

Course Overview

INFO 780-14 Computer-Supported Collaborative Learning

Wednesdays 6:00 – 9:00 pm, Rush 205

Spring 2004, Dr. Gerry Stahl

Course Description

This course examines social and technical issues and concepts of computer-supported collaborative learning (CSCL). It covers such topics as: the ways individuals and groups learn in classes, teams and collaborations with computer support; the theory of collaborative knowledge building; CSCL software design, implementation and evaluation issues, and future directions of this technology. It includes review of current research literature, theories, issues, technologies and methodologies.

Focus this Term

This term will be particularly concerned with a new (pre-publication) book on CSCL:

- Stahl, G. (in preparation). *Collaborating with Technology*. Cambridge, MA: MIT Press.

After gaining some background from “classics” of CSCL, we will critique this new book and develop suggestions for revising it prior to publication. This book includes sections on software design, interaction analysis and collaboration theory.

Course Approach to Learning

This course will engage in *collaborative learning* conducted by small groups of students taking advantage of computer support.

There will be weekly assignments. Each group will present their work to the rest of the class. By the end of the course, each group will have a portfolio of small projects, including documentation of the ideas, sources and interactions that went into its group work process.

You will learn by reading, reflecting, applying, explaining, sharing, critiquing. Because interactions are carried out on-line and results are displayed on the Web, you will have a record of much of your learning.

Please note: This course requires extensive online group work, supported by Blackboard. You will be required to use the Blackboard “virtual classroom” chat/whiteboard software. You will have to meet online with your group throughout the week and to develop a website with weekly presentations (if you have not done this before, you will learn how to do it in the course). You may have to use the computers in the CRC if you do not have a high-speed Internet connection on your own computer. You will work hard and learn a lot. Taking this course means you have agreed to try the approach of this course as described in this Course Overview.

Course Texts

The course content is presented by the texts. There will be no lectures. You are expected to read the texts carefully, take notes and be critical. There will be a threaded discussion area to raise questions, make comments and discuss the reading with other students and the instructor.

There are three books to purchase (Koschmann, 1996; Lave & Wenger, 1991; Vygotsky, 1930/1978):

- Koschmann, T. (Ed.). (1996). *CSCL: Theory and practice of an emerging paradigm*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge, UK: Cambridge University Press.
- Vygotsky, L. (1930/1978). *Mind in society*. Cambridge, MA: Harvard University Press.

The pre-print (Stahl, in preparation) is available online:

Stahl, G. (in preparation). *Collaborating with technology: Studies in theory & design of online collaboration*. Cambridge, MA: MIT Press. Retrieved from <http://www.cis.drexel.edu/faculty/gerry/mit/>.

Course Assignments

The reading assignments are listed below. There will be weekly project assignments – mostly group projects. All projects are due online by midnight Monday night.

Week	Start date	Textbook	Topic	Deadline
1	March 31	CSCL pages 1-24, 209-248, 249-268	Intro	April 5
2	April 7	Situated Learning pages 29-123	Learning Communities	April 12
3	April 14	Mind in Society pages 19-119	Social Psychology	April 19
4	April 21	Overview, Ch. 1, 2	Background	April 27
5	April 28	Ch. 3, 4, 5	System design	May 3
6	May 5	Ch. 6, 7, 8	System Design	May 10
7	May 12	Ch. 9, 10, 11	Interaction Analysis	May 17
8	May 19	Ch. 12, 13, 14	Interaction Analysis	May 24
9	May 26	Ch. 15, 16, 17, Conclusion	Theory	May 31
10	June 2		Reflection	June 5

Course Requirements

- Read the assigned texts carefully. Take notes.
- Discuss the readings and other course issues in the class discussion board. Each week, as soon as you have finished a reading, enter a comment or question in the Blackboard discussion board; return a couple days later to respond to the discussion.
- Collaborate actively in a project group. Participate fully in all group projects. See Course Assignments document for details on group projects.
- Search for other resources (interactive designs in commercial products, informative websites, research papers, etc.) related to the readings and share these with the rest of the class in the discussion board.
- Document the theoretical rationale and the use of techniques from the texts or other sources that led to your ideas.
- Conduct your collaboration on-line, and archive chats and other interactions, so that you and other course members can review and reflect on the learning process.
- At the end of the term, submit a reflection paper of about 10 single-spaced pages. This should be a reflection from your personal, individual perspective on what you accomplished in this course, what you learned, and how you would continue the research of your group if your group had another 10 weeks to work on it. You should prepare notes for this throughout the term.
- Ph.D. students must write a conference research paper that meets the requirements for submission to the CSCL 2005 conference in Taiwan. This paper is in addition to the reflection paper and other assignments; it will be included in your Ph.D. portfolio. The submission-quality conference paper will count for 10% of your grade in this course.

