

Portfolio Technology Options

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Overview

- Technology Options
- Technology Resources
- Student Motivation

Technology Options

- Generic
- Proprietary
- Open source
- Homegrown
- Blogs

Generic Tools

- Web design: Dreamweaver, Netscape Composer
- Graphics tools: Adobe Photoshop, Illustrator
- Audio and video: iMovie
- Print design tools: Adobe Acrobat
- Published on the Web or to CD-ROM
- Some examples:
 - <http://www.bsu.edu/web/knkramer/index.html>
 - http://scil.stanford.edu/research/learningcareers/capstones/brian/LOB_index.html
 - <http://www.stolaf.edu/depts/cis/wp/wernerb/>

Generic Tools Advantages

- Require little infrastructure, central IT support
- Author has great flexibility and control
- Develops and demonstrates ICT skills
- Many students know how to use these tools already or learn them within the existing curriculum

Generic Tools Disadvantages

- Many students don't know these tools already; steep learning curve
- Students need access to expensive desktop software and fast computers
- Time consuming to produce (and consume)
- Privacy challenges
- Lack of workflow scaffolding

Generic Tools Best Practices

- Make space in the curriculum for the skills and activities necessary to take advantage of the power of generic tools
- Provide technical and conceptual support services
- Clemson University
 - Credit for portfolio building over three years within general education
 - Studio in professional writing center with expert consultants

Commercial Tools

- Web applications
- Hosted by campus or vendor
- Major vendors:
 - Nuventive (partnered with SCT)
 - ePortaro
 - Taskstream
 - LiveText
 - Blackboard
 - Avenet

Commercial Tools Advantages

- Ease of use
- Features:
 - Views
 - Access control
 - Roles-based permissions
 - Integrated commenting and scoring
- Hosted option
- Vendor technical support
- Vendor consulting services
- Integration with other enterprise systems

Commercial Tools Disadvantages

- Proprietary format
- Author has less control of information architecture and visual design
- Rapidly evolving market
- Dependent on vendor for customization
- Licensing costs

Commercial Tools Best Practices

- Survey the range of portfolio practices you might need to support before choosing a tool
- Develop a CFP based on your needs, not available features
- Look for open standards support (IMS and OKI)
- Schedule lots of demos, even if you're not the sole or primary decision maker
- Budget for both software and services

Open Source Tools

- Similar in features and structure to commercial tools
- Unbundling on software and support (Wheeler 2004)
- Open Source Portfolio
 - The Open Source Portfolio Initiative
 - R-Smart Group
- Epsilon (community source)
 - ePortConsortium
 - CyberLearning Labs

Open Source Tools Advantages

- No (or low) licensing costs
- Commercial advantages: Ease of use, features, and integration with other systems
- Customizable in-house
- Factored architecture (OSPI)
- Technical support and vendor consulting
- Support from community (Linux)
- Direction of development determined by community

Open Source Tools Disadvantages

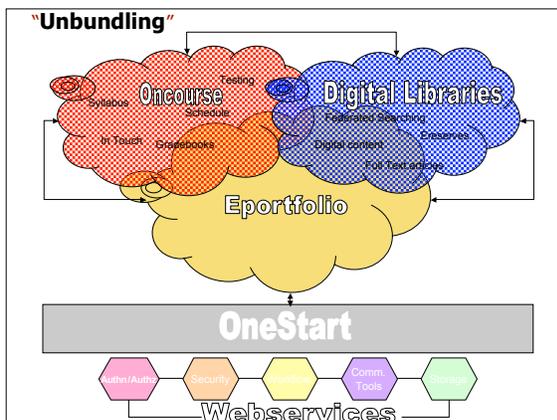
- Direction of development determined by community
- Proprietary format
- Lack of design and IA control (for the moment)
- Other people's code is harder to work with
- You support it yourself

Open Source Best Practices

- All the commercial best practices apply
- Engage the community before you commit
- Formalize your relationships with the key players (CHEF -> SAKAI example)
- Find a way to contribute early and often
- Consider partnering with other institutions

Open Source Examples

- OSPI
 - <https://www.theospi.org/portfolio/>
- OSPI 2
 - Organization: Repository
 - Design: Presentation
 - Visual design
 - Navigation
 - Analysis: Search and Reporting
 - Guidance: Scaffolding
 - Commenting, certification, and scoring
 - Multi-dimensional learning matrixes
 - Specifying workflow
 - Communication: CIGs and Sakai tools



