Balancing “ePortfolio as Test” with “ePortfolio as Story”

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Three Topics in this Presentation
- Assessment - for what purpose?
  - OF or FOR Learning?
- Conflicting Paradigms in Electronic Portfolio Development
  - Assessment Management or ePortfolio?
- Electronic Portfolios as Digital Stories
  - Deep Learning and Intrinsic Motivation

A few thoughts about Assessment -- What Type?

- Assessment OF Learning? or Assessment FOR Learning?

Assessment OF Learning = Summative
- Involves judging pupils' performance against national standards (level descriptions).
- Teachers often make these judgments at the end of a unit of work, year or key stage.
- Test results also describe pupils' performance in terms of levels.
- Carried out for the purposes of grading and reporting (ARG, 1999).

Assessment FOR Learning = Formative
- While it is not the only purpose, Assessment for learning is one of the most important purposes of assessment.
- While assessment of learning has well-established procedures, assessment for learning requires some theoretical ideas to be put into practice if the potential benefits are to be gained.
**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.

*www.qca.org.uk*

**Assessment OF Learning**

- Checks what has been learned to date
- Is designed for those not directly involved in daily learning and teaching
- Is presented in a formal report
- Usually gathers information into easily digestible numbers, scores and grades
- Usually compares the student’s learning with either other students or the ‘standard’ for a grade level
- Does not need to involve the student

*http://assessment-reform-group.org.uk*

**Assessment FOR Learning**

- Checks learning to decide what to do next
- Is designed to assist teachers and students
- Is used in conversation about learning
- Usually detailed, specific and descriptive feedback in words (instead of numbers, scores and grades)
- Usually focused on improvement, compared with the student’s ‘previous best’ and progress toward a standard
- Needs to involve the student – the person most able to improve learning

*http://assessment-reform-group.org.uk*

**10 AFL Principles - Part 1**

- AFL should be part of effective planning of teaching and learning
- AFL should focus on how students learn
- AFL should be recognized as central to classroom practice
- AFL should be regarded as a key professional skill for teachers
- AFL should be sensitive and constructive because any assessment has an emotional impact

**10 AFL Principles - Part 2**

- AFL should take account of the importance of (and foster) learner motivation
- AFL should promote commitment to learning goals and a shared understanding of the criteria by which they are assessed
- AFL develops learners’ capacity for self-assessment so that they can become reflective and self-managing
- AFL should recognize the full range of achievements of all learners
- Learners should receive constructive guidance about how to improve
Overlap of Assessment Types*

Assessment OF Learning  
Assessment FOR Learning

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

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

Resources and Readings on Assessment FOR Learning
- My website for articles not available online: http://electronicportfolios.org/afl/
- Assessment Reform Group http://assessment-reform-group.org.uk
- Principles of Assessment for Learning http://www.qca.org.uk/afl

Assessment Systems and Electronic Portfolios: Balancing Accountability with Learning
©2004, Helen C. Barrett
Judy Wilkerson & William Steve Lang

Accountability System (based on Assessment Triangle)

- Congruent with Conceptual Framework
- Feedback Loop for Continuous Improvement
- Analysis and Reporting System
- Tasks, Rubrics and Record of Achievement
Congruence with Conceptual Framework
- Create a system that is congruent with your underlying learning philosophy or conceptual framework
  - behaviorism vs. constructivism
  - positivism vs. hermeneutics
- portfolio as *test* vs. portfolio as *story*

Tasks, Rubric, Record of Achievement
- Identify tasks or situations that allow one to observe students’ performance...
- Create rubrics that clearly differentiate performance (3 or 4 levels only)
- Create a recordkeeping system to keep track of the rubric/evaluation data
  - based on multiple measures/methods

Reporting System and Feedback Loop
- Create a reporting process
  - to summarize assessment data
  - to be able to draw inferences from performance evidence
  - to use for program improvement

Which approach should you take?
- Are you looking for an **electronic portfolio**...
- Or an **assessment management system**?
- What’s the difference? Along a Continuum

Purpose
- **Electronic Portfolio**
  - Multiple:
    - Learning
    - Assessment
    - Employment
- **Assessment Management System**
  - Single:
    - Assessment

Data Structure
- **Electronic Portfolio**
  - varies with the tools used to create the portfolio; most often common data formats (documents often converted to HTML, PDF)
- **Assessment Management System**
  - most often uses a relational database to record, report data
Primary Type of Data

