Lifelong Personal Learning Environments

Revolution in Technology and Pedagogy to Support Lifelong and Life-Wide Learning

“My Digital Self”

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Electronic Portfolios & Digital Storytelling for Lifelong and Life-Wide Learning

Overview of Presentation

- Revolutions in Web 2.0 technologies
  - Memex & LPWS
  - Architecture of Collaboration/Participation
  - My LifeBits/Hits
- Revolutions in Learning
  - Lifelong & Life-wide Learning
- Challenges

-ePortfolio 2.0 Mash-Up:
  Blogs, Wikis, Google, YouTube, Flickr,
  Social Networks, Virtual Storage,
  Mobile Phones, and...???

My Digital “Self”

- Self: An individual’s awareness of what constitutes his or her essential nature and distinguishes him or her from all others.
- Past (Memories/Stories)
- Present (Competencies/Character*)
- Future (Goals/Vision/Direction)
- Identity: The set of behavioral or personal characteristics by which an individual is recognizable.

* The combination of emotional, intellectual, and moral qualities that distinguishes an individual.

“Self” terms as learning goals

- Self efficacy
- Self knowledge
- Self awareness
- Self-directed
- Self evaluation
- Self-regulation
- Self-educated
- Self-improvement
- Self defense
- Self-sustaining
- Self esteem
- Self confidence
- Self care
- Self portrait
- Self guided
- Self expression

Try replacing “self” with “identity”???

Personal Learning Environment Supports Self-Directed Learning

Learning for Life

LIFELONG LEARNING
DEFINE YOUR LIFE

E-Portfolio Model

Try replacing “self” with “identity”???
Questions to Ponder

- What happens to electronic portfolios once learners leave an institution?
- Can learners continue to maintain their own “digital documentation of development” throughout their lifetime? (Do they even want to?)
- Has the process of reflective practice become a habit of mind that will support lifelong learning?

Cognitive Dissonance

Web 2.0 tag cloud

Recent changes in technology

Web 2.0 deep trends: a revolution in human augmentation

Architecture of Interaction
Architecture of Participation (Web 2.0)

allows a Pedagogy of Interaction (ePortfolio 2.0)
Levels of ePortfolio Implementation

- Working Portfolio (Digital Identity?)
  - The Collection
  - The Digital Archive
  - Repository of Artifacts
  - Personal Information
  - Reflective Journal (eDOL)

- Presentation Portfolio(s)
  - The “Story” or Narrative
  - Multiple Views (public/private)
  - Varied Audiences (varied permissions)
  - Varied Purposes

Portfolio as Process  Portfolio as Product

Another question to ponder

- What could happen if every citizen were issued personal web server space that they would own for a lifetime?

E-Portfolio Components

- Multiple Portfolios for Multiple Purposes
- Multiple Tools for Multiple Processes
- Single Digital Archive (for life?)

Educause Quarterly 2004

- “Beyond the Electronic Portfolio: A Lifetime Personal Web Space” [LPWS]
  - Ellen R. Cohn and Bernard J. Hibbitts
    (University of Pittsburg)
- “Rather than limit people to the e-portfolio model, why not develop a model providing a personal Web space for everyone, for their lifetimes and beyond?”

MEMEX

- “A memex is a device in which an individual stores all his books, records, and communications, and which is mechanized so that it may be consulted with exceeding speed and flexibility. It is an enlarged intimate supplement to his memory.”

Vannevar Bush (1945) “As We May Think” Atlantic Monthly

LPWS

- organized more like our brains than our file cabinets
- available anywhere, any time
- universally accessible to everyone, any ability, even the homeless
- can survive as an historical record of a person’s body of work

Cohn & Hibbitts (2004)
Digital Archive for Life (DAL)

- space to store raw materials for e-portfolios
- archives of family records, genealogy and digital stories, autobiographies, child development data
- evidence of personal and professional accomplishments, and all kinds of personal information
- Personal archive/content management system

Four key pillars of Lifelong Learning

Knowing the learner (Self-awareness)

- Understanding prior knowledge
- Motivation for and attitudes toward learning
- Portfolios = mirror
- Help learners understand themselves
- See their growth over time

Planning for learning (Self management)

- Setting goals
- Develop a plan to achieve these goals
- Portfolios = map for future learning

Understanding how to learn (Meta-learning)

- Awareness of learners to different approaches to learning
- Deep vs. Surface Learning, Role vs. Meaningful Learning
- Different Learning Styles
- Portfolios = different artifacts
- Help learners recognize success
- Accommodate approaches that are not successful

Evaluating learning (Self monitoring)

- Systematic analysis of learners' performance
- Responsibility to construct meaning
- Be reflective & think critically
- Portfolios = include reflective journals
- Learners construct meaning, monitor learning, evaluate own outcomes
- Align artifacts to outcomes, goals, standards

ePortfolio 1.0 – ePortfolio 2.0

Hierarchical, Designed
Metaphor: Portfolio as Test
Data-driven
Focus on Templates, Standardization
Feedback from Authority Figures
Large, complex systems

Networked, Emergent
Metaphor: Portfolio as Story
Learner-driven
Focus on Individuality, Creativity
Feedback from Community of Learners
Small pieces, loosely joined - “Mash-ups”

Continued…

Process & Web 2.0 Tools

Web-based Form
Positivist
Accountability-driven
Proprietary
Digital Paper (text & images)
Local Storage (hard drives, CD, DVD)

Blog or Wiki
Constructivist, Connectivist
Learning-focused
Open Standards
Digital Story (multimedia)
Network Storage (Lifetime Personal Web Space)

Ownership of Data

Institution-centered vs. Learner-centered
Time-limited vs. Lifelong
Need to separate individual space from institutional needs
Artifacts have unique identifier
Use in a variety of contexts
Meta tags, keywords

Institutional Portfolios

What happens when a learner leaves or transfers?

