

## What is your e-Portfolio? a High-Stakes Test or a Story of Deep Learning?

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## 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)

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## 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)

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## Purpose & Goals for the portfolio (Determine Content)

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

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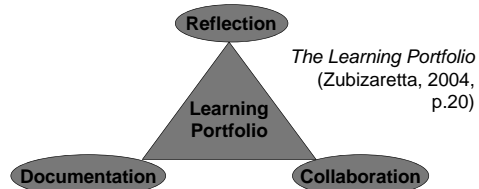
Think about the differences  
between:

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

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## Learning Portfolios

- *"know thyself" = a lifetime of investigation*
- *self-knowledge as outcome of learning*



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## 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

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## Showcase Portfolios

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

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## Assessment Portfolios

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

More later!

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## A few thoughts about Assessment -- What Type?

- **Assessment OF Learning?** or
- **Assessment FOR Learning?**

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[www.qca.org.uk](http://www.qca.org.uk)  
ages3-14

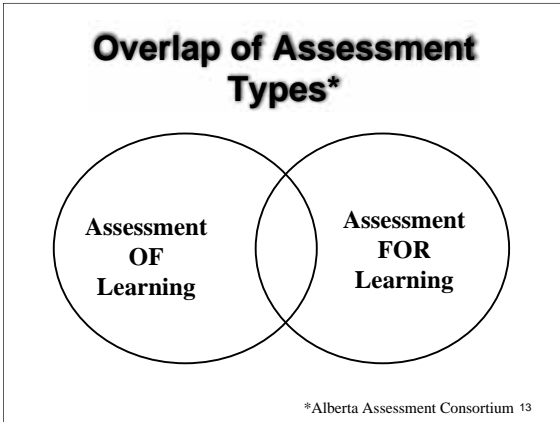
Research-based principles of assessment for learning to guide classroom practice

**Assessment for Learning**

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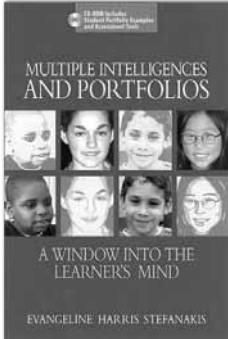
## Principles of Assessment FOR Learning

- **Definition:**  
Assessment for Learning is the process of seeking and interpreting evidence for use by learners and their teachers to decide where the learners are in their learning, where they need to go and how best to get there.



- ### 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
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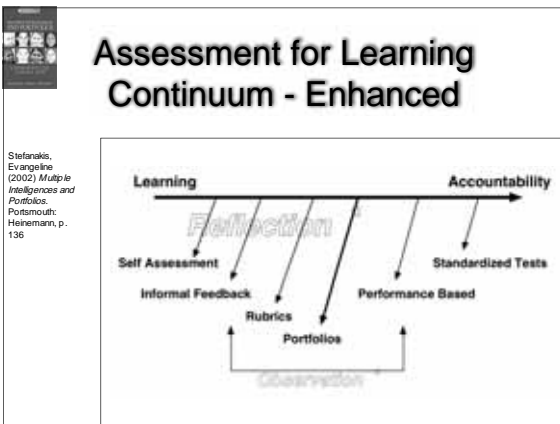
- ### Portfolios that support Assessment FOR Learning
- Purpose of portfolio agreed upon with learner
  - Artifacts selected by learner to tell the story of their learning
  - Portfolio maintained on an ongoing basis throughout the class, term or program - time flexible
  - Portfolio and artifacts reviewed 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
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### A Resource on K-12 Portfolios

- By Evangeline Harris Stefanakis
- Published by Heinemann
- Includes a CD-ROM with examples of student portfolios

