

# Digital Storytelling in Electronic Portfolios:

## Using Reflection on Experience to Improve Learning for K-12 students and Teacher Professional Development

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The REFLECT Initiative

### Based on my online articles

- **Electronic Portfolios as Digital Stories of Deep Learning**
  - *Emerging Digital Tools to Support Reflection in Learner-Centered Portfolios*
- **White Paper for TaskStream**
- **<http://electronicportfolios.org/>**
  - Under Online Publications
  - Slides under Recent Conference Presentations

### Themes

- Portfolios
- Assessment for Learning
- Reflection
- Storytelling
- Digital Storytelling
- Examples

### A tale of two paper portfolios

- High School graduates in Washington state (and Utah, too!)
- High school freshman in NY  
(Jim Mahoney, *Power and Portfolios* published by Heinemann)

### What's the difference between those two stories?

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

### 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

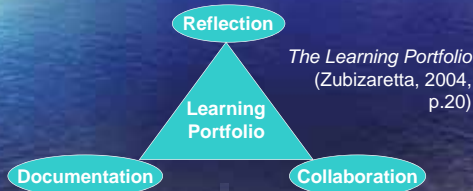
(Northwest Evaluation Association, 1990)

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

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

## Learning Portfolios

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



## Learning Portfolios

- Support reflection which is central to learning
  - “Folio Thinking”
- Reflection:
  - 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!

Think about the differences between:

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

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

- Assessment OF Learning? or
- Assessment FOR Learning?

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

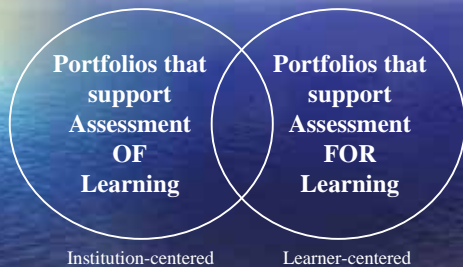


Assessment for Learning

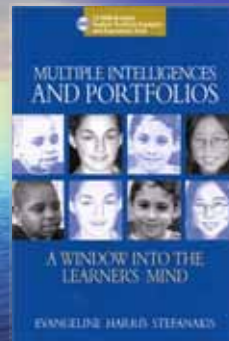
### Principles of Assessment FOR Learning

- **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.

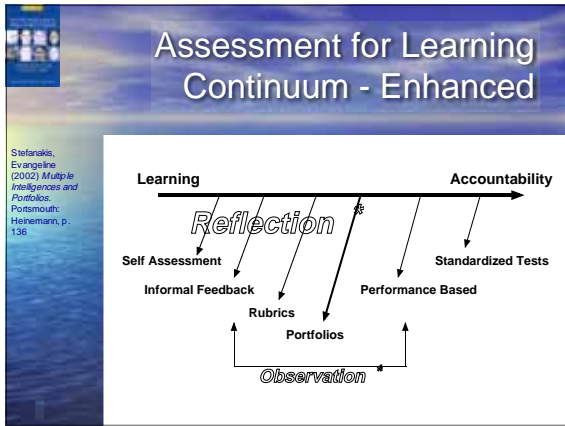
### Overlap of Assessment Types\*



### A Resource on K-12 Portfolios



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

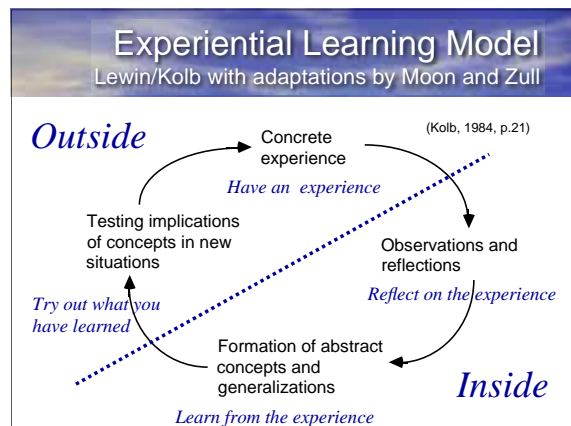
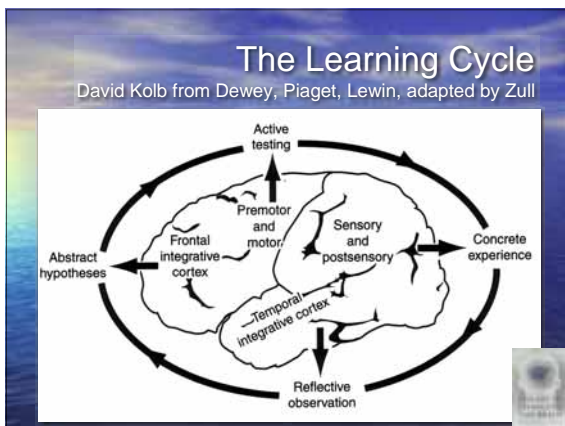


