Getting Started with ePortfolios

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Goals for Today’s Session

- Provide a practical **framework** for implementing ePortfolios
- Identify **resources**, examples, and opportunities for future exploration
- Share some new **ideas and questions** to collaboratively consider
Why ePortfolios? Why now?

A Changing Educational Landscape

Peter Thiel pays kids $100K to drop out of college

Stanford Online
Credit Hour $\rightarrow$ Degree $\rightarrow$ Learning?

Amy Latinen, *Cracking the Credit Hour*, September 2012, New American Foundation and Education Sector

http://postsecondary.gatesfoundation.org/student-stories/america-as-100-college-students/
Why ePortfolios?

ePortfolios and Folio Thinking

**Portfolio**: A purposeful selection of artifacts together with reflections that represent some aspect of the owner’s learning

A culture of **Folio Thinking** provides structured opportunities for students to:

1. create learning portfolios
2. reflect on learning experiences emphasizing integration, synthesis, and self-understanding
ePortfolio Purposes
(Lorenzo & Ittelson, 2005)

1. **Showcase**
   - Finding a job
   - Highlighting achievements, skills, and abilities

2. **Assessment**
   - Tracking development within a course or program
   - Performance monitoring and evaluation

3. **Learning**
   - Educational Planning, advising, mentoring
   - Documenting knowledge, skills, and abilities over time

4. **Hybrid** (some combination of the above)

Image credit: Alan Levine
With thanks to Cathy Buyarski (IUPUI)
Showcase Portfolios vs. Learning ePortfolios

**Showcase ePortfolio**

- **Purposes**: Showcase
- **Content**: Curated collection highlighting exemplary work; formal and/or verified
- **Focus**: the ePortfolio *product*
- **Goals**: Outward facing, networking; your *professional* identity
- **Audience**: Employers, grad schools, professionals, the public

**Learning ePortfolio**

- **Purposes**: Exploratory & Developmental over time
- **Content**: Could include works in progress, drafts, goals, plans
- **Focus**: the ePortfolio *process*
- **Goals**: Self-knowledge and understanding; growth over time; your *intellectual* identity
- **Audience**: Selected mentors, advisors, faculty, alumni, peers & family

### ePortfolio Implementation Framework

(Chen & Penny-Light, 2010; Penny-Light, Chen, & Ittelson, 2012)

1. Defining Learning Outcomes
2. Identifying and Understanding Learners and Stakeholders
3. Designing Learning Activities
4. Informing Assessment of Student Learning
5. Using ePortfolio Tools and Technologies
6. Evaluating the Impact of Your ePortfolio Initiative
How can Learning Portfolios support greater synthesis and integration across formal and informal learning experiences?
The Essential Learning Outcomes

Beginning in school, and continuing at successively higher levels across their college studies, students should prepare for twenty-first-century challenges by gaining:

- Knowledge of Human Cultures and the Physical and Natural World
  - Through study in the sciences and mathematics, social sciences, humanities, histories, languages, and the arts
  - Focused by engagement with big questions, both contemporary and enduring

- Intellectual and Practical Skills, including
  - Inquiry and analysis
  - Critical and creative thinking
  - Written and oral communication
  - Quantitative literacy
  - Information literacy
  - Teamwork and problem solving
  - Performed artifacts, across the curriculum, in the context of progressively more challenging problems, projects, and standards for performance

- Personal and Social Responsibility, including
  - Civic knowledge and engagement—local and global
  - Interpersonal knowledge and competence
  - Ethical reasoning and action
  - Foundations and skills for lifelong learning
  - Anchored through active involvement with diverse communities and real-world challenges

- Integrative and Applied Learning, including
  - Synthesis and advanced accomplishment across general and specialized studies
  - Demonstrated through the application of knowledge, skills, and responsibilities to new settings and complex problems

An ability to function on multidisciplinary teams

FIRST Robotics

http://learningoutcomesassessment.org/
Alignment in Course/Program Design

Learning Outcomes

Content & Concepts

Teaching & Learning

Methods

Assessment

The capstone of the Notation, the electronic Portfolio (ePortfolio), will document students' achievements in communication and writing. This ePortfolio showcases students' ability to communicate effectively across disciplines, audiences, and genres. It will be assessed by a committee as the final requirement of the Notation.
What kinds of evidence would document students’ achievements in communication and writing?

