Teacher Portfolios and New Technologies: Confronting the Decisions and Dilemmas

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Personal experiences that have given me insights into portfolio issues—
- Case study research
- Teacher educator initiating an electronic portfolio program and teaching a course in electronic portfolio design
- Assistant professor constructing her own electronic portfolio for pre-tenure review

Case study research
Three traditional paper and three electronic portfolios authored with generic software tools and posted on the web

Participants
- Pre-service teachers—secondary certification
- Candidates for a Masters in Teaching at a large research university
- In the final quarter of a 5-term teacher education program

All tools have distinctive affordances and constraints (Gibson, 1979).

How will the affordances and constraints of portfolio technologies interact with our decisions about portfolio content and format?

To devise effective portfolio assessment systems for teachers, one must make wise decisions in three key areas:
1. Purpose/audience*
2. Ownership*
3. Focus
Dilemmas are inherent in our decision-making:

- Multiple-purpose dilemma
- Personal-revelation dilemma
- Cognitive-overload dilemma
- Self-expression dilemma
- Dead-end dilemma

1. Purpose & Audience

Several reasons for doing a portfolio were suggested to the pre-service teachers who were participants in my study; each author had to decide which of these purposes, or combination of them, to embrace.

Decision:

What is my purpose for doing this portfolio?

The two purposes most commonly suggested to teachers for doing a portfolio may be incompatible, if they imply audiences with quite different needs and perspectives—as they generally do.

Multiple-purpose dilemma

In suggesting teacher portfolios might accomplish many purposes, we make it likely they will accomplish none of them well; yet suggesting the portfolio is for one purpose only, arouses a certain amount of recalcitrance among pre-service teachers, especially among those who are not naturally reflective or who find writing to be laborious.

Personal-revelation dilemma

The technology that affords teachers the opportunity to share teaching knowledge widely may prove too revealing for novices to deal candidly with problems of practice.
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**Personal-revelation dilemma**
Yet, the technology also offers the potential for dealing with the multiple-purpose dilemma:
- Password-protected environments
- Portfolios on CD
- Different portfolios for different purposes
- Use of hypertext linking to create multiple paths for different audiences.

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**Cognitive-overload dilemma**
Learning the technology as one is trying to reflect deeply about one's practice may result in a "cognitive overload." The technology that is most effective in helping pre-service teachers develop high-level NETS competencies, may at the same time make it difficult for the portfolio authors to achieve important portfolio goals related to content.

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1. Purpose & Audience decision—
   *How shall we define purpose/audience and use our technologies so as to deal with these three dilemmas?*

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2. Ownership
   *Who is allowed access?*
   *What tools are to be used for its construction?*
   *Where is the portfolio to be stored?*
   *To what extent is the portfolio an expression of the individual author?*

What effects did the technology used for authoring electronic portfolios have on these purpose and audience issues?

**Dilemma #3...**
Ownership
In selecting artifacts, a portfolio author is saying:
“This is who I am as a teacher—me doing what I think is good teaching.”

Mary Diez (1994) conceived of portfolio as mirror, map, and sonnet.

What effects did the technology used for authoring electronic portfolios have on this ownership issue?

Dilemma #4...

Self-expression dilemma
Customized systems enable teachers with limited technology skills to create attractive electronic portfolios with relatively little effort, but will they also constrain teachers from making portfolios that are truly an expression of self?

On the other hand, teachers will need some facility with the generic tools to be able to create something true to their intentions.

Relatively few teachers have those skills.
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**Dead-end dilemma**
Using fully-developed CS might result in teachers lacking the skills to author their own portfolios outside the system. And by producing teachers who lack the skills to do web authoring and multimedia design with off-the-shelf tools, we may be, in effect, disempowering them— which has implications for continuing professional development.

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**Dead-end dilemma**
Will novice teachers have to begin their portfolios anew, making pre-service Customized System portfolios nearly as much of a dead-end as the traditional portfolios in my study?

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*If we expect portfolios to be effective devices for representing and communicating teacher knowledge, we must confront the dilemmas posed by our new technologies and make wise decisions about how to use our tools.*