The screenshot shows the "PUL Learning Matrix" interface. On the left is a sidebar titled "My Matrix Tool" with a list of actions: Browse and Subscribe, Build and Publish, Matrix Manager, PUL Maps, Comparative Religion Matrix, Community Service Matrix, Research Methods Matrix, and Chess Club Matrix. The main area is a table with the following structure:

PULS	Introductory	Intermediate	Advanced	Experimental
Core Communication & Quantitative Skills	[Icon]	[Icon]	[Green]	[White]
Critical Thinking	[Icon]	[Icon]	[Green]	[White]
Integration & Application of Knowledge	[Icon]	[Icon]	[Green]	[Icon]
Intellectual Depth, Breadth, & Adaptiveness	[Icon]	[Icon]	[Yellow]	[Purple]
Understanding Society & Culture	[Icon]	[Icon]	[Green]	[Icon]
Values & Ethics	[Icon]	[Icon]	[Green]	[Icon]

At the bottom of the table, there is a status bar with buttons: Complete (blue), Pending (yellow), Ready (green), and Locked (red).

Homegrown Tools

- Written and supported in house
- Often computerizes an existing format and process
- Examples:
 - Digital Diagnostic Portfolio (Alverno College)
 - Learning Record Online (U of Texas at Austin)
 - Portfolio Community (U of Denver)
 - Catalyst Portfolio (U of Washington)

Homegrown Tools Advantages

- Total control
- Focused and lightweight
- Community and knowledge building through development process

Homegrown Tools Disadvantages

- Need development infrastructure
- Scalability
- Still have to provide support
- Proprietary format
- Lack of a broader community
- Danger of reinventing the wheel

Homegrown Tools Best Practices

- Research existing software before you build
- Consider integrating rather than building from scratch
- Involve all stakeholders, especially students, as early and often as possible
- Plan for sustainability

Homegrown Tools Examples

- [Alverno Digital Diagnostic Portfolio](#)
 - http://ddp.alverno.edu/production/login.php?base=DDP_Demo
 - Username: sue; password: pattydayo4
- Carnegie Foundation KEEP Toolkit
 - <http://www.cfkeep.org/html/snapshot.php?id=971>
- Learning Record Online
 - <http://lro.cwrl.utexas.edu/>

Blog Software

- Commercial, open source, or homegrown blogging software
- Examples
 - Blogger
 - WordPress
 - Moveable Type
 - Drupal

Blog advantages

- Familiar, authentic genre and tools
 - students may use them anyway
- Excellent support for reflection
- Some support for collection
 - Excellent for short texts
 - Decent to no support for documents
- Easy to use
- Free or cheap

Blog disadvantages

- Strong genre conventions that do not always align with the portfolio process
 - Chronological order
 - Permanence of posts
 - Publicness and undifferentiated access
- Poor support for integrative phases of folio thinking: selection and connection
 - Limited to categories and meta entries
 - A digital journal with attachments is not yet an electronic portfolio

Blog Examples

- USC
 - <http://www.usc.edu/jisd/locations/cst/tlsnew/currentthemes/eportfolios.html>
 - KEEP Toolkit for presentation
- Stanford
 - Reflective learning in Engineering
 - Folio thinking, not portfolios
- ELGG
 - Being developed at University of Edinburgh
 - Still brochureware

Technology Resources

- Helen Barrett's Online Portfolio Adventure
 - Constructed same portfolio in 17 different online tools
 - <http://electronicportfolios.com/myportfolio/versions.html#18>
- ePortConsortium Whitepaper
 - General overview of eportfolios from a technical perspective
 - <http://eportconsortium.org/Content/Root/whitePaper.aspx>
- JISC InfoNet
 - Project planning and management resources
 - <http://www.jiscinfonet.ac.uk/InfoKits>
- UBC Features Comparison

Barrett's Portfolio Adventure

- The process is as valuable as the product
 - Define a representative task or set of tasks
 - Experiment with completing the activities with different tools
 - In that order
- Are your tasks the same as Barrett's?
 - No institutional goals / requirements
 - No clear audience
 - Collection outside of the tool