

## Multimedia Memories: Family Involvement in Electronic Portfolio Development in Elementary School

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## Questions Addressed in this Presentation

- How can families help young students build electronic portfolios that demonstrate growth over time?
- How can parents help their children use commonly-available multimedia software to create digital documentation of development, while addressing obsolescence of media and data formats?



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## Assumptions

(from the Teacher/Classroom Point of View)

- In many schools, students have more computer access in their homes than in their classrooms.
- Portfolios (whether paper or electronic) belong to the student.
- Teachers don't have a lot of extra time... they need a partner in the electronic portfolio development process to help those students who do not have the necessary technology skills.



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## Assumptions

(from the Child/Family Point of View)

- Children and parents are natural "packrats"
- Technology is becoming very commonplace in the home, even among single-parent families
- Families want to find meaningful ways to support students' learning using technology
- Parents want to be involved in early childhood learning



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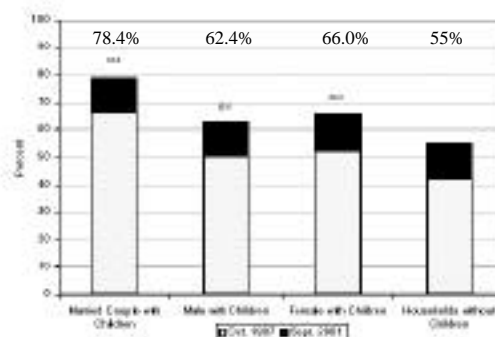
## Use of the Internet and Home Computers Expanding

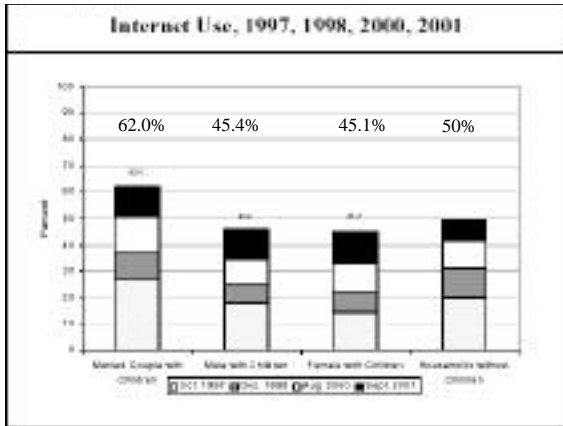
- More than 54% of all households are connected to the Internet (as of September, 2001)
- More than 90 percent of children between the ages of 5 and 17 now use computers at home and/or at school.
- 75% of 14- to 17-year-olds and 65% of 10- to 13-year-olds use the Internet
- 71% of 3-to 8-year olds use computers  
28% of 3-to 8-year olds use the Internet

U. S. Department of Commerce (February, 2002)  
*A Nation Online:*  
<http://www.ntia.doc.gov/ntiahome/dn/index.html>



Computer Use, 1997, 2001





## What is a Portfolio in Education?

A portfolio is a purposeful collection of student work that exhibits the student's efforts, progress and achievements in one or more areas *[over time]*. The collection must include student participation in selecting contents, the criteria for selection; the criteria for judging merit, and evidence of student self-reflection.



(Northwest Evaluation Association, 1990)

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## How are portfolios often stored?

- Note-books
- File folders
- Large, red-rope envelopes
- Pizza boxes
- You name it!



## What is an Electronic Portfolio?

- Uses electronic technology as the container
- Allows the portfolio developer to collect and organize portfolio artifacts in many media types (audio, video, graphics, text).
- A standards-based assessment portfolio uses a database or hypertext links to clearly show the relationship between the standards or goals, artifacts and reflections.
- The learner's reflections are the rationale that specific artifacts are evidence of achieving the stated standards or goals.<sup>10</sup>



## Why do an Electronic Portfolio?

- Make work in many media accessible, examinable, widely distributable
  - easy to create back-up files
  - portability
- Minimal storage space
- Long shelf life
- Learner-centered
- Increases technology skills
- It's fun



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## Missing Element: Time

- Teachers in early childhood classrooms don't often have the time to develop electronic portfolios without a LOT of help.
- If we are going to have electronic portfolios in early childhood, they need to be developed in partnership with parents, or grandparents, or older students working in cross-age collaboration.



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## Missing Element: Technology

- Many schools do not have adequate access to computer equipment or multimedia hardware such as cameras and scanners.
- Many families have acquired multimedia development equipment for their own use:
  - Scanners
  - Digital cameras
  - Video cameras
  - CD-Recorders



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How many families have those boxes full of the work that their children bring home from school?



*Victoria's collection*

## What happens to that work?

- A lot of it just accumulates and gathers dust.
- Many parents and grandparents collect photographs and video of their children, documenting their growth over time.
- A lot of that work also sits in a box or eventually deteriorates with age.
- Many families are making scrapbooks of this memorabilia.



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## Families as e-Portfolio Partners

- Find strategies to involve families as partners in the e-portfolio development process
- Use home computers to make up for the lack of teacher time and access to computers in classrooms.
- Take advantage of the popularity of scrapbooking to involve families in e-portfolio development.