I don’t think anything has ever made me feel as much like a “real” scientist as the creation of this research paper. Everything from recording data in the field in a waterproof notebook, to doing a literature review of everything ever done on Australian grassstrees (Xanthorrhoea johnsonii), to logging and twining our data through every permutation of chart we could think of, to hours of detailed writing in the passive voice of scientific authority, all to produce something that I think is...
How do we create a culture of folio thinking and practice?
What does the learning career for your institution, program, or course look like?

- What are the major milestones in the student’s academic trajectory?
- When and where is reflection occurring, e.g. assignments, RA applications, jobs, internships, fellowships, scholarships?
- Who are students interacting with along the way? What faculty, staff, offices, programs, services are supporting students in their educational trajectory?
Sketch... who are the potential stakeholders for a learning portfolio.

Share your map...

- Who are the most important stakeholders for the ePortfolio?
- What stakeholders are missing?
- How do you envision the ePortfolio meeting stakeholder needs?
Stakeholder: Students
What are you taking away from your Stanford education?

Skills
• Communication
• Teamwork
• Problem Solving

Personal values & Attributes
• Discipline
• Adaptability
• Responsibility
• Integrity

Experiences
• Courses
• Clubs & Organizations
• Events (Powwow, Luau)
• Outreach
• Projects

Evidence
• Writing Samples
• Multimedia
• Promotional materials
• Multimedia – Photos, Videos

Wellness

Portfolio to Professoriate ➔ Professional

Manage Your Career

Should Graduate Students Create E-Portfolios?

By David Brooks

A year ago, I noticed that more and more fellowship applications asked whether I had a Web site for my dissertation project. I doubt that my negative response to that question explained the regretful letters of rejection I received last spring. But the question and the thin envelopes did get me wondering about how we, as graduate students, craft our online presence.

Too often, I think we do very little of the crafting.

I Googled myself for the first time a few weeks ago. None of the hits I got surprised me, except for the realization that I had posted none of them. Sure, I had written the published pieces and presented the conference papers that came up in my search, but I had no hand in creating how, or where, my work had been displayed online. As a result, my Web presence amounted to an assortment of singular products with my name on them, rather than a comprehensive picture of me—a scattering of digital trees instead of a cyber forest.

When I went looking to see how other graduate students created a virtual likeness, I found more of the same.
P2P Guiding Principles

What's your story?

SHOW ME, DON'T TELL ME

Lia Iris Izenberg

Impassioned Educator | Strategic Leader | Innovative Thinker

I am an educational leader and professional with a passion for social justice and educational equity. I have more than 10 years of experience volunteering and working in schools and educational non-profits.
hello!

Did you know that in Idi, a language spoken in Papua New Guinea, there are different words for hello depending on how far away the speakers are?

Although I’m typing this in San Francisco and you may be anywhere in the world, this interaction between the two of us allows for the closest of the hellos:

mer yedo!

Teaching that Inspires Me

- set high expectations
- take risks
- be excited

Stakeholder: Alumni
"We've never met but I feel like I already know you"
Using ePortfolios to Facilitate Student-Alumni Conversations

Helen L. Chen | Katherine Toy | Julius Paras | Thomas Black

Project Goal
Design an engagement opportunity to facilitate student-alumni conversations around independent learning projects.

Guiding Questions
1. What are the characteristics of a program for which alumni would want to return?
2. How do we create a meaningful and compelling exchange method for both alumni and students?
3. Given an enriched set of initial practices, how can these be disseminated and integrated into other programs or contexts?

Study Description
Stanford News: Alumni Perspectives
In 2011, the Stanford Alumni Association (SAA) sought to develop a new engagement program that would provide a meaningful way for alumni to interact with the university. The SAA launched a project to develop a program that would allow alumni to share their experiences and insights with students. This program, known as "ePortfolios," was designed to provide a platform for alumni to share their stories and experiences with students, fostering a deeper understanding of the university's history and culture.

Pilot 2: Mentoring Moments with Alumni in Washington, D.C.
ePortfolio Template
- Introduction
- Showcase: Specific moments where alumni have shared their stories and experiences
- Alumni biographies
- Alumni contributions to the university

For more information
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Implications and Opportunities
- The pilot project has demonstrated the potential value of ePortfolios to support mentoring moments.
- There is a need to differentiate between "formal" vs. "informal" alumni interactions.
- Partnerships have been built with the Stanford Alumni Association and the Office of Undergraduate Research and the Stanford Alumni Association.
- Sustainability is a challenge.
- There is value in exploring the opportunity to allow alumni who live outside of the Bay Area to engage with the university and support current students.

