

# Pedagogical Issues in Electronic Portfolio Implementation

©2002, Helen C. Barrett, Ph.D.

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

Evidence = Artifacts + Learner Reflections + Validation or Feedback

Below are some of the requirements for creating an online portfolio based on the pedagogical requirement of a PORTFOLIO system (whether paper-based or electronic).

## 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:

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 collections demonstrates achievement of a standard or learning goal)

Ability to set learning goals and future direction

## Publishing

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

- **Learning** portfolio (a reflective journal with artifacts; primary audience is the learner)
- **Assessment** portfolio (a highly-structured portfolio demonstrating achievement of learning goals or standards, with independent validation and feedback on artifacts/reflections from faculty)
- **Employment** or **Marketing** Portfolio (a semi-structured portfolio, developed for the purpose of making the case for suitability for a particular position)
- **Showcase** Portfolio (a collection of artifacts, with reflections, that demonstrate growth over time, highlighting specific achievements)

Ability to individualize the portfolio, to allow creativity of expression in the presentation (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.

---

## Types of Evidence in Portfolios

Barton & Collins (1997) have identified four types of evidence that can be placed in a portfolio:

**Artifacts:** documents produced during normal academic work

**Reproductions:** documents of student work outside the classroom

**Attestations:** documentation generated about student's academic progress

**Productions:** documents prepared just for the portfolios. These productions include:

- **Goal Statements:** Student's personal interpretations of each specific purpose for the portfolios
- **Reflective Statements:** Students write as they review and organize the evidence in their portfolios
- **Captions:** Statement attached to each piece of portfolio evidence, articulating what it is, why it is evidence, and of what it is evidence.

(Barton, James & Angelo Collins (1997) *Portfolio Assessment: A Handbook for Educators*. Dale Seymour Publications)

---

## Levels of Portfolio Implementation

0. A collection of artifacts
1. A collection of artifacts **with reflective statements**
2. A collection of artifacts with reflective statements & **self-assessment**  
A learning portfolio (journal entries with associated artifacts)  
A showcase or marketing portfolio (a celebration of learning or an employment portfolio)
3. A collection of artifacts with reflective statements & **self-assessment**, linked to course outcomes, program outcomes, or standards  
A non-validated assessment portfolio
4. A **course**-centered portfolio: A collection of artifacts with reflective comments & self assessment, **linked to course outcomes** including validation & feedback from faculty, used for **course assessment**
5. A **program**-centered portfolio: A collection of artifacts with reflective comments & self-assessment, **linked to program outcomes** including validation & feedback from faculty, used for **program assessment**
6. A **standards (or goals)**-centered portfolio: A collection of artifacts with reflective comments & self-assessment, **linked to standards** including validation & feedback from faculty, used for **individual learning support** and **program assessment**
7. A **learner**-centered portfolio: A collection of artifacts with reflective comments & self-assessment, **linked to learner goals or outcomes** including validation & feedback from faculty, used to support **individual learning, growth, professional development**.