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## Turning scrapbooks into portfolios

- With some guidance, and support for facilitating student self-reflection, these scrapbooks could be turned into portfolios.
- How can families help build electronic portfolios that demonstrate growth over time?



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## Dr. Helen Barrett's Electronic Portfolio Development Stages

1. Determine the purpose, audience, content
2. Working Portfolio (Collection, Selection)  
(Developing the Digital Archive)
3. Reflective Portfolio  
(What? So What? Now What?)
4. Connected Portfolio  
(Creating a hyperlinked document)
5. Presentation Portfolio  
(Publishing and Sharing)



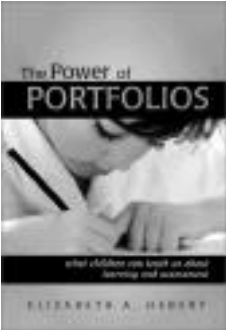
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## The Power of Portfolios

*what children can teach us about learning and assessment*

Author: Elizabeth Hebert  
 Publisher: Jossey-Bass

Picture courtesy of Amazon.com



## The Power of Portfolios

Author:  
 Dr. Elizabeth Hebert,  
 Principal  
 Crow Island School,  
 Winnetka,  
 Illinois


Picture taken by Helen Barrett at AERA, Seattle, April, 2001




### From the Preface (1)

Hebert, Elizabeth (2001) *The Power of Portfolios*. Jossey-Bass, p.ix


“Portfolios have been with us for a very long time. Those of us who grew up in the 1950s or earlier recognize portfolios as reincarnations of the large memory boxes or drawers where our parents collected starred spelling tests, lacy valentines, science fair posters, early attempts at poetry, and (of course) the obligatory set of plaster hands. Each item was selected by our parents because it represented our acquisition of a new skill or our feelings of accomplishment. Perhaps an entry was accompanied by a special notation of praise from a teacher or maybe it was placed in the box just because we did it.”



### From the Preface (2)

Hebert, Elizabeth (2001) *The Power of Portfolios*. Jossey-Bass, p.ix


“We formed part of our identity from the contents of these memory boxes. We recognized each piece and its association with a particular time or experience. We shared these collections with grandparents to reinforce feelings of pride and we reexamined them on rainy days when friends were unavailable for play. Reflecting on the collection allowed us to attribute importance to these artifacts, and by extension to ourselves, as they gave witness to the story of our early school experiences.”




### From the Preface (3)

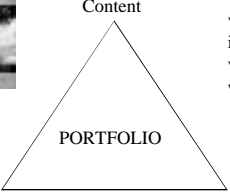
Hebert, Elizabeth (2001) *The Power of Portfolios*. Jossey-Bass, p.ix-x

“Our parents couldn’t possibly envision that these memory boxes would be the inspiration for an innovative way of thinking about children’s learning. These collections, lovingly stored away on our behalf, are the genuine exemplar for documenting children’s learning over time. But now these memory boxes have a different meaning. It’s not purely private or personal, although the personal is what gives power to what they can mean.”




## Interrelatedness of Purpose, Ownership, and Content





“These three definitional values are highly interdependent. If one of these values is known the other two will be known as well.”



Hebert, Elizabeth (2001) *The Power of Portfolios*. Jossey-Bass, p.47

## Stages of Ownership of the Portfolio

Child-organized portfolio

Teacher-and-child-organized portfolio


Progress portfolio

Showcase portfolio or achievement portfolio

Teacher-organized portfolio or curriculum portfolio

Collection of child's work


Folder of child's work



Hebert, Elizabeth (2001) *The Power of Portfolios*. Jossey-Bass, p.45 25

## Primary Portfolio Purpose

“If we can begin to consider that the primary purpose for the portfolio is to provide a vehicle for each child to grow metacognitively and to demonstrate competence in telling the story of learning, the door is open for the child to assume ownership.”




Hebert, Elizabeth (2001) *The Power of Portfolios*. Jossey-Bass, p.48 26

## Contents of the Portfolio

Hebert, Elizabeth (2001) *The Power of Portfolios*. Jossey-Bass, p.42


“Although content is a logical way to define a portfolio, we later understood that it’s important not to become rigid about what goes into the portfolio. I’m reminded always of the wonderful advice by Pearl and Leon Paulson: ‘Portfolios tell a story...put in anything that helps to tell the story’ (1991, p. 294).”



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## How we developed ECE portfolio


- **Purpose:** A chronologically-organized learning portfolio
- **Collection:** The BOX
- **Selection:** Criteria for Selection  
10-12 items + journal entries + pictures + video, showing growth over the year
- **Reflection:** (sticky notes)  
I like \_\_\_\_\_ because...  
I learned ...



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## Selecting the artifacts


- **Criteria:**
  - Self-created work - no worksheets
  - 10-12 items showing growth over time



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## Artifact with sticky note reflection

“I like my elephant  
Because it has hearts  
for the ears.  
I learned  
you  
can be  
created  
[creative].”



