

# Using Social Software for Teaching and Learning

Helen L. Chen & Dan Gilbert  
 Stanford Center for Innovations in Learning  
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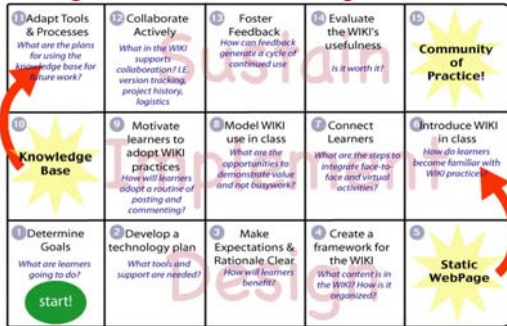
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## Using WIKIs to Build Learning Communities



Helen L. Chen, Dan Gilbert, Jeremy Sabol Stanford University

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## Who are today's students?

“Today's students are no longer the people our educational system was designed to teach.”  
 —Marc Prensky (2001)

- Net Generation
- Millennials (students born after 1982)
- Generation M (multitasking)
- Digital Natives vs. Digital Immigrants

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### Impact of student expectations for:

- Faculty: teamwork, experiential activities, technology such as online discussions, games, simulations
- Institutions: a campus infrastructure that allows being connected anytime, anywhere
- Administrators & staff: customer service, immediacy, low tolerance for delays

*(Oblinger & Oblinger, 2005; Educause, 2005)*

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### Gen M Learning Environment

- Multitasking
- Visual orientation
- Immediate gratification
- Parallel processing
- Social interaction that is compelling & satisfying
- Engages learners in the learning process
- Relates directly to learner's interests, motivations & needs

*(Oblinger & Oblinger, 2005; Educause, 2005)*

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What's being lost in this environment?

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## Some ideas of what's being lost

"We are being pummeled by a deluge of data and unless we create **time and spaces in which to reflect**, we will be left with only our reactions."

--Rebecca Blood, *weblog historian*

- Communication skills (writing and in person)
- How to think
- How to be contemplative
- How to reflect

--*Chronicle for Higher Education*, 10/5/05

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## Challenges for educators

1. What opportunities currently exist in higher education to take advantage of social software tools?
2. What are the pedagogical challenges of adoption and implementation for students and faculty?
3. How can we use emerging technologies to facilitate and capture evidence of how students integrate, transfer, apply, and re use their learning experiences?

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## Characteristics of Social Software

*(Higdon, 2006; Gotta, 2006)*

- Enables a collective user experience
- Augments informal interaction
- Supports conversations or interactions between individuals and groups
- Allows for individualized experiences of resources (get out of it only what you want)
- Spans work and lifestyle

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### Examples of Social Software Technologies

- Weblogs (blogs)
- Wikis
- Podcasts
- Social network webs: MySpace, Facebook
- Spaces to share media-specific resources: flickr, YouTube
- Social bookmarking: del.icio.us

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### Social software can allow students to:

- Collect their own resources (individual ownership and responsibility)
- Share them with whomever they wish (friends, instructors, employers) → creating a community
- Collect assets in one environment and display in a different environment

(Higdon, 2006)

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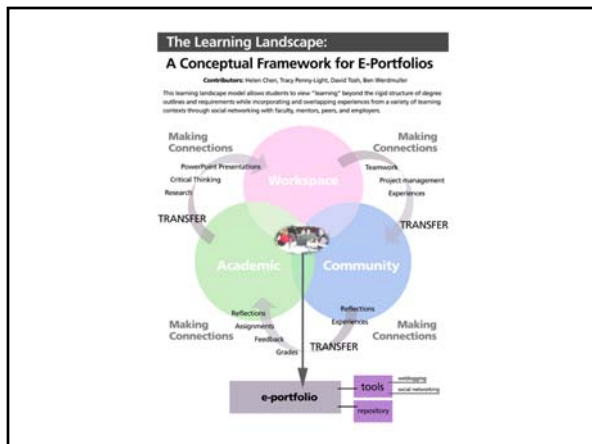
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### National Coalition on ePortfolio Research

- Selected in January 2004 in first cohort with UW, Portland State, Bowling Green, VA Tech, LaGuardia CC, Alverno College, N. Illinois, IUPUI, Mississippi State
- Activities: design and implement a campus based research agenda and report out results
- Common RQ: How does reflection, supported by electronic portfolios, influence student learning?

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### Opportunities for Student Affairs

*(Chen & Mazow, 2002)*

- Student Advising
- Residential Education
- Community and Public Service Programs
- Study Abroad
  
- National Coalition Cohort 3: partnership with NASPA – exploring and documenting the use of ePortfolios as a means to support students' in class and out- of class learning

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### What [Facebook](#) and [MySpace](#) can teach us about ePortfolios

- Florida State, George Mason, U. of Georgia, Northern Illinois, Stanford, U. of Washington
- What features of online social networking software can be:
  - Incorporated into existing ePortfolio systems?
  - Linked to ePortfolios as a way of increasing student motivation and connection to wider audiences?
- New forms of self representation, self portraiture, self branding (*NYT, 2/19/06*)

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## Cal State Monterey Bay

- Individual Learning Portfolios (ILPs) as a Senior Capstone Project in School of Information Technology and Communications Design
- [Outcomes Based Learning](#)
- KEEP Toolkit
  - [Malinda Lambert](#)
  - [Norman Haughey](#)