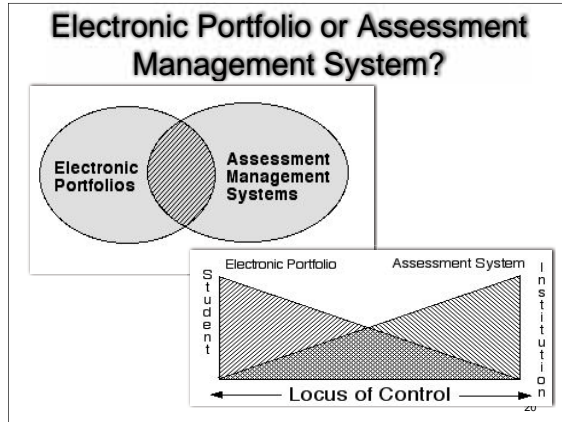
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- ### Which approach should you take?
- Are you looking for an **electronic portfolio...**
  - Or an **assessment management system?**
  - What's the difference? Along a Continuum
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### Electronic Portfolio or Assessment Management System?

Electronic Portfolio	Assessment Management System
Multiple purposes: Learning, Assessment, Employment	Single purpose: Formative and Summative Assessment
Data structure varies with tools used to create the portfolio; common data formats (converted to HTML, PDF)	Data structure most often uses a relational database to record, report data
Primary type of data: qualitative	Primary type of data: qualitative and quantitative
Data storage in multiple options: CD-ROM, videotape, DVD, WWW server, LAN	Data storage primarily on LAN or on secure WWW server
Visual design and hyperlinks often under control of portfolio developer	Visual design and hyperlinks most often controlled by database structure
<b>Learner</b> choice of artifacts	<b>Institutional</b> choice of artifacts
Learner-Centered	Institution-Centered



## 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

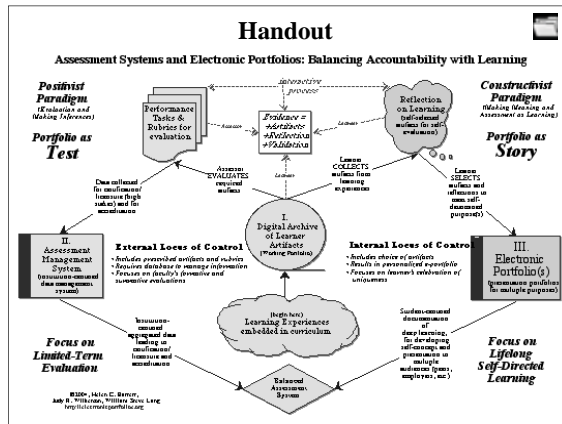
- "The two paradigms produce portfolio activities that are entirely different."
- "The positivist approach puts a premium on the selection of items that reflect **outside standards and interests.**"
- "The constructivist approach puts a premium on the selection of items that reflect learning from **the 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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## How can we address both types of portfolios?

Use three different systems that are digitally linked:

- i. A digital archive of a learner's work
- ii. An institution-centered database to collect faculty-generated assessment data based on tasks and rubrics
- iii. A student-centered electronic portfolio



## Constructed Meaning

"The portfolio is a **laboratory** where students **construct meaning** from their accumulated experience."

(Paulson & Paulson, 1991, p.5)

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## 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)

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## 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)

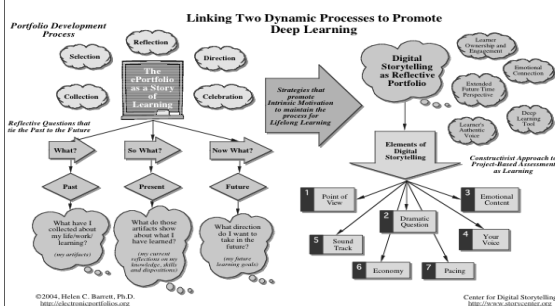
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## Linking Two Dynamic Processes to Promote Deep Learning

### Portfolio Development Process Digital Storytelling

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## ePortfolio as Storytelling



## Portfolio Processes

### Traditional + Technology

- Collecting
- Archiving
- Selecting
- Linking/Thinking
- Reflecting
- Storytelling
- Directing
- Collaborating
- Celebrating
- Publishing

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## Some concerns...

- Assessment for Learning
- Portfolios for Learning
- What about Motivation?

