

Voice and Interactivity in ePortfolios: Digital Stories and Web 2.0

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Based on 2 papers in Proceedings

- Authentic Assessment with Electronic Portfolios using Common Software and Web 2.0 Tools
 – <http://electronicportfolios.org/web20.html>
- Purposes of Digital Stories in ePortfolios
 – <http://electronicportfolios.org/digistory/purposes.html>

What is a Portfolio?

- A purposeful collection of work that demonstrates efforts, progress and achievement in one or more areas [over time]
- Multiple purposes
 - Learning/Process
 - Assessment/Accountability
 - Marketing/Employment

An electronic portfolio provides an environment where students can:

- collect their work in a digital archive
- select specific pieces of work (hyperlink to artifacts) to highlight specific achievements
- reflect on the learning demonstrated in the portfolio, in either text or multimedia form
- set goals for future learning (or direction) to improve
- celebrate achievement through sharing this work with an audience, whether real or virtual

Purposes for Assessment

Assessment OF Learning = Summative Assessment	Assessment FOR Learning = Formative (Classroom-based) Assessment
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Authentic Assessment

- where students **generate**
- rather than **choose** a response
- “The terms alternative assessment, authentic assessment, or performance-based assessment are often used synonymously “to mean variants of performance assessments that require students to generate rather than choose a response”
(Thomas, Arshauer, and Wiggins, 1992, p. 2)

www.qca.org.uk
ages3-14

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

Assessment for Learning

Metaphors for portfolios

- Checklist of skills/competencies
- Resume/C.V. on steroids
- **Test**
- **Story** of deep learning

State of the Art of e-Portfolio Development

- **Publishing environments:**
 - Optical media (CD-R, DVD-R)
 - WWW
- **Authoring environments:**
 - Common Tools
 - Customized (Commercial) Systems
 - Open Source Tools
 - Web 2.0 Technologies

Planning Issues

- What is your **purpose**?
- **Software capabilities:** allow **interaction** between teachers and students around learning activities and products
- **Internet access?** Poor or good?

What is your purpose?

- authentic assessment (formative feedback)
- showcasing best work and growth over time
- When used in formative, classroom-based assessment, teachers (and peers) can review the portfolio document, and provide formative feedback to students on where they could improve.

Software capabilities

- allow **interaction** between teachers and students around learning activities and products:
 - **Students:** create, store artifacts and reflections and organize their work, preferably with hyperlinks
 - **Teachers:** review the work and provide feedback in narrative form (based on a rubric, if available)

Today's Tool Choices

<p>Poor Internet Access?</p> <ul style="list-style-type: none"> • Microsoft Office <ul style="list-style-type: none"> - Word - Excel - PowerPoint • Other Options: <ul style="list-style-type: none"> - Apple iLife06 - iDVD - iWeb • Web Page Editors (DreamWeaver, Front Page) <p>These tools do not require Internet access to create electronic portfolios.</p>	<p>Good Internet Access?</p> <ul style="list-style-type: none"> • TaskStream or any commercial fee-based system • Think.com a free commercial service to education (Oracle) <p>These tools require only a browser and good Internet access to create electronic portfolios because they are Application Services Providers (ASP) - the software is on the company server.</p>
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Office - Word, Excel, PowerPoint

<p>Advantages:</p> <ul style="list-style-type: none"> • On most personal computers • Common toolset • Easy to create hyperlinks • Easy to add comments • Does not require Internet access to develop portfolios (students work off-line) 	<p>Disadvantages:</p> <ul style="list-style-type: none"> • Set up own system for storing and organizing files, and managing the feedback on student work (probably using Track Changes in Word or Comments in all tools) • Data aggregation must be set up by teacher with another tool, like Excel, not automated • Files should be translated into Web-compatible format before posting online (HTML or PDF)
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Better for publishing on CD