## Creating the Digital Archive

- Equipment
  - Scanner
  - Digital Still Camera
  - Digital Video Camera
- File Storage Issues
- Organization Strategies
- Process



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## Tools to Connect/Organize the Artifacts and Reflections

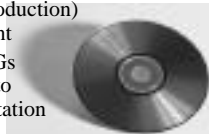
- Software we used
  - Microsoft PowerPoint & Adobe Acrobat
  - Sound Companion (sound recording & editing)
  - QuickTime Player Pro
  - iMovie & Adobe PremiereLE
- Other software we want to try
  - KidPix
  - Camtasia and Snag-It (Windows)
  - Extensis' Portfolio
  - Any digital asset management system (database)



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## File Formats I Used

1. The original **generic files in folders** in JPEG, AIFF (sound, converted to sound-only Quicktime), and .MOV (QuickTime movie) file formats - this is the digital COLLECTION
2. JPEG files converted into **Acrobat**, with links to the sound and video files (and a few PowerPoint slides as introduction) - a **HYPERLINKED** document
3. **PowerPoint**, with the JPEGs inserted on slides, with links to the video - a **LINEAR** presentation



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## Issues about File Formats

- Will you be able to read these files 10-15 years from now?
- Are they in a standard, generic or proprietary formats?
- What about text files?
- Make sure word processing files are saved in plain text or RTF formats.



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## Future File Formats for Experimentation

- HyperStudio
- Web-based multimedia authoring tools
- Convert the whole thing to digital video using iMovie and saved to digital video formats (DVD?) (a kindergarten portfolio has mostly scanned images, audio and video reflections, and no computer-created documents)
- A Web-enabled database



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## Publishing the Portfolio

- Storage systems we used at one time or another
  - Internal and external hard drives
  - Zip disks (100 MB)
  - CD-Recordable disk (650 MB)
  - MyYahoo Briefcase (30 MB)
  - Apple iTools iDisk (20 MB)
- Storage system we want to use:
  - **iDVD** (4.5 GB)



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## What pilot testing is needed to make this process work in schools?

- Teacher Resource Guide (on CD)
  - A series of “Step-by-Step” Guides and Tutorials
- Family Resource Guide (print from CD)
  - A similar series of “Step-by-Step” Guides and Tutorials
  - A jargon-free explanation of the ECE Portfolio Process
- Recommendations on:
  - Online Storage Strategies
  - Software to organize the portfolio
  - Hardware to digitize the artifacts



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## Help Wanted

- A few teachers, with students and families willing to try out various strategies (Kindergarten-3rd grade)
- School location between south Seattle and north Tacoma (including Puyallup)
- Willing to spend a couple of late afternoons or early evenings at the school working on their portfolios



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## What's Next?

### A Gift for the Future A Partnership for Today

How to extend this process beyond the classroom...



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## Documenting our Families' Stories

- There are a group of people (personal historians) who are helping elderly people recall and record their life stories.
- A new trend is to record these stories in audio and video formats (digital storytelling).
- How about beginning the collection process much earlier in life?



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## Leaving a Legacy Beyond the Classroom

- Couple the interest in **scrapbooking** with the widespread interest in **genealogy**, and you have *Project Progeny*: or genealogy in reverse.
- We have the technology today to begin telling our stories for current and *future* generations, not just in words, but in sounds and images, stored in a media that will last longer than magnetic tape or celluloid.



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## Beware of the obsolescence of Magnetic Media

Why Family Stories and History are Lost:  
*Procrastination*

- **Rating the Life of Archival Media**
  - Inkjet photos - 5 years
  - Audio & video tapes - 25 years
  - Boxes of stuff in the attic - 50 years
  - Childhood memories - 75 years
  - CD-ROMs - Over 100 years
  - A well printed and bound book - 100s of years



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(Source: Tombo Media: <http://www.tombomedia.com/Notes.html>)

## We need a vision of the possible

- We have a baby boom generation who are becoming grandparents
  - many have or can afford the technology
  - their children (and grandchildren) have the technology skills to make it happen.
- Involving our children and grandchildren in building a new family tradition:
  - documenting our family values and preserving our stories



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## Cross-Generational Collaboration

- We share the development process and build the younger generation's commitment
- It is their responsibility for insuring that these digital stories are preserved and transferred to the next appropriate media every decade or so...  
whatever that media turns out to be.



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## A Gift for the Future

- What a gift we can give to our descendants: to know us through songs and stories, laughter and tears... to preserve our family values, heritage and the celebrations of our lives.



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## A Partnership for Today

- If we introduce this digital collection/ e-portfolio strategy beginning in early childhood classrooms, we give new meaning and definition to **family involvement** and partnership in our children's education.



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## My Final Wish...

A conversation  
about Tori's  
portfolios ->

May all your  
**electronic portfolios**  
become dynamic  
**celebrations of**  
**learning**  
across the lifespan.



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<http://electronicportfolios.com>



- becoming a resident of Washington state, again  
...after 26 years in Alaska



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