ePortfolios:
Digital Stories of Deep Learning

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Legacy from the Portfolio Literature

- Much to learn from the literature on paper-based portfolios
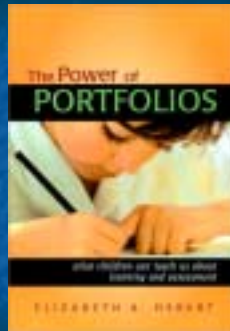- As adult learners, we have much to learn from how children approach portfolios

"Everything I know about portfolios was confirmed working with a kindergartener"

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)

"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)

"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)

"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**."

Let's get personal…
Think for a minute about:

Something about your **COLLECTIONS**: Suggested topics:

- If you are a parent, what you saved for your children
- What your parents saved for you
- What you collect…
- Why you collect…

Some issues to consider

- What do your collections say about what you value?
- Is there a difference between what you purposefully save and what you can't throw away?
- How can we use our personal collections experiences to help learners as they develop their portfolios?

The power of portfolios [to support deep learning] is personal.

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].*

(Northwest Evaluation Association, 1990)

What is a Portfolio in Education? (2)

The collection must include:
- student participation in selecting contents
- the criteria for selection
- the criteria for judging merit
- evidence of student self-reflection

(Northwest Evaluation Association, 1990)

Metaphors!

- Mirror, Map, Sonnet
- C.V. or Multimedia Resume
- Test
- Story

- http://electronicportfolios.org/metaphors.html

Purpose & Goals for the portfolio (Determine Content)

- Multiple purposes:
  - Learning/Process
  - Assessment
  - Marketing/Showcase

Think about the differences between:

- Learning Portfolio *and* Portfolio Learning
- Assessment Portfolio *and* Portfolio Assessment
- One is more **Product**, the other is more **Process**

Learning Portfolios

- *"know thyself" = a lifetime of investigation*
- *self-knowledge as outcome of learning*
- *portfolio development study (Brown, 2002)*
  - *increased students' understanding of what, why, and how they learned throughout their careers*
  - *enhanced their communication and organization skills*
  - *reinforced the importance of reflection in learning.*

Learning Portfolios

- Support reflection which is central to learning
- Reflections
  - The Heart and Soul of the Portfolio
- An electronic portfolio without reflection is just a
  - Digital scrapbook
  - Fancy electronic resume
  - Multimedia Presentation
  - Personal web site

Showcase Portfolios

- Marketing
- Employment
- Tell your story
- A primary motivator for many portfolio developers

Assessment Portfolios

- A major movement in Teacher Education in U.S.
- A major new commercial market
- A primary motivator for organizations

More later!

A few thoughts about Assessment -- What Type?

- Assessment OF Learning? or
- Assessment FOR Learning?

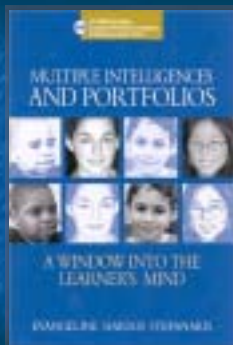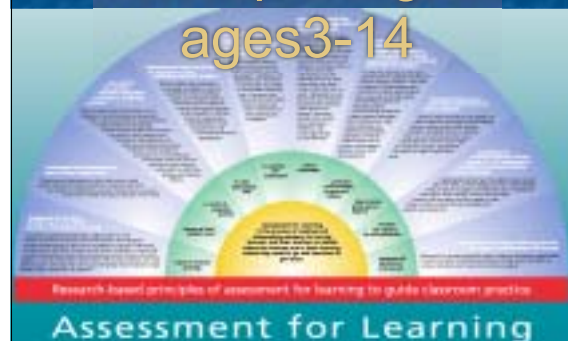## Portfolios used for Assessment OF Learning

- Purpose of portfolio prescribed by institution
- Artifacts mandated by institution to determine outcomes of instruction
- Portfolio usually developed at the end of a class, term or program - time limited
- Portfolio and/or artifacts usually "scored" based on a rubric and quantitative data is collected for external audiences
- Portfolio is usually structured around a set of outcomes, goals or standards
- Sometimes used to make high stakes decisions
- Summative - what has been learned to date? (Past to present)
- Requires Extrinsic motivation
- Audience: external - little choice