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## Using Social Software to support reflection via community

- One of Dewey's criteria for reflection: reflection needs to happen in a community
- Learning is not solitary – emphasis on the connections and social interactions among all learners
- To think but not articulate oneself to others is an incomplete act
- Collaborative reflection

*(Rodgers, 2002)*

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## Wikis, blogs, and ePortfolios: A case study from design engineering

- **ME 013N: Designing the Human Experience:** introductory freshman seminar
- Project-based with a real client
- Team-oriented
- Real subject of the course: design process, design thinking

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## Study Objectives

1. To increase student self-awareness of knowledge & skills
2. To help the student make explicit connections among aptitudes, knowledge, skills, & the real work of engineering

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## Blogs and Wikis

- [Web log or blog](#): a frequently updated website consisting of dated entries; typically published by individuals in a personal and informal style
- [Wikis](#): fairly focused Web sites compiled and constantly edited by a dedicated group of people-- all of whom can not only post material to the site but edit it at will

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## Why Blogs and Wikis?

- Informal, continuous, easy and low barriers to posting
- Students already potentially familiar with blogs
- Ability to link reflection to artifacts
- Individual commenting/feedback from coaches and others at a distance
- Supports both individuals and teams

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## Scaffolding the Reflection Process

- Weekly posting requirements:
  - 2 Input Captures
  - 2 Immediate Reflections
  - 2 Broad Takeways (at the end of the design cycle)
- Required weekly comment on another student's idea log
- Taboo List of Phrases – The Clichés of Reflection

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## Taboo Phrases

### Individual Tasks

- “very productive”
- “insightful”
- “interesting”
- “put my creativity to the test”
- “I learned so much”
- “we needed more time”

### Group Work

- “different perspectives and ideas”
- “workload was divided evenly”
- “everyone worked well together”
- “two heads are better than one”

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## Idea Logs:

### Supporting Individual and Team Reflection in Design Thinking

Jonathan Gahrn, David Cannon, Center for Design Research    Helen Chen, Stanford Center for Innovations in Learning    Lynn Larkier, Professor of Mechanical Engineering

**Why support reflection?**  
After doing design, many students feel they have experiential knowledge of the design process, but have difficulty pinpointing what they learned. This experiential knowledge is most useful if it can serve as a base for future design projects. Using an idea log, students document their thinking during the design process. Later, they are able to draw from their logs to generate new ideas. Additionally, supporting reflective environments in the classroom is increasingly important in the millennia of experiential learning in the information age.

**How does it support reflection?**  
Idea Logs keep formal and informal documents, images, streams of consciousness ideas, and crucial questions in one organized place. Sharing with team members and classmates encourages comparison and improvement, pushing students to engage in deeper reflection about what they are learning. Teams can create and edit documents asynchronously through the web, allowing all members to be included in the process which is a necessary step for good reflection.

**Who will use the idea logs?**  
Students, coaches, and faculty of Designing the Human Experience, MERRIN, a introductory seminar about design thinking for freshmen.

**What kind of tool is used?**  
TabWiki, an open source web application, is the content management system for the site. Features have been modified to make the application fit the class.

**Team Space**

This space is a collection of web pages. Each member has editing privileges to create and modify pages shared by team.

**Class Home Page**

These pages feature easy access to all idea logs and quick access to user's posting page and nearby pages shared by team.

**Team Home**

Starting notes, spreadsheets, and formal documents are placed in the team website of the site.

**Important Features**

- Fast and reliable image upload to enable students to think more critically about photographed moments.
- Obvious feedback structure for both students and faculty
- Customizable but still coherent
- Easy access and modification to changes on other students' idea logs
- Flexible structure designed by users

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*“On a different subject, I am still in the dark on what exactly we are supposed to be doing for this next iLoft project. I feel so unproductive and confused - I just want to get instructions and to get started designing something! I am a techie! I don't get all this reflection stuff! That's all for now! Later wiki page!”*

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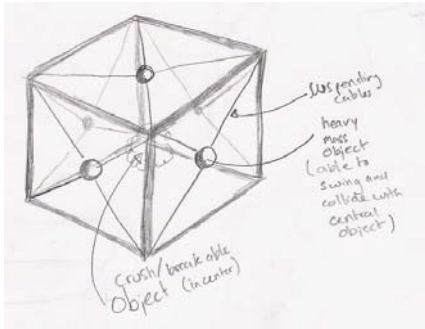
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## People-based Design



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**Broad Takeaway**

*Another change in thinking I took from this class is not really design related, but from the wiki posting and reflection. I've never had a class that encourages so much reflection, and while it is tedious, I'm realizing how helpful it is. I'm understanding more and more the importance of taking responsibility for my own learning; this is something I am definitely going to keep doing for the rest of my college education, and even life. Knowledge is power, but if you're not aware of what you know, how can you use that power?*

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**For more information**

Helen L. Chen, [hchen@stanford.edu](mailto:hchen@stanford.edu)  
Dan Gilbert, [dgilbert@stanford.edu](mailto:dgilbert@stanford.edu)

Additional Links and Resources:  
<http://wasc2007.pbwiki.com>  
password: wasc

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