Stakeholder: Administrators
How can we use ePortfolio evidence assess, understand, and communicate what our students are learning?

Comprehend
Mapping Overview

Kelly (2009)

http://teachingcommons.cdl.edu/eportfolio/resources/dop/mapping.html

ePortfolio Assessment of General Education
Quantitative and Information Literacy—2013

David Hubert, ePortfolio Director
Kati Lewis, ePortfolio Coordinator

Page from the Portfolios of Matthew Potts and Adam "Tob" Spickel. Used with Permission.
General Education Statement: This course fulfills the Quantitative Literacy (QL) requirement for the General Education Program at Salt Lake Community College. It is designed not only to teach the information and skills required by the discipline, but also to develop vital workplace skills and to teach strategies and skills that can be used for life-long learning. General Education courses teach basic skills as well as how to use them.

General Education ePortfolio—Each student in General Education courses at SLCC maintains a General Education ePortfolio. Instructors in every Gen Ed course will ask you to put at least one assignment into your ePortfolio, and accompany it with reflective writing. It is a requirement in this class for you to add to your ePortfolio, and this syllabus details the assignments and reflections you are to include. Your ePortfolio will allow you to include your educational goals, describe your extracurricular activities, and post your resume. When you finish your time at SLCC, your ePortfolio will then be a multimedia showcase of...

Modeling the Motion of a Spring

Consider a weight attached to a spring that is suspended from a horizontal bar as illustrated in the figure. When the object comes to rest we say it is at equilibrium' which is labeled 0 on the vertical number line. If you give the weight a push, either up or down, it will start to move and the motion can be modeled by sine and cosine functions. The "stiffness" of the spring and the mass of the object affect how far the object moves from the equilibrium position. The initial velocity and initial position also affect the motion of the spring. (We don't always start at the equilibrium position.)

If we neglect any damping forces (air resistance etc.) then the motion of the spring can be modeled by

\[ x(t) = \frac{v_0}{\omega} \sin(\omega t) + x_0 \cos(\omega t) \]

where \( x(t) \) is the position of the object along the number line at time \( t \). The other quantities are constants: \( \omega \) is a constant that depends on the stiffness of the spring and the mass of the weight, \( v_0 \) is the initial velocity, and \( x_0 \) is the initial position of the object.

Model the motion of a weight on a spring.
The intent of this assignment was to help us to understand some of the ways trigonometry can be used in everyday life. ...At first I was really confused by this process, but in the end it all came together and made sense.
Evidence-Based Storytelling
(Natasha Jankowski, NILOA)

- How are we engaging with a variety of evidence to understand our students’ educational trajectories?
- Need to communicate effectively to various stakeholders and audiences
- How do we help other see the story in our data?

Examples of Quantitative Evidence of Success
(Eynon, Gambino, Török, 2012)

Increase in GPA
At Manhattanville College, the average GPA of ePortfolio pilot students was 3.097 vs. 2.771 for students in a comparable, non-ePortfolio cohort.

Higher Retention Rates
At IUPUI, the one year fall-to-fall retention rate for students who complete an ePortfolio (80%) was significantly higher than for students who did not (72%).
How do we document 21st century learning and create record that is more authentic, comprehensive, and useful to its users?
College transcripts are horrible... when it comes to winnowing the field to 10 or 15 semifinalists, we have almost no useful information about what they learned in school.

But what does a college degree really tell employers about how much an applicant knows, about how much they learned to earn that credential?
...we need to apply new technologies to the primary tool of traditional certification, the diploma. We need to take what now exists as a dumb, static document and turn it into a richer, updateable, more connected record of a person's skills, expertise, and experience.
“Sam”

Learning Objectives

Formal Reasoning

manipulate a system of symbols logically and consistently so as to derive or prove new results of particular interest or utility.

- PHIL 101: Basic Concepts in Mathematical Logic (PHIL 250)
- PHIL 151: First-Order Logic (PHIL 251)
- PHIL 154: Modal Logic (PHIL 254)
- PHIL 166: Probability: Ten Great Ideas About Chance (PHIL 266, STATS 167, STATS 267)

solve equations or optimization problems through translation to a standardized formalism.