Learners’ Digital Archives and presentation portfolios
Guidance portfolios
Institution’s server or online service

Limited Time Frame

Life-wide focus
Social networks

Separate Systems

Learners maintain collection across the lifespan, institutions maintain evaluation data & links

Institution’s Server or Service & Purposes

Limited Time Frame
Social networks

Faculty-generated evaluation data
Guidance portfolio
Class portfolio
Learner-owned Lifelong Web Space

Employment portfolio

Learner’s Digital Archive & Blog

Academic focus
Employment portfolios
Class portfolios
Guidance portfolios
Institutional data

Limited Time Frame
Life-wide focus
Social networks
Online Storage Systems

Online Storage Providers (Free)

- **“Cloud” Computing**
  - Google (coming)
  - Microsoft Windows Live SkyDrive (5 GB)
  - Amazon S3 ($0.15/GB/month) (Simple Storage Service)
  - AOL Xdrive (5 GB)
  - Yahoo Briefcase (30 MB)
  - IBM Global Business Continuity and Resiliency Services
  - Wells Fargo Bank (digital safe deposit box – not free)

- Smaller Services
  - box.net (1 GB)
  - allmydata.com (1 GB)
  - divshare.com (5 GB)
  - 4shared.com (5 GB) (expires 30 days of non-use)
  - openomy.com (1 GB)
  - thelinkup.com (25 GB)
  - scribd.com (unlimited docs/pdfs – no audio/video)

Source: electronicportfolios.org/web2/

Virtual Storage (coming!)

Virtual Storage

Google plans to become the latest of several services that let you store and share your files online.

- **Google Drive**
  - 1 GB for free
  - 10 GB for $9.95/month

- **Microsoft Windows Live SkyDrive**
  - 1 GB for free
  - 5 GB for $9.95/month

- **Amazon S3**
  - $0.15/GB/month
  - (Simple Storage Service)

- **AOL Xdrive**
  - 1 GB for free

- **Yahoo Briefcase**
  - 30 MB

- **IBM Global Business Continuity and Resiliency Services**

- **Wells Fargo Bank** (digital safe deposit box – not free)

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Microsoft’s MyLifeBits Research

- An experiment in lifetime storage
  - Lifetime store of everything using Gordon Bell’s life work

- A software research effort
  - Leverages SQL server to support:
    - Hyperlinks
    - Annotations
    - Reports
    - Saved queries
    - Annotations
    - Record;
      - web pages
      - IM transcripts

Wall Street Journal, November 27, 2007
What about “My Life HITS?”

- **Selection** with Reflection and Direction

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**Portfolios in the Cloud**

Supporting Lifelong and Life-Wide Learning

- Digital Archive (for Life)
- Social Networks
- Digital Snapshots of Life Experiences
- Early Childhood Portfolios
- Video Portfolios
- Online Videos
- Digital Stories

**Lifelong Life-Wide Scenario**

Lifelong, life-wide approach to:
- Lifetime personal web space
- Electronic portfolios
- Online Videos
- Digital Stories

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**Families are the Centerpiece**

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**Early Childhood Portfolios**
Children enter school

My Electronic Portfolio for Kindergarten 2000-2001
Victoria Barrett

Children take on responsibility

Windows Live Folders

Example - Victoria 2nd Grade

Student-Led Conference
Victoria’s Second Grade Portfolio

Formal Education: Assessment Portfolio Systems

Two approaches
- Formative
- Summative

Personalizing & Goal Setting

Post-Secondary - Benchmarks

- Course Objective
- Summary Statement
- Contract Information
- Education
- Work Experience
- Skills
Skills for Lifelong Learning in the Workplace

- Basic Workplace Skills
- Lifelong Learning Skills
- Professional Development
- Research and Analytics
- Leadership
- Innovation and Creativity
- Communication
- Collaboration
- Critical Thinking
- Adaptability

Portfolios in the Work Place

- Less well-defined
- Some professions produce digital products
  - Music
  - Art
  - Website design
- Accreditation of prior learning
- Personnel Evaluation?

Digital Stories - Legacies

- Listen deeply
- Tell stories

Logistics

...of a lifelong, life-wide online personal learning environment

How would we manage such a system?

- Who would offer digital archive space?
  - Governments
  - Schools
  - Private Companies

- Advantages
- Problems

How would we get the systems to work together?

- Open ID
- RSS
- Tags
- Portfolio Specifications
Open ID

- Authentication
- Share logon ID

RSS

- Event notification and aggregation
- Really Simple Syndication

Tags

Challenges

- User Interface of Web 2.0 tools
- Security Concerns in Schools
- Quality of artifacts online
- Socio-Cultural

Socio-Cultural Issues

- Not a technical issue
- Raising awareness
  - Why?
  - How?
- Usability
- Cost-benefit
- Efficacy
- Impact on learning & achievement
- Acceptance by employers or other stakeholders

Age & Social Technology Adoption

Age is a major driver of adoption
“every day-ness”

How can we make ePortfolio development a natural process integrated into everyday life?

Lifelong and Life Wide Learning

Isn’t this Web 2.0 thing just a fad?

Telling about Interview with TV producer

cognitive surplus
looking for the mouse

Web 2.0 Expo, April 2008, Clay Shirky
Author of the book Here Comes Everybody

Collaborative Research Agenda

- a long-term research proposal
- a proposed implementation plan
- evaluation study using Web 2.0 tools
- find out what strategies work under what conditions to support the vision
- Join me! http://groups.google.com/group/web2eportfolios/
- Google Group: web2eportfolios

My Final Wish…

May all your electronic portfolios become dynamic celebrations and stories of deep learning across the lifespan.

Dr. Helen Barrett

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