- Electronic Portfolio
- Qualitative
- Assessment Management System
- Quantitative and Qualitative

Data Storage

- Electronic Portfolio
- Assessment Management System
- Multiple options: CD-ROM, videotape, DVD, WWW server, LAN
- LAN or secure WWW server

Technology Skills Required

- Electronic Portfolio
  - Medium → High
  - More advanced skills: information design through hyper linking, digital publishing strategies, file management
- Assessment Management System
  - Low → Medium
  - Minimal skills, equivalent to using a web browser and adding attachments to an e-mail message

Technology Skills Demonstrated

- Electronic Portfolio
  - Medium → High
  - Depending on tools used to create portfolio
- Assessment Management System
  - Low → Medium
  - Depending on the sophistication of the artifacts added to the portfolio

Control of Design & Links

- Electronic Portfolio
  - Under control of portfolio developer
- Assessment Management System
  - Controlled by database structure

Choice of Artifacts

- Electronic Portfolio
- Assessment Management System
- Learner
- Institution

*Hyperlinking reinforces metacognition*
*Design = Individuality*
Locus of Control
- Electronic Portfolio
- Assessment Management System
- Student-Centered
- Institution-Centered

Electronic Portfolio or Assessment Management System?

Cautions about Portfolio Use (Lucas, 1992)
1. The weakening of effect through careless imitation
2. The failure of research to validate the pedagogy
3. The co-option by large-scale external testing programs

Lee Shulman’s 5 dangers of portfolios
1. "lamination"
2. "heavy lifting"
3. "trivialization"
4. "perversion"
5. "misrepresentation"

Lee Shulman’s 5 dangers of portfolios
1. "lamination" - a portfolio becomes a mere exhibition, a self-advertisement, to show off
2. "heavy lifting" - a portfolio done well is hard work. Is it worth the extra effort?


Lee Shulman’s 5 dangers of portfolios

3. "trivialization" - documenting stuff that isn't worth reflecting upon

4. "perversion" - when used as a form of high stakes assessment “why will portfolios be more resistant to perversion than all other forms of assessment have been?”

5. "misrepresentation" - does "best work" misrepresent "typical work" -- not a true picture of competency

Contrasting Paradigms of Portfolios

- Positivism
- Constructivism

Positivist Portfolios

“The purpose of the portfolio is to assess learning outcomes and those outcomes are, generally, defined externally. Positivism assumes that meaning is constant across users, contexts, and purposes... The portfolio is a receptacle for examples of student work used to infer what and how much learning has occurred.”

Constructivist Portfolios

“The portfolio is a learning environment in which the learner constructs meaning. It assumes that meaning varies across individuals, over time, and with purpose. The portfolio presents process, a record of the processes associated with learning itself; a summation of individual portfolios would be too complex for normative description.”
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.

"Assessing Portfolios Using the Constructivist Paradigm"  
In Fogarty, R. (Ed.) (1996) Student Portfolios Palatine: IRI Skylight Training & Publishing

How do we create an Institution-Centered Assessment and Accountability System...

Without losing the power of the portfolio as a student-centered tool for lifelong learning and professional development?

How do we maintain the authenticity of the portfolio process...

And help our teacher candidates develop the skills and attitudes necessary to implement this strategy with their own students once they have their own classrooms?

Modeling!

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

Why?

- Learner Ownership and Engagement with Portfolio
- Emotional Connection to Process
- Learner’s Authentic Voice
- Portfolio as Story
- Portfolio as Lifelong Learning/Professional Development Tool
- Support deep learning
Who?

- Who has successfully kept these two strategies separate, but connected?
  - Baylor University College of Ed
  - University of Denver (campus-wide)
  - Ball State University College of Ed

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University of Denver
http://portfolio.du.edu

- Student-created web-based portfolio PLUS

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Ball State University

- Student-created web-based portfolio PLUS

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University of Washington

- Catalyst Portfolio
  http://catalyst.washington.edu
- Student Learning Objectives System (SLO)
  http://www.washington.edu/slo/
Student Learning Objectives (SLO)

- Four web applications:
  - SLO Encoder: Faculty encode the SLOs for their courses.
  - SLO Reporter: A tool for viewing information in the database.
  - MyLO: SLO Student system - to view their personal learning objective profile.
  - SLO Admin System: A non-technical tool to perform basic system administration tasks.

