**FETC 2003**

**Electronic Portfolios in Education: Definitions, Dilemmas and Decisions**

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**Definitions**

**What is a Portfolio?**

A purposeful collection of students’ work that illustrates efforts, progress, and achievement [over time] (NW Eval Assoc.)

**What is an Electronic Portfolio?**

uses electronic technologies as the container which allows students/teachers to collect and organize portfolio artifacts in many media types (audio, video, graphics, text) using hypertext links to organize the material connecting evidence to appropriate standards (in a standards-based portfolio)

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**Dr. Mary Diez’ Metaphors**

(Alverno College)

**The portfolio as Mirror**

Captures the reflective nature of the portfolio  
Allows students to “see” themselves over time

**The portfolio as Map**

Creating a plan and setting goals
Dr. Mary Diez' Metaphors (Alverno College)

The portfolio as Sonnet

Provides a framework, but the contents can showcase creativity and diversity


Financial or Professional Portfolio?

A financial portfolio documents the accumulation of fiscal capital or monetary assets

A professional portfolio documents the development of human capital or intellectual assets

Professional Portfolios for Teachers


... extends the possibilities for portfolios in education by going beyond assessment, learning, and professional development to the use of the portfolio as a living history of a teaching-learning life. (p.5)

Decisions

Electronic Portfolio Decision Considerations

PT3 Catalyst Grant focusing on Supporting Technology and Assessment in Teacher Education

Questions to ask

- Credit to David Nigudula and Hilarie Davis for the basic structure to think about implementing electronic portfolios:

  Vision
  Culture
  Assessment
  Logistics
  Use of Technology

Basic Structure for Implementing Electronic Portfolios
Purpose & Goals for the portfolio (Determine Content)

Many purposes:
- Learning
- Assessment
- Marketing/Showcase

Audience (Determine publishing format)

Who are the primary audiences for the portfolio?
- Student
- Parent
- Faculty
- Employer
- College

What technologies do they have?

Assessment - What are the goals for students? How is the work assessed?

- Standards
- Rubrics
- Is there a need to aggregate portfolio/assessment data for program assessment purposes?

Implementing Large Scale Change

Vision (not confusion)
Skills (not anxiety)
Incentives (not gradual change)
Resources (not frustration)
Action Plan (no false starts)

Curriculum Issues in Teacher Education

Where is the concept of the e-portfolio introduced to students?
Does the curriculum require “appropriate digital artifacts for electronic portfolio?”
Is there a course in the curriculum where the students develop their electronic portfolios?
How are the portfolios assessed?

Culture

What else has to change for the portfolio to be valued AND valuable?

Collaboration
Technology - Storage

How much storage to make available per student?

- 5 MB
- 20-30 MB
- 650 MB
- Unlimited

Type of Technology

What MEDIA best convey the messages of the learning journey?

- Text
- Images
- Audio
- Video

*Portfolios tell a story...put in anything that helps to tell the story*

- Pearl & Leon Paulson, 1991

Scarcest Resource: Time

FACULTY
- Professional Development
- Implementation
- Planning
- Reflection
- Assessment

STUDENTS
- Collection
- Selection
- Reflection
- Direction

Directions in Electronic Portfolio Development

Generic/Common Tools Approach

- MS Office: Word/Excel/PowerPoint
- Higher level tool software
- Portable Document Format
- HTML
- Multimedia authoring

+ Low startup and maintenance costs

- Ability to aggregate data for assessment

IT Customized Systems Approach

- Online database
- Assessment Management Systems
- Examples of commercial companies: LiveText, TaskStream, Chalk & Wire, McGraw-Hill's FolioLive, ePortaro, True Outcomes

- Server programming/purchase (or student fee subscription), maintenance & Internet access requirements

+ Ability to aggregate data for assessment

Pedagogical Requirements

An online portfolio system needs to support a culture of EVIDENCE:

Evidence = Artifacts + Learner Reflections + Validation or Feedback
Pedagogical Requirements

Storage Space

Security

Linking and Grouping Artifacts

Reflection

Publishing

Portability

Storage Space

To store digital artifacts (with meta-tags)

To store learner self-reflection and self-assessment on each artifact

To store feedback on each artifact from assessor(s) (independent validation)

To store details of the assignment with criteria for assessment (rubrics)

Security

Ability to restrict access, setting permissions to view:

- Artifact only
- Artifact with reflection
- Artifact with reflection and feedback

Ability to set permissions separately for faculty to view portfolio and provide feedback on work.

Linking and Grouping Artifacts

Ability to organize portfolio in a variety of ways (flexibility in organization)

- By standards or learning outcomes
- By course
- By date (entered, last updated, etc.)
- By status of work (Work in progress, ready for assessment, ready for publication)

Ability to include:

- Goals for portfolio, Contents of portfolio
- Learning Goals or Standards
- Resume

Reflection

Ability to reflect on a specific grouping of artifacts to make a particular case (i.e., how this collection demonstrates achievement of standards or learning goals)

Ability to set learning goals and future direction

Publishing

Ability to create a variety of portfolios, depending on audience and purpose

Ability to individualize the portfolio, to allow creativity of expression in the presentation (how to avoid the “cookie cutter” effect or identical “look and feel” of a data-base or template-based portfolio)
Portability

Ability to archive work in a portable format such as:
- CD-ROM
- HTML or PDF Archive
- DVD

Learners can take their portfolio to another institution or maintain it on their own.

Dilemmas

Joanne Carney's Dilemmas on Electronic Portfolios

1. Multiple Purpose Dilemma
2. Personal Revelation Dilemma
3. Cognitive Overload Dilemma
4. Self-Expression Dilemma
5. Dead-End Dilemma
6. Data-Aggregation Dilemma

Yancey, Kathleen Blake (in development) “Campfires Around Which We Tell Our Stories: Confronting the Dilemmas of Teacher Portfolios and New Technologies”

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


SITUATING PORTFOLIOS

Lucas (1992):
- ... will [portfolios] become merely the newest vehicle to perform the old task, with the result that portfolios will become standardized—with "common assignments" and "clearly defined criteria" and restricting conditions...
- ... resist the standardization characteristics of mass testing


Let's See Some Examples

Teaching Portfolios

Early Childhood Portfolios

Above all else...

Electronic portfolios should provide a dynamic environment for learners to document and celebrate their learning across the lifespan

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Planning Documents

http://helenbarrett.com/EPDirections.pdf
a paper by David Gibson that outlines issues between generic tools and computer systems approaches

a list of pedagogical issues to address when planning for electronic portfolios.