# **Designing Learning Spaces**

Education 303X, Spring 2008, Stanford University



#### Basic course info

Time: Friday 1:15 - 4:05

Location: 127 Wallenberg Hall (Bldg. 160)

Instructors: Dan Gilbert, Stanford Center for Innovations in Learning (SCIL)

Website: <a href="http://learningspaces.stanford.edu/">http://learningspaces.stanford.edu/</a>

Office Hours: Before each class or by appointment

### Overview of the course:

While many education courses and much literature focus on the design of curriculum and/or information technology, there is little research about the role that design plays in physical spaces for learning. In both formal (i.e. school) and informal settings (i.e. any place but school) the *design of space* and the appropriate technologies within that space can have a significant impact on the kinds of interactions people have and consequently on their learning, particularly in light of the role wireless technologies are playing to redefine what constitutes a learning space. This course offers graduate and upper-level undergraduate students interested in the intersection of learning, design, and technology the opportunity to integrate learning principles into the design of a specific space for a local client.

#### Goals for students:

- Gain experience with a process of designing a physical space for learning
- Network with partners in the local community that are designing real spaces (Partners could include: Children's Discovery Museum San Jose, Zeum, Cantor Arts Center, Palo Alto Jr. Museum and Zoo, Kaboom, SFMOMA)
- Explore/Develop multiple ways of evaluating spaces and assessing the activities that occur in those spaces

## Goals for the class as a whole:

- Create a community of learning space designers
- Develop common ground for a design process rubric that includes assessment that could help partners measure the impact that their spaces have on learning
- Encourage multidisciplinary viewpoints on learning space design

## How we'll know if we're successful:

- Students produce high-quality presentations/designs that reflect an understanding of learning principles, assessment ideas, and practical considerations
- Students achieve at least one of their goals from graduate school through this class

Grading

50%	Individual Contributions	Project 1 – Individual Poster Session
		Reflections, posts, and reviews to WIKI
		In-Class Design Activities and
		discussions
		Interactions with guests
50%	Group Contributions	Project 2 – Design Learning Space for
		Partner
		Book Club Discussion

### **Deliverables:**

- Individual Project: A conference style poster presentation that highlights a missed opportunity for learning
- Group Project: Teams of 2-4 will design a learning space for a specific site, present prototypes to class and produce project report
- Reflections: Students will be asked to reflect on various experiences as well as readings and share those reflections in a course wiki (public editable website)

# **EDUC 303X Readings: Table of Contents & Source**

Allen, Sue. Designs for Learning: Studying Science Museum Exhibits that do More Than Entertain. *Science Education* Vol. 88. No. 1 pp 17-S33. 2004.

Viewable online at:

http://www3.interscience.wiley.com/cgibin/abstract/109062555/ABSTRACT?CRE TRY=1&SRETRY=0 (online can only be accessed from Stanford network through Stanford Libraries (http://socrates.stanford.edu)

Learning Space Design: Theory and Practice, table by Brown: Available on course website and at: <a href="http://www.educause.edu/apps/er/erm05/erm0544.asp">http://www.educause.edu/apps/er/erm05/erm0544.asp</a>

- Crowley, K., Callanan, M.A., Tenenbaum, H.R., & Allen, E. (2001). Parents explain more often to boys than to girls during shared scientific thinking. Psychological Science, 12 (3), 258-261 (on course website)

Nicolopolou, A., & Cole, M., (1993). Generation and transmission of shared knowledge in the culture of collaborative learning: The Fifth Dimension, its play-world, and its institutional contexts. In E. A. Forman, N. Minich, & C.A. Stone (Eds.), *Contexts for learning: Sociocultural dynamics in children's development* (pp.283-314). New York: Oxford University Press. (on course website)

Packer, J., & Ballantyne, R. (2005) Solitary vs. Shared Learning: Exploring the Social Dimensions of Museum Learning, *Curator: The Museum Journal*. Vol.48 (2). Pp. 177-192. Viewable and downloadable PDF @ eprint.uq.edu.au/archive/00002531/01/jp\_rb\_mj\_05.pdf