- ### What is Reflection?
- Major theoretical roots:
    - Dewey
    - Habermas
    - Kolb
    - Schön
  - Dewey: "We do not learn from experience...we learn from reflecting on experience."

### Resource on Biology of Learning

- Enriching the Practice of Teaching by Exploring the Biology of Learning
- James E. Zull
- Stylus Publishing Co.

- ### The Learning Cycle
- David Kolb from Dewey, Piaget, Lewin
- **Deep Learning** (learning for real comprehension) comes from a sequence of
    - Experience
    - Reflection
    - Abstraction
    - Active testing
  - Zull: the learning cycle arises naturally from the structure of the brain (p.19)



## Reflection and Emotion

James Zull

- Hard to make meaning of experience unless it engages our emotions. (p.166)
- Reflection: a search for connections
- Sleep researchers: dreams help us make connections...We discover what is important to us, because we dream about what matters most. (p.168)
- For comprehension we need time. (p.168)

## Reflection and Emotion

James Zull

- decrease our emphasis on speed and information
- increase the possibilities for reflection
- give our students the kind of experience that would produce dreams-- **experiences that engage their emotions.** (p.168)
- "...our experiences **must matter in our lives** if we are to learn from them." (p.168)
- "...it suggests how seriously we have to take emotion if we want to foster deep learning." (p. 169)

## My own story

- The issue of time and learning - reaching another transition and decision point in a long career, reflecting on the milestones in my life
- Play "choices"



## Moon on Reflection

- One of the defining characteristics of surface learning is that it does not involve reflection (p.123)
- Conditions for Reflection:
  - Time and space
  - Good facilitator
  - Curricular or institutional environment
  - Emotionally supportive environment

## Moon's Qualities of Tasks that Encourage Reflection

- Ill-structured, 'messy' or real-life situations
- Asking the 'right' kinds of questions – no clear-cut answers
- Setting challenges can promote reflection
- Tasks that challenge learners to integrate new learning into previous learning
- Tasks that demand the ordering of thoughts
- Tasks that require evaluation

pp.175-6

## 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)
<ul style="list-style-type: none"> <li>• Noticing</li> <li>• Making sense</li> <li>• Making meaning</li> <li>• Working with meaning</li> <li>• Transformative learning</li> </ul>	<ul style="list-style-type: none"> <li>• Story finding</li> <li>• Story telling</li> <li>• Story expanding</li> <li>• Story processing</li> <li>• Story reconstructing</li> </ul>

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

## Reflective Process and Storytelling

- First stage: inner discomfort or surprise – “something” makes the experience memorable
- Second stage: events examined in detail – stories are shared, dialogue is formed
- Third stage: relates to outcomes – decision to change or gain knowledge through reflection

McDrury, J., Alterio, M. (2003) *Learning through Storytelling in Higher Education*. London: Kogan-Page, p.110-1

## 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

## Story = Unpretentious Narrative

*Clandinin & Connelly in Schön (1991)*

- A fundamental method of personal growth
- Reflection: preparation for the future
- Deliberation: past considerations

## 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.”

## 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**



- ### Portfolio Processes
- Traditional + Technology**
- Collecting
  - Selecting
  - Reflecting
  - Directing
  - Celebrating
  - Archiving
  - Linking/Thinking
  - Storytelling
  - Collaborating
  - 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)**

- ### 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)