Course Grading

The course work will involve class discussions and weekly group or individual projects. Grading will be based half on your individual participation in the class and in your group, and half in the grade of your project group for its portfolio of solutions to group projects.

50%	individual	
	20%	Participation in project group
	5%	Careful study of course readings
	5%	Participation in class discussions
	10%	Participation in Blackboard discussions
	10%	Individual Web portfolio
50%	group	
	10%	Quality of group products
	10%	Rationale for approach and write-up
	10%	Use of techniques from texts and other sources – e.g., review of the research literature
	10%	Creativity of presentations to class
	10%	Group Web portfolio

grades	
A	91-100%
B	81-90%
C	71-80%
D	51-70%
F	0-50%

Course Web Space

A special web space has been set up for this course:

<http://iisweb.cis.drexel.edu/stahl/info780/>

This includes personal, group and course spaces. You will set up your personal web space for use in preparing materials for the course. You will work with your group to develop a group portfolio during the quarter.

To set up your personal web space, go to <ftp://iisweb.cis.drexel.edu/stahl/info780/> and login with username=info780 and password=780info. You may want to set up a directory on your local harddisk to mirror what goes in the web space – or you can use a tool like FrontPage or DreamWeaver. Create a subdirectory and name it with your first name – all lower case and no spaces. Then create your homepage as a file named index.html and save it in this new subdirectory. You can use Word to design your homepage, including formatting, diagrams and digital pictures. If you use Word, do a SaveAsWeb. This will save your page as an HTML page for the Web. Be sure that any pictures and linked files are included in your subdirectory. Then publish your homepage, etc. to your Web Space. To do this you can open your IE browser to the ftp address above and drag your new subdirectory and its files into the ftp site. Then close your browser and re-open it with the http address above, followed by your first name to see if it looks like you intended.

Privacy Notice

All work and communication in this course should be considered public.

- Any communication on the Internet may end up being seen by people for whom it was not originally intended.
- The web spaces for this course can be viewed by anyone in the world through the World Wide Web.
- The instructor and other Drexel faculty, students and staff may have access to anything in Blackboard or the web spaces.
- Future researchers may have access to these materials as data. Although they do not have permission to publish any data about you and although they should ensure anonymity and confidentiality of all personal data, you should assume that activities taking place in this course may be subject to viewing.

- Students in future courses may have access to your work, particularly the group portfolios.

Instructor's Background

Hi. My name is Gerry (pronounced like “Jerry”). For urgent or personal questions, you can contact me directly by email at Gerry.Stahl@drexel.edu . However, it is often better to ask questions about the textbook, weekly assignments or other aspects of the course through the class discussion board so that everyone in the class can see and respond to your questions and my answers.

My professional research area is the field of CSCL (Computer-Supported Collaborative Learning). I think that collaborative learning is an exciting and especially effective way to learn. I believe that there is great potential to design good computer support for it. I have been experimenting with a number of CSCL prototypes and have written many papers on the theory, design and evaluation of interactive systems to support collaborative learning. We will be taking advantage of what I have learned from my research in this course, and I hope you will benefit from this.

My background is in computer science and philosophy. Last year I taught HCI courses at Drexel; the previous year I worked at a large research organization in Germany; before that I was a Research Professor at the University of Colorado in Boulder. The 2002 international CSCL conference was at Boulder and I was the Program Chair for it; the 2003 one was in Norway and I was in charge of the workshops there; the next one will be in Taiwan and I will be in charge of tutorials there.

Let me know if you have any questions about my background or check out my home page, where you can see more details and read my papers: <http://www.cis.drexel.edu/faculty/gerry>.