Digital Storytelling in Electronic Portfolios: Using Reflection on Experience to Improve Learning for K-12 students and Teacher Professional Development

Dr. Helen Barrett
University of Alaska Anchorage
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?

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

The Learning Portfolio

(Zubizaretta, 2004, p.20)

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?

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*

Portfolios that support Assessment OF Learning
Institution-centered

Portfolios that support Assessment FOR Learning
Learner-centered

A Resource on K-12 Portfolios

- By Evangeline Harris Stefanakis
- Published by Heinemann
- Includes a CD-ROM with examples of student portfolios
Assessment for Learning Continuum - Enhanced

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<th>Accountability</th>
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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

- 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)

The Learning Cycle

- David Kolb from Dewey, Piaget, Lewin, adapted by Zull

Experiential Learning Model

- Lewin/Kolb with adaptations by Moon and Zull

Outside

Concrete experience

Observations and reflections

Testing implications of concepts in new situations

Reflect on the experience

Learn from the experience

Inside

Concrete experience

Formation of abstract concepts and generalizations

Try out what you have learned

Have an experience

Reflect on the experience

Learn from the experience

(Kolb, 1984, p.21)
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)

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

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
Maxine Alterio, Helen Barrett, Janice McDrury
December 9, 2004 - Dunedin, New Zealand

Links between Learning and Storytelling

Map of Learning
(Moon, 1999)  Learning through Storytelling
(McDrury & Alterio, 2003)

- Noticing
- Making sense
- Making meaning
- Working with meaning
- Transformative learning
- Story finding
- Story telling
- Story expanding
- Story processing
- Story reconstructing


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


Storytelling = Narrative Inquiry

- 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

Mattingly in Schön (1991)

Story = Unpretentious Narrative

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

Clandinin & Connelly in Schön (1991)

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.”

“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 Development Process

Portfolio Processes

- Traditional
  - Collecting
  - Selecting
  - Reflecting
  - Directing
  - Celebrating

- Technology
  - Archiving
  - Linking/Thinking
  - Storytelling
  - Collaborating
  - Publishing

Some concerns...

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

Components of Portfolio Development

- Content: evidence (artifacts + reflections)
- 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**

**Contents**

- Purpose
- Intrinsic
- Extrinsic
- Organization Control
- Learner Control

**Motivation**

**Digital Tools for Reflection**

**Digital Storytelling**

**Linked to...**

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

**Digital Storytelling Process**

- 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

Why include Digital Storytelling in ePortfolios?
Learner Motivation and Affect
Brain Research on Emotion in Learning

Deep Learning
• involves reflection,
• is developmental,
• is integrative,
• is self-directive, and
• is lifelong

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

http://www.storycenter.org
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

- 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

My Final Wish…

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

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

Dr. Helen Barrett

• Research Project Director, The REFLECT Initiative
• eportfolios@mac.com
• http://electronicportfolios.org/