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.

Handout

Assessment Systems and Electronic Portfolios: Balancing Accountability with Learning

I. Digital Archive of Learner Artifacts (Working Portfolio)

Interactive Process

Evidence = + Artifacts + Reflection + Validation
Interactive Process

Performance Tasks & Rubrics for evaluation

Evidence = +Artifacts +Reflection +Validation

Reflection on Learning (self-selected artifacts for self-evaluation)

Assessor ➔ Learner

Positivist Paradigm
(Evaluation and Making Inferences)

Portfolio as Test

Assessor EVALUATES required artifacts

Data collected for certification/licensure (high stakes) and for accreditation
II. Assessment Management System
(institution-centered data management system)

Resulting in…
Institution-centered aggregated data leading to certification/licensure and accreditation

Focus on Limited-Term Evaluation

External Locus of Control
- Includes prescribed artifacts and rubrics
- Requires database to manage information
- Focuses on faculty's formative and summative evaluations

I. Digital Archive of Learner Artifacts (Working Portfolio)
Constructivist Paradigm
(Making Meaning and Assessment as Learning)

*Portfolio as Story*

Learner COLLECTS artifacts from learning experiences

Reflection on Learning
(self-selected artifacts for self-evaluation)

Learner SELECTS artifacts and reflections to meet self-determined purpose(s)

III. Electronic Portfolio(s)
(presentation portfolios for multiple purposes)

Resulting in…
Student-centered documentation of deep learning,
for developing self-concept and presentation to multiple audiences (peers, employers, etc.)
Deep Learning
- involves reflection
- is developmental,
- is integrative,
- is self-directive, and
- is lifelong


Focus on Lifelong Self-Directed Learning

Internal Locus of Control
- Includes choice of artifacts
- Results in personalized e-portfolio
- Focuses on learner's celebration of uniqueness

Both approaches result in a:
Balanced Assessment System

One final thought...
- Assessment of Learning
- Portfolios for Learning
- What about Motivation?

Components of Portfolio Development
- Content
- Purpose
- Process
Components of Portfolio Development

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

**Purpose:**
the reason for developing the portfolio – includes audience
- Learning & professional development
- Assessment
- Employment

**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

The ePortfolio as a Story of Learning
Digital Storytelling as Reflective Portfolio

Learner Ownership and Control of Electronic Portfolio Development

**Motivation**
- Intrinsic
- Extrinsic

**Process**
- Purpose

Learner Control vs. Organizational Control
Assumption:
Greater Learner Control leads to more Intrinsic Motivation
Linking Two Dynamic Processes to Promote Deep Learning
Portfolio Development Process
Digital Storytelling

Portfolio Development

Handout: ePortfolio as Storytelling

Portfolio Process

Constructed Meaning

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

"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)

Portfolio Development Process
Portfolio Processes

Traditional
- Collecting
- Selecting
- Reflecting
- Projecting
- Celebrating

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

Reflective Questions that tie the Past to the Future

What?
Past
What have I collected about my life/work learning?
(my artifacts)

So What?
Present
What do those artifacts show about what I have learned?
(my current reflections on my knowledge, skills and dispositions)

Now What?
Future
What direction do I want to take in the future?
(my future learning goals)

Linked to...

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

Digital Storytelling
- Blogs
- Wikis

Center for Digital Storytelling

Elements of Digital Storytelling

1. Point of View
2. Dramatic Question
3. Emotional Content
4. Voice
5. Sound Track
6. Economy
7. Pacing

http://www.storycenter.org

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

What is Digital Storytelling?

- Go to DVD - Play Digital Storytelling
Why include Digital Storytelling in ePortfolios?

Learner Motivation and Affect

Brain Research

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 have built into them and attending, as well, to our strategies of narrative description.”

Examples of Reflective Stories

- Go to DVD - Play “Full Circle”
- Go to DVD - Play “Hakuin”

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.

Don’t double your learning! Consider Cognitive Overload!

- When learning new tools, use familiar tasks;
- When learning new tasks, use familiar tools.
  
  Barrett, 1991

My Story

- Go to DVD - Play “Choices”

My Final Wish...

- May all your electronic portfolios become dynamic celebrations of learning across the lifespan.

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