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## Components of Portfolio Development

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

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## Components of Portfolio Development

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

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## 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)

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## Components of Portfolio Development

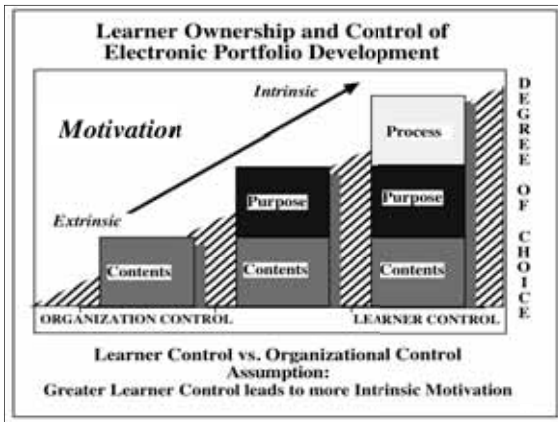
- **Process:**
  - tools used
  - sequence of activities
  - rules
  - evaluation criteria (rubrics)
  - collaboration/conversation

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## 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

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## Two anecdotes about high school portfolios

- High School graduates - thrown in bonfire or trash can
- High school freshman - \$50 reward for lost portfolio

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What's the difference between those two stories?

- What are the variables that produce these extremes in attitudes toward ownership of portfolios?

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## Linked to...



**Digital Tools to Support Reflection:**

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

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## Portfolios provide Encouragement for Reflection

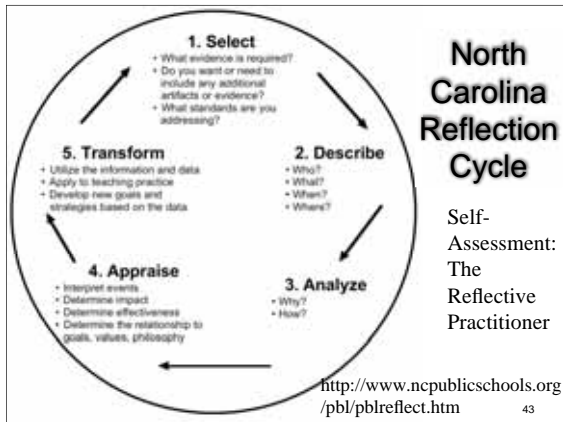
1. ...provides both the discipline and the freedom of structure, allowing one to see one's own work. (Sonnet)
2. ...provides the opportunity to assess one's own strengths and weaknesses through examination of a collection of samples, as well as to get feedback on one's performance from others. (Mirror)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

(Mary Diez, 1994)

## 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.

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## “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

## 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

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## Why include Digital Storytelling in ePortfolios?

### Learner Motivation and Affect

### Brain Research on Emotion in Learning

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## 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

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## Storytelling = Narrative Inquiry

*Mattingly in Schön (1991)*

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

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### Storytelling as Reflection (Schön, 1988)

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

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### 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.”

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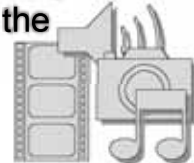
### Storytelling as Reflection (Schön, 1988)

“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.”

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### 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)

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### Voice ≡ Authenticity

- multimedia expands "voice" in an electronic portfolio (both literally and rhetorically)
- personality of the author
- reflections unique
- writer talking directly to the reader/viewer

## Digital Paper or Digital Story?

Digital paper = text and images only

Digital story = tell your story **in your own voice.**

**Multimedia** = audio and video

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## Digital Stories

- A Graduate Student's Letter to a former teacher reflecting on what is drawing him into teaching (while showing his photo portfolio) Available online at: <http://homepage.mac.com/eportfolios/iMovieTheater14.html>
- My Story - Available online at: <http://homepage.mac.com/eportfolios/iMovieTheater11.html>



## What's Your Story?

Richness not possible in print  
Audiences worldwide but most likely small and intimate.

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## Digital Story as Legacy

Not just for professional development  
Or skills-based portfolios

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## My Final Wish...

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

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