Portfolios that support Assessment FOR Learning

- Purpose of portfolio agreed upon with learner
- Artifacts selected by learner to tell the story of their learning
- Portfolio maintained on an ongoing basis throughout the class, term or program - time flexible
- Portfolio and artifacts reviewed with learner and used to provide feedback to improve learning
- Portfolio organization is determined by learner or negotiated with mentor/advisor/teacher
- Rarely used for high stakes decisions
- Formative - what are the learning needs in the future? (Present to future)
- Fosters Intrinsic motivation - engages the learner
- Audience: learner, family, friends - learner can choose
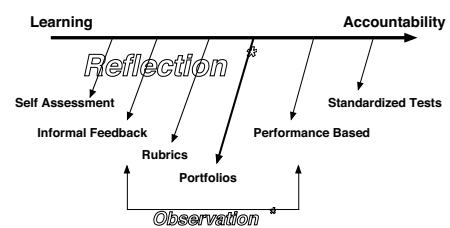
www.qca.org.uk ages3-14

Research-based principles of assessment for learning to guide classroom practice

Assessment for Learning

A Resource on K-12 Portfolios

By Evangeline Harris Stefanakis

Published by Heinemann

Includes a CD-ROM with examples of student portfolios

MULTIPLE INTELLIGENCES AND PORTFOLIOS
A WINDOW INTO THE LEARNER'S MIND
EVANGELINE HARRIS STEFANAKIS

Assessment for Learning Continuum - Enhanced

Stefanakis, Evangeline (2002) *Multiple Intelligences and Portfolios.* Portsmouth: Heinemann. p. 136

Learning ———————————— Accountability

Reflection

Self Assessment

Informal Feedback

Rubrics

Portfolios

Standardized Tests

Performance Based

Observation

Contrasting Paradigms of Portfolios

- **Positivism**

- **Constructivism**

F. Leon Paulson & Pearl Paulson (1994)
"Assessing Portfolios Using the Constructivist Paradigm"
in Fogarty, R. (ed.) (1996) *Student Portfolios.*
Palatine: IRI Skylight Training & Publishing

Tension between two approaches

" The two paradigms produce portfolio activities that are entirely different."

"The positivist approach puts a premium on the selection of items that reflect **outside standards and interests**."

"The constructivist approach puts a premium on the selection of items that reflect learning **from the student's perspective**."

F. Leon Paulson & Pearl Paulson (1994)
"Assessing Portfolios Using the Constructivist Paradigm"
in Fogarty, R. (ed.) (1996) *Student Portfolios.*
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Constructed Meaning

"The portfolio is a **laboratory** where students **construct meaning** from their accumulated experience."
(Paulson & Paulson, 1991, p.5)

Portfolio tells a Story

"A portfolio tells a story. It is the story of knowing. Knowing about things... Knowing oneself... Knowing an audience... Portfolios are students' own stories of what they know, why they believe they know it, and why others should be of the same opinion."
(Paulson & Paulson, 1991, p.2)

Portfolios tell a Story

"A portfolio is opinion backed by fact... Students prove what they know with samples of their work."
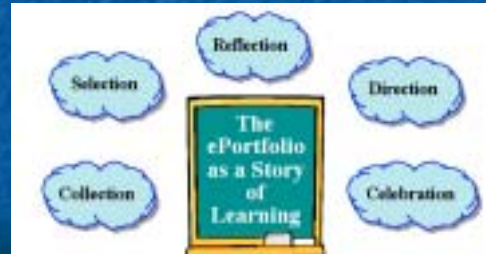(Paulson & Paulson, 1991, p.2)

Linking Two Dynamic Processes to Promote Deep Learning

Portfolio Development Process
Digital Storytelling

ePortfolio as Storytelling

Portfolio Development Process

Portfolio Processes

Traditional	+ Technology
Collecting	Archiving
Selecting	Linking/Thinking
Reflecting	Storytelling
Directing	Collaborating
Celebrating	Publishing

Some concerns…

- Assessment **for** Learning

- Portfolios **for** Learning

- What about Motivation?