- MATH 11: Linear Algebra and Differential Calculus of Several Variables
- PHIL 101: Basic Concepts in Mathematical Logic (PHIL 250)
- PHIL 151: First-Order Logic (PHIL 251)
- PHIL 154: Modal Logic (PHIL 254)
- PHIL 166: Probability: Ten Great Ideas About Chance (PHIL 266, STATS 167, STATS 267)

study complex processes or systems using theoretical models to predict their outcomes.

- CS 107: Computer Organization and Systems
- PHIL 101: Basic Concepts in Mathematical Logic (PHIL 250)
- PHIL 151: First-Order Logic (PHIL 251)
- PHIL 154: Modal Logic (PHIL 254)
- PHIL 166: Probability: Ten Great Ideas About Chance (PHIL 266, STATS 167, STATS 267)

use deductive reasoning correctly through the study of particular examples in an area of interest at the collegiate level.

- ECON 50: Economic Analysis
- PHIL 101: Basic Concepts in Mathematical Logic (PHIL 250)
- PHIL 151: First-Order Logic (PHIL 251)
- PHIL 154: Modal Logic (PHIL 254)
- PHIL 166: Probability: Ten Great Ideas About Chance (PHIL 266, STATS 167, STATS 267)

“Charlie”

Learning Objectives

Formal Reasoning

- Use deductive reasoning correctly through the study of discrete mathematics, computability theory, and complexity theory. Manipulate a system of symbols logically and consistently so as to derive or prove new results. Study computational problems using theoretical models to determine their difficulties. Reason about problems in computing through translation to a standardized formalism.

- CS 103: Mathematical Foundations of Computing
- CS 103 - Mathematical Foundations of Computing
- CS 105X: Programming Abstractions (Accelerated) (ENGR 70K)

solve equations or optimization problems through translation to a standardized formalism.

- CS 103: Mathematical Foundations of Computing
- CS 103 - Mathematical Foundations of Computing
- CS 105X: Programming Abstractions (Accelerated) (ENGR 70K)

study complex processes or systems using theoretical models to predict their outcomes.

- CS 103: Mathematical Foundations of Computing
- CS 103 - Mathematical Foundations of Computing
- CS 105X: Programming Abstractions (Accelerated) (ENGR 70K)
- CS 107: Computer Organization and Systems
- CS 109: Introduction to Probability for Computer Scientists

use deductive reasoning correctly through the study of particular examples in an area of interest at the collegiate level.

- CS 103: Mathematical Foundations of Computing
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- CS 105X: Programming Abstractions (Accelerated) (ENGR 70K)
What capacities are missing?

Should capacities be defined by the institution, faculty, and/or students?

What other contexts might the Scholarship Record be used? (e.g. advising, career planning)
The “classic” badge: CeDiploma

CeDiploma Trust: How it works

Digital Signature Explanation

Independent Validation

While the Blue Ribbon may show the document has not been altered, you have the option to perform an additional validation to ensure the Degree information is still valid.

Please visit https://cediploma-validation.stanford.edu to validate the CeDiploma.

Diploma Validation

The Diploma ID is located below the CeDiploma symbol.

? represents first letter of student’s first name.

? represents last letter of student’s last name.
How do we empower and support faculty, staff, and students as innovators?

Creativity

http://dschool.stanford.edu/
As a unique, living artifact of competencies, the skill-print became an invaluable tool for employers to assess the potential of a candidate.

http://www.stanford2025.com/
Connections
Comprehend
Community
Capture

Creativity

Additional Resources
ePortfolio Implementation Framework
(Chen & Penny-Light, 2010; Penny-Light, Chen, & Ittelson, 2012)

1. Defining Learning Outcomes
2. Designing Learning Activities
3. Identifying and Understanding Learners and Stakeholders
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6. Evaluating the Impact of Your ePortfolio Initiative

National & International ePortfolio Initiatives

CRA CENTRE FOR RECORDING ACHIEVEMENT

EPAC electronic portfolio action & communication

IJJeP ePortfolios Australia

The Association for Authentic, Experiential and Evidence-Based Learning

AACE Association of American Colleges and Universities
Thank you!

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EPAC Community of Practice
http://epac.pbworks.com/