text-to-speech capabilities with a mechanical but reasonably clear voice. Words are highlighted as they read, allowing a sighted user to follow along with the spoken words.
- **Adobe Acrobat Reader Version 6.0**
<http://www.adobe.com/products/acrobat/readstep2.html> and <http://www.adobe.com/products/acrobat/readerhelp.html>
- **Mobipocket Reader 4.7 for PDA & PC**
<http://www.mobipocket.com/en/Downloads/Soft/default.asp>



E-Book Writers

- **ReaderWorks** <http://www.everdive.com/readerworks/>
- **Adobe Acrobat 6.0**
<http://www.adobe.com/products/acrobatpro/ftpout.html>
- **Microsoft Reader Tools** needed to create Microsoft Reader eBooks
<http://www.microsoft.com/reader/downloads/sdk.asp>



E-Book Writers

- **MobiPocketPublisher**
<http://www.mobipocket.com/en/HomePage/default.asp>
- **E-Book Studio** <http://www.palmdigitalmedia.com>
- **Palm DropBook and MakeBook**
<http://www.palmdigitalmedia.com/dropbook>



Web Capture Sites

- With AvantiGo, you can get thousands of specially formatted brand-name web sites ("channels") on your PDA or smartphone: news, weather, sports, stock quotes, maps, movie listings, and more. All for FREE!
<http://avantigo.com/>
- **Yahoo Mobile!**
<http://mobile.yahoo.com/pda/home>
- Use Create Mobile Favorites in Explorer Browser

Audio Books Source

Audible.com <http://www.audible.com>

Over 18,000 audiobooks, magazines, newspapers and radio programs that you won't find anywhere else! Exclusives like *The New York Times Audio Digest*, the audio edition of *Forbes Magazine*, public radio programs.


Listen on your AudibleReady MP3 player, Apple iPod, Palm Handheld, Pocket PC, or computer desktop.


Peripherals - In-Put Devices

Keyboards

Virtual Keyboard
A full-size virtual keyboard projected by light on to any surface has been invented.

MSI.com/press/pressroom/articles/Bk_Rokuawa_Virtual_Keyboards_Sum





Scientific Probes

Peripherals - Projection Add-ons

- Presentation – iGO for Palm
<http://www.palm.com/pressrel/pressrel.htm?Q=//>
- Margi: Presenter-to-Go for PCs
http://www.margi.com/products/prod_ptg.htm



Peripherals - Additional Memory



Secure Digital



Compact Flash

Peripherals - Cameras



Peripherals - GPS Systems




Wireless Peripherals

WirelessConnections
Cordless 56K Modem with Bluetooth
<http://www.wireless.com/conduct/CM7100610.asp>

802.11b Compact Flash Wireless LAN Card
D-Link



Wireless Printers - Print Boy & Infrared Adapter
<http://www.beetmannsoftware.com/>

Web Pages for Handhelds

- HICE (at the University of Michigan)
<http://www.hice.umich.edu/>
- K12 Handhelds <http://www.k12handhelds.com>
- HandheldLearning <http://www.educationpalm.org/>
- Kathy Schrock's POWER Page
<http://www.kathyschrock.net/power/>



Web Pages for Handhelds



- PDA Education
<http://www.pdaed.com/vertical/tutorials.vml>
- Using Handheld Technologies in Schools
<http://www.softtec.org/publications/NewsWire/Vol5.2.pdf>
- Handango - leading publisher of handheld and wireless software
<http://www.handango.com/home.jsp?siteid=1>
- Freeware Pocket PC <http://www.free-warsppc.com/>
- Learning@Hand <http://www.learningathand.com/>

NETS-T Standards for Handhelds



I. Technology Operations and Concepts


B. demonstrates continual growth in technology knowledge and skills to stay abreast of current and emerging technologies.

NETS-T Standards for Handhelds

III. Teaching, Learning, and the Curriculum

A. facilitate technology-enhanced experiences that address content standards and student technology standards.
 B. use technology to support learner-center strategies that address the diverse needs of students.
 C. apply technology to develop students' higher-order skills and creativity.
 D. manage student learning activities in a technology-enhanced environment.

NETS-T Standards for Handhelds



IV. Assessment and Evaluation

B. use technology resources to collect and analyze data, interpret results, and communicate findings to improve instructional practice and maximize student learning.

NETS-T Standards for Handhelds

V. Productivity and Professional Practice

A. use technology resources to engage in ongoing professional development and lifelong learning.
 C. apply technology to increase productivity.
 D. use technology to communicate and collaborate with peers, parents, and the larger community in order to nurture student learning.


NETS-T Standards for Handhelds

VI. Social, Ethical, Legal and Human Issues

B. apply technology resources to enable and empower learners with diverse backgrounds, characteristics, and abilities.
 D. promote safe and healthy use of technology resources.
 E. facilitate equitable access to technology resources for all students.


NETS-S Standards for Handhelds

- Basic Operation and Concepts
 - Students demonstrate a sound understanding of the nature and operation of technology systems.
 - Students are proficient in the use of technology.



NETS-S Standards for Handhelds

- Social, Ethical, and Human Issues
 - Students practice responsible use of technology systems, information, and software.
 - Students develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.



NETS-S Standards for Handhelds

- Technology Productivity Tools
 - Students use technology tools to enhance learning, increase productivity, and promote creativity.
 - Students use productivity tools to collaborate in constructing technology-enhanced models, preparing publications, and producing other creative works.




NETS-S Standards for Handhelds

- Technology Communications Tools
 - Students use telecommunications to collaborate, publish, and interact with peers, experts, and other audiences.
 - Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences.



NETS-S Standards for Handhelds
Technology Research Tools


- Students use technology to locate, evaluate, and collect information from a variety of sources.
- Students use technology tools to process data and report results.
- Students evaluate and select new information resources and technological innovations based on the appropriateness of specific tasks.



NETS-S Standards for Handhelds

- Technology Problem-Solving and Decision-Making Tools

- Students use technology resources for solving problems and making informed decisions.
- Students employ technology in the development of strategies for solving problems in the real world.



Online Professional
Development Class



<http://www.uwstout.edu/soe/profdev/handhelds/>

Questions
Comments,
Discussion.