Components of Portfolio Development

- **Content**
- **Purpose**
- **Process**

Components of Portfolio Development

- **Content:**
  **evidence=
  artifacts +
  reflections +
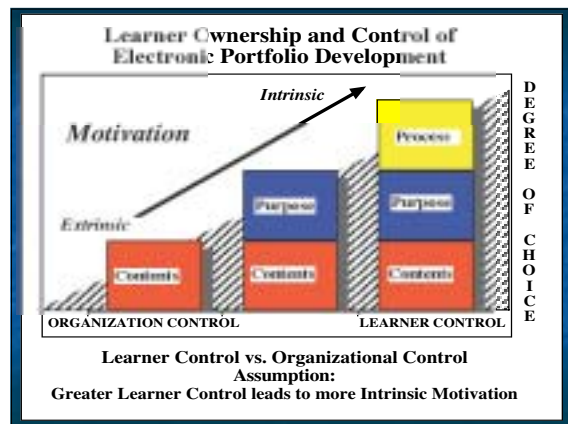 validation**

Components of Portfolio Development

Purpose:

the reason for developing the portfolio – includes audience

- Learning & professional development - **Process**
- Assessment (**of** and **for** learning)
- Showcase (Employment/Marketing)
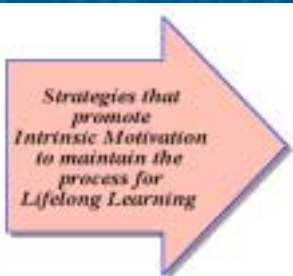
Components of Portfolio Development

Process:

- tools used
- sequence of activities
- rules
- evaluation criteria (rubrics)
- collaboration/conversation

Developmental Levels of Portfolio Implementation

Extrinsic Motivation
–institutional directed content, purpose & process – external locus of control

Mixed Motivation
–learner ownership over one or two of the components

Intrinsic Motivation
—learner ownership of content, purpose and process

Learner Ownership and Control of Electronic Portfolio Development

Learner Control vs. Organizational Control
Assumption:
Greater Learner Control leads to more Intrinsic Motivation

Linked to…

Strategies that promote Intrinsic Motivation to maintain the process for Lifelong Learning

Digital Tools to Support Reflection:

- **Online Portfolios**
- **Blogs & Wikis**
- **Digital Storytelling**
- **Games**

Portfolios provide Encouragement for Reflection

1. …provides both the discipline and the freedom of structure, allowing one to see one's own work. (Sonnet)
2. …provides the opportunity to assess one's own strengths and weaknesses through examination of a collection of samples, as well as to get feedback on one's performance from others. (Mirror)
3. …the process of self assessment leads one to setting goals for future development and professional growth. (Map)

(Mary Diez, 1994)

Electronic Portfolio Development

Publishing environments:
Optical media (CD-R, DVD-R) or WWW
Authoring environments:
Common Tools or Customized Systems

Common Desktop Tools
with hyperlinks

- Office - Word, Excel, Powerpoint
- Hypermedia authoring tools - HyperStudio, MediaBlender
- Inspiration or Kidspiration (mind mapping)
- Adobe Acrobat
- HTML Editors - Front Page, Dreamweaver, Netscape/Mozilla Composer
- Multimedia Authoring - Macromedia Director & Flash, Ezedia

My evaluation study of online software, services, or strategies

- **http://electronicportfolios.org/ myportfolio/versions.html**
- Under On-line Publications
- To date, recreating my new portfolio using **17 different software packages, services, or strategies**

Conclusions

- Too early to judge
- Scales applied to each system
- **"Trade-offs" - "Balance"**
  - Creativity
  - Ease of Use
  - Cost/Storage & ROI
  - Features
  - Flexibility/Customization Allowed
  - Integration with Assessment System
  - Transfer & technology skill development

"They each exhibit trade-offs between the flexibility inherent in an HTML-based tool with the relative ease-of-use but lack of creativity in a system built on a data-base."

Helping Students to Reflect

- Provide models and examples
- Begin with forms or prompts
- Move to journals/blogs
- Be careful that reflection in portfolios doesn't become an exercise in filling in the blanks on a web-based form.

What is a blog?

- Abbreviation for "web log" which is an online journal organized in reverse chronological order…the most recent entry on top
- Emerging into the mainstream in the last 18 months
- Very popular with adolescent girls
- Free, open source and commercial tools available

"Blog" #1 word of the year*

- Merriam-Webster Inc announced its top 10 "words of the year" list, with the immensely popular "blog" taking the number one place.
- Compiles list each year by taking the most researched words on its various Web sites

Internet Scout Report, December 3, 2004

What is a "wiki"

- Hawaiian term for "quick"
- A tool for collaborative writing
- Anyone who reads a wiki page can click the EDIT button and add or edit text
- Another "older" technology that is emerging into common use.