Apple's iLife06

<p>Advantages</p> <ul style="list-style-type: none"> • Seamless integration of Video/audio into portfolios created with iWeb (or iDVD) and iMovie, iPhoto, iTunes and Garage Band. • Use iDVD for creating DVD portfolios (primarily video or image/slide shows). • Use iWeb to publish web-based portfolios (create off-line and then upload). 	<p>Disadvantages</p> <ul style="list-style-type: none"> • Cost \$59 (free on new Macintosh computers) • Requires server to publish web pages (or .Mac account) or DVD writer (for iDVD) <div style="border: 1px solid black; padding: 2px; font-size: small;"> <p>This is Macintosh-only software. NOTE: the new Macs also run Windows software.</p> </div>
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Web 1.0 vs. Web 2.0

<ul style="list-style-type: none"> DoubleClick Ofoto Akamai mp3.com Britannica Online personal websites domain name speculation page views screen scraping publishing content management systems directories (taxonomy) stickiness Netscape 	<ul style="list-style-type: none"> Google AdSense Flickr BitTorrent Napster Wikipedia blogging search engine optimization cost per click web services participation wikis tagging ("folksonomy") syndication Google
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O'Reilly, T. (2005)

Web 2.0 Technologies

<p>Advantages</p> <ul style="list-style-type: none"> • Free, often open-source tools on the WWW • "Me Publishing" • Shared Resources • Shared Writing • Media Creation Online 	<p>Disadvantages</p> <ul style="list-style-type: none"> • Requires higher technology competency • Mostly not secure websites <p style="text-align: center; font-style: italic; font-size: small;">"Small Pieces, Loosely Joined"</p>
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"Me" Publishing

- Blogs
 - Blogger, LiveJournal
- Social Networking
 - MySpace, Friendster, Elgg
- Content Management Systems
 - Plone, Drupal

Shared resources

- Photo Sharing
 - Flickr, PhotoBucket
- Media Sharing
 - vimeo.com, ourmedia.org, youtube.com, video.google.com
- Bookmarks
 - BackFlip.com, IKeepBookmarks.com, del.icio.us

Shared Writing

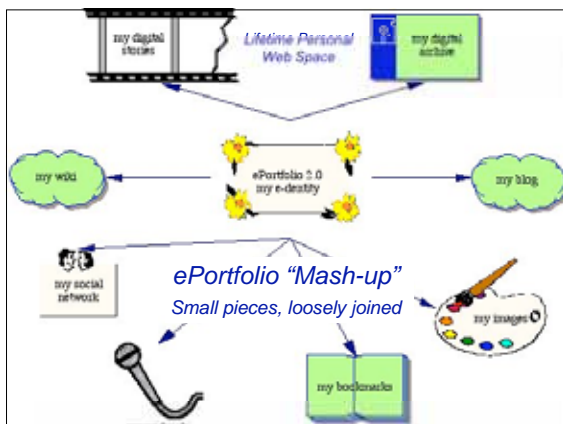
- Wikis
 - WikiSpaces (hosted site with free subscriptions for teachers)
 - MediaWiki (Open Source - used by Wikipedia)
- Word Processors
 - Writely (owned by Google)
 - Zoho tools

Media Creation Online

- Video
 - BubbleShare, JumpCut, PrimaryAccess
- Podcasts (audio)
 - odeo, podomatic

Open Source ePortfolio Tools

- The Open Source Portfolio (OSPI)
 - Created by U.S. higher education for college students
 - Integration with Sakai
- Elgg
 - Created as a combined blog and social networking tool
 - Allows students to create groups, integration with Moodle
- Open University (U.K.)
 - Under development - integration with Moodle



Conventional vs. Reform Instruction

- | | |
|---|---|
| <ul style="list-style-type: none"> • Teacher-directed • Didactic teaching • Short blocks of instruction on single object • Single media • Individual work • Teacher as knowledge dispenser • Ability groupings • Assessment of fact knowledge and discrete skills | <ul style="list-style-type: none"> • Student exploration • Interactive modes of instruction • Extended blocks of authentic and multidisciplinary work • Multimedia • Collaborative work • Teacher as facilitator • Heterogeneous groupings • Performance-based assessment |
|---|---|