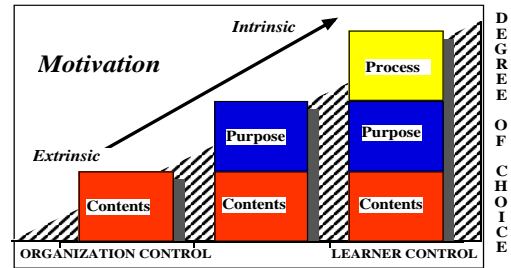


## Components of Portfolio Development

### • Process:

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

## Learner Ownership and Control of Electronic Portfolio Development



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

## Linked to...



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

## Digital Tools for Reflection

## Digital Storytelling

## Digital Storytelling Process

Anchorage  
8th grade

- Learners create a 2-4 minute digital video clip
  - First person narrative [begins with a written script ~ 400 words]
  - Told in their own voice [record script]
  - Illustrated (mostly) by still images
  - Music track to add emotional tone

## A Graduate Student's Letter to a Former Teacher

- Maybe you are a graduate student reflecting on what is drawing you into teaching (while displaying your photo portfolio)
- Play "Coming Full Circle"



## Digital Storytelling is BOTH...

HIGH TECH  
and  
HIGH TOUCH

## Center for Digital Storytelling

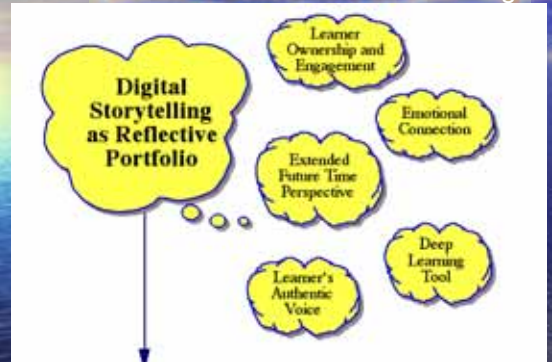


<http://www.storycenter.org>

Why include Digital  
Storytelling in ePortfolios?

**Learner Motivation  
and Affect  
Brain Research on  
Emotion in Learning**

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



## 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

## More Digital Stories

- Victoria: K, 1, 2
- Naya: 7th



## Digital Paper or Digital Story?

Digital paper = text and images only  
Digital story = tell your story **in your own voice**.

**Multimedia** = audio and video

## What's Your Story?

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

## Digital Story as Legacy

Not just for professional development  
Or skills-based portfolios

## Digital Storytelling Becomes a Lifelong Skill

Play "Legacy"



- **Digital Family Stories** from birth to end-of-life
- **Digital Family Stories** help people **reflect** on life transitions
- **Digital Family Stories** preserve multimedia memories as a legacy for future generations

## Recommendations!

Unsolicited e-mail message

## From a Teacher Educator in Florida

- Each of my students this semester produced two digital stories, one focusing on their philosophy of teaching, and the other dealing with their field experience. We used PhotoStory 3 because it was a free Microsoft Download. I was most impressed with their efforts and they have told me it was a most meaningful activity.

## 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.

## Helping Students Tell Their Stories

- **COLLECT** more than text documents
  - Pictures
  - Audio
  - Video
- Focus on **REFLECTION** over time
- Help students make **CONNECTIONS**
- Support multimedia presentation formats

## A high school student inquiry

"I am a student in high school. Why is it mandatory for me to make a proficient on my portfolio for me to graduate? I have all of my credits to graduate, but if I make lower than proficient I don't get to graduate."

### How would you answer this student?

Read my complete answer in my blog:  
<http://electronicportfolios.org/blog/>

## My final advice to that student:

Remember, you are telling us a story, and not just any story. Your portfolio is meant to be your story of your life over the last four years as well as the story of where your life might be going during the next four years: tell it with pride!

(adapted from the Mead School District's DRAFT Guidelines for Culminating Project)

## My Website and my CD



A brief look at the tools

More in-depth tutorials and examples

## Kean University Digital Stories Conference



- June 23-24, 2005
- Union, New Jersey (closest to Newark airport)
- May 15 registration deadline

## The REFLECT Initiative

reflect@taskstream.com

<http://electronicportfolios.org/reflect/>

A research project to assess the impact of electronic portfolios on student learning, motivation and engagement in secondary schools



## 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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