Digital Storytelling Process

- Learners create a 2-4 minute digital video clip
  - First person narrative
  - Told in their own voice
  - Illustrated by (mostly) still images
  - Music track to add emotional tone

## Center for Digital Storytelling

http://www.storycenter.org

Local Resources on Digital Storytelling

- Australian Center for the Moving Image (ACMI)
- Fraynework digital storytelling
- Once Upon a Time digital storytelling (RMIT)

Why include Digital Storytelling in ePortfolios?

Learner Motivation and Affect

Brain Research on Emotion in Learning

Storytelling as a Theory of Learning
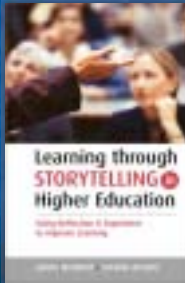
- Two educators from New Zealand - staff developer and health educator
- Relates storytelling to literature on learning and reflection
- Provides stages of storytelling related to reflection

Links between Learning and Storytelling

Map of Learning (Moon, 1999)	Learning through Storytelling (McDrury & Alterio, 2003)
Noticing	Story finding
Making sense	Story telling
Making meaning	Story expanding
Working with meaning	Story processing
Transformative learning	Story reconstructing

McDrury, J., Alterio, M. (2003) *Learning through Storytelling in Higher Education.* London: Kogan-Page, p.47

Storytelling = Narrative Inquiry
Mattingly in Schön (1991)

- Aristotle: narrative – natural framework for representing world of action
- Everyday sense-making role of storytelling
- Stories reveal the way ideas look in action
- Narrative provides explanation
- Motivation for telling stories: to wrest meaning from experiences

Storytelling as Reflection (Schön, 1988)

"…for storytelling is the mode of description best suited to transformation in new situations of action."

Storytelling as Reflection
(Schön, 1988)

"Stories are products of reflection, but we do not usually hold onto them long enough to make them objects of reflection in their own right."

Storytelling as Reflection
(Schön, 1988)

"When we get into the habit of recording our stories, we can look at them again, attending to the meanings we build into them and attending, as well, to our strategies of narrative description."

Constructivist Approach to Project-Based "Assessment-as-Learning"

Learner Ownership and Engagement with Portfolio

- The tools should allow the learner to feel in control of the process, including the "look and feel" of the portfolio.
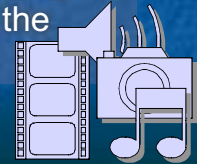
Deep Learning

- involves reflection,
- is developmental,
- is integrative,
- is self-directive, and
- is lifelong

Cambridge (2004)

Voice = Authenticity

- multimedia expands the "voice" in an electronic portfolio (both literally and rhetorically)
- personality of the author is evident
- gives the reflections a uniqueness
- gives the feeling that the writer is talking directly to the reader/viewer

Digital Paper or Digital Story?

- If your e-portfolios are just digital paper (text and images on the screen) you are losing a wonderful opportunity to really tell your story **in your own voice**.

- With the capability to **add multimedia**, audio and video, we can truly create an **engaging environment** to document the **milestones** of our lives.

A 2nd Grader's Autobiography

- Perhaps you are a 2nd grader telling your autobiography for a VIP school assignment
- Play "tori's 2nd grade bio"

A Graduate Student's Letter to a former teacher

- ...or you are a graduate student reflecting on what is drawing you into teaching (while showing your photo portfolio)
- Play "coming full circle"

My own story

- ...or you are reaching another transition and decision point in a long career, reflecting on the milestones in your life
- Play "choices"

What's Your Story?

- We all have a story to add to our portfolios. These digital stories provide opportunities for a richness not possible in print.
- Some stories will represent the fresh innocence of youth, some will reflect the experiences of a rich life.
- The audiences might be worldwide, like the BBC Wales, but most likely the audiences will be small and intimate.

Digital Story as Legacy

- These digital stories aren't just for professional development
- They aren't just for skills-based portfolios
- They are our legacy for those who come after us...the stories of our lives we give to our children's grandchildren.

Presentation online and stories are on my CD

- **http://electronicportfolios.org** and click **On-Line Publications**
  "Electronic Portfolios as Digital Stories of Deep Learning"
- **http://electronicportfolios.org** *and click Recent Conference Presentations*

- My CD has examples of digital stories as well as hands-on activities to learn the process on Mac and Windows XP

My Final Wish...

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

Dr. Helen Barrett

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- http://electronicportfolios.org/