SRI (1993)

Approach Hierarchical vs. Network

Arina (2006)

<ul style="list-style-type: none"> Structured Controlled Designed Managed Broadcast Courses Centralized LMS* *Learning Management System Information Technology - Core in Information 	<ul style="list-style-type: none"> Networked Turbulent Emergent Adaptive Aggregation Ecosystem Decentralized PLE* *Personal Learning Environment Interaction Technology - Core in Interaction
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Portfolio Differences

<p>Assessment OF Learning</p> <ul style="list-style-type: none"> • Purpose prescribed • Artifacts mandated - scoring for external use • Organized by teacher • Summative (Past to present) • Institution-centered • Requires extrinsic motivation 	<p>Assessment FOR Learning</p> <ul style="list-style-type: none"> • Purpose negotiated • Artifacts chosen - feedback to learner • Organized by learner • Formative (Present to future) • Student-centered • Intrinsically motivating
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ePortfolio 1.0 - ePortfolio 2.0

<ul style="list-style-type: none"> • Hierarchical, Designed • Metaphor: Portfolio as Test • Data-driven • Focus on Standardization • Feedback from Authority Figures • Large, complex systems 	<ul style="list-style-type: none"> • Networked, Emergent • Metaphor: Portfolio as Story • Learner-driven • Focus on Individuality, Creativity • Feedback from Community of Learners • Small pieces, loosely joined - "Mash-ups"
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Continued...

ePortfolio 1.0 - ePortfolio 2.0 (continued)

<ul style="list-style-type: none"> • Web-based Form • Positivist • Accountability-driven • Proprietary • Digital Paper (text & images) • Local Storage (hard drives, CD) 	<ul style="list-style-type: none"> • Blog and Wiki • Constructivist, Connectivist • Learning-focused • Open Standards • Digital Story (multimedia) • Network Storage (Lifetime Personal Web Space)
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“every day-ness”

How can we make ePortfolio development a natural process integrated into everyday life?

Lifelong and Life Wide Learning

Social Learning

How can we integrate ePortfolios with what we know about social learning and interactivity?

Architecture of Interaction
(Web 2.0)
allows a

Pedagogy of Interaction
(ePortfolio 2.0)

- Emerging Models for Portfolios
- mPortfolios
 - Mobile
 - iPortfolios
 - Interactive
 - Digital Stories
 - Voice

Voice

Individual Identity
Reflection
Meaning Making

- Why Digital Stories in ePortfolios?
- Reflection is the "heart and soul" of portfolios
 - Digital Stories can humanize any model of ePortfolio
 - Digital Stories add **VOICE**

Website with links to movies

<http://electronicportfolios.org/digistory/purposes.html>

electronicportfolios.org

Information about Electronic Portfolios and Digital Storytelling

Dr. Helen Barrett
Electronic Professional Digital Storytelling
An ePortfolio and DV with Storyline

Digital Storytelling

Resources for Digital Stories in Electronic Portfolios

Digital Storytelling in Education

Digital Family Stories

International Digital Storytelling

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

Asa Ferrago
8th grade

Digital Stories and e-Portfolios

- highly motivating project-based learning activity
- powerful artifacts in electronic portfolios
- Importance of reflection in e-portfolios
- Tools for scaffolding reflection: blogging and digital storytelling
- Storytelling: reflection on experience to improve learning (McDrury & Alterio)
- the role of reflection in brain-based learning (Zull)

A Dozen Purposes for DS in EP

- **Introduction of Self**
 - Voice & Personality
 - Legacy
 - Biography
 - Memoir
- **Reflection**
 - Transition
 - Decision
 - Benchmarking Development
 - Change over Time
- **Artifacts**
 - Evidence of Collaboration
 - Documentary
 - Record of Experience
 - Oral Language

Voice & Personality

- Voice is often missing from electronic portfolios, both literally and rhetorically.
- A digital story provides that voice: listening to the author, we hear a real person, getting a sense of their unique personality.

Victoria's 1st Grade Reflection

Legacy

- Digital stories can provide us with an opportunity to leave a legacy of our family stories for those who come after us.
- Legacy stories are usually told **about** a person or place.

Legacy & Jonathan

Biography

- A biography provides the facts about a life, whether of the storyteller or another person.

Victoria's 2nd Grade Autobiography

Memoir

- Whereas a legacy story is told for or **about** another person or place, a memoir is very personal, told in the first person, focusing on the memories of the storyteller.
- Memoirs are autobiographical in nature, but are much more personal and reflective.
- They are often much longer than a typical digital story.

Dad & No Ideas

Reflection - Transition

- Some learners reflect on the major changes or transitions in their lives.
- Reflection can help us make sense of these changes.
- Telling digital stories could also help the transition to retirement or any other major life change.

Coming Full Circle & Changes

Reflection - Decision

- Digital stories can be used to either weigh the options in a decision to be made
- or document the process used to make decisions.

Choices and Changes

Benchmarking Development

- (Joe's Kean podcast)
- at each point (of development) a digital story snapshot would be an extremely appropriate part of a portfolio

Change over time

- Ss maintain a collection of work over time
- Ss recognize when growth and change has occurred
- Ss reflect on the changes they see in their own performance
- Process has the potential to increase students' self esteem.

Victoria's Kindergarten Reflection

Evidence of Collaboration

- Much of the work in both schools and the workplace is the result of collaboration
- a digital story could provide explanation of the process.

Documentary

- A digital video can take the place of a research paper or a PowerPoint presentation.
- Story takes on characteristics of a documentary, often fact-based without emotional content.

What is Digital Storytelling?

Record of Experience

- Often no concrete product that can be represented in a discrete artifact.
- could be used to reflect on and document an experience
- could provide the final evidence of a project-based learning activity

Chevak

Oral Language

- learning to speak in a second language
- early childhood students learning to read in their native language
- learners record their voice, speaking or reading out loud at different stages of development
- demonstrating growth over time.
- "podcast" could be an audio-only digital story without the visual component.

How to Develop Digital Stories

Process and Tools

Process to develop digital stories

1. Script development: write the story, often with a group called a story circle to provide feedback and story development ideas
2. Record the author reading the story (audio recording and editing)
3. Capture and process the images to further illustrate the story (image scanning and editing)
4. Combine audio and images (and any additional video) onto a timeline, add music track (video editing)
5. Present or publish finished version of story

Tools - Audio

- Mac
 - [Audacity](#) O/S
 - [SoundStudio](#) (\$50) T=14 days
 - GarageBand* (Apple's iLife06 Tools)
 - iPod and microphone
- Windows
 - [Audacity](#) O/S
 - [Audio Record Wizard](#) (\$25 S/W)
 - any Windows-compatible audio recording program

Microphones

- Microphone + Mixer OR
- **USB Microphone** OR
- iPod recorder
 - Belkin
 - Griffin



Web 2.0 Collaborative writing tools

- for script development and collaborative writing:
- Writely.com or any wiki

Web 2.0 Audio editing tools

- (primarily created to capture and publish podcasts online):
- odeo.com, podomatic.com

Web 2.0 Image sharing tools

- (primarily created to share images online):
- Flickr.com, PhotoBucket.com

Web 2.0 Video editing tools

- (primarily created to create and publish short video clips online):
- BubbleShare.com, JumpCut.com, PrimaryAccess.org

Web 2.0 Media publishing services

- (primarily created to share video online):
- vimeo.com, ourmedia.org, youtube.com, video.google.com

What's Your Story?

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

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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