Ed Tec 6436: Computer-Mediated Communication in Education
Mondays 5:30-8:10pm, SCC103
(with selected meetings in the E. Desmond Lee Technology & Learning Center)

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A Note on this Syllabus
This syllabus is subject to change based on the needs of the class as a learning community. Adjustments will be made that generally benefit the group's learning opportunities.

Overview and goals
Explores the theory, research, and practice of using computer-mediated communication (CMC) and computer-supported collaborative learning (CSCL) in education. Learning environments including elementary, secondary, higher, and adult education will be considered. Emphasis will be placed on the use of CMC and CSCL as part of courses that meet face-to-face during at least part of classtime (fully online course are emphasized in Ed Tec 6437).
In this course, we will read relevant research articles and chapters based on research, as well as make hands-on use of the CMC and CSCL tools we are reading about and discussing.

Topics
- Dialogic views of learning
- Online discussion lists and discussion boards as adjuncts to face-to-face courses
- Collaborating around computers
- Telecollaborations
- Knowledge-building networks
- Communities of learners
- Distributed multimedia learning environments
- Learning in multi-user virtual environments (MUVEs) and MOOs (Multi-user object-oriented)

Readings
Koschmann. T. (Ed.) (1996). *CSCL: Theory and practice of an emerging paradigm*. Mahwah, NJ: Lawrence Erlbaum Associates.
Linn, M. C., & Hsi, S. (2000). *Computers, Teachers, peers: Science learning partners*. Mahwah, NJ: Lawrence Erlbaum Associates.
Online and electronic articles as detailed within the schedule below.

Required Activities and Grading
There are five main activities associated with the course (% of final grade is included in parentheses; incremental grading will be used for final grades):
1) Attending class weekly and actively participating in hands-on activities and discussion. (20%)
2) Weekly participation in online discussions between classes. (20%)

3) Acting as facilitator of one week's thread of online discussion, and providing a summary and debriefing during the following class meeting. (15%)
4) Developing a technology-use plan for CMC and/or CSCL technology in either a face-to-face or distance learning course. (30%)
5) Completing a personal reflection on one's own experience using CMC in the course as it relates to the readings and ideas from the course. (15%)

Note
If anyone has a health condition or disability, which may require accommodations in order to effectively participate in this class, please contact me privately as well as the Disability Access Services Office in 144 Millennium Student Center at 516-6554. Information about your disability will be regarded as confidential.

Class schedule
Week 1. Introductory Class: Communication and Collaboration using Computers
Class Activity on Aug 26
- Intros & Goals
- Syllabus review
- MyGateway
- Overview of communication and collaboration possibilities, discussion of topics of interest to the group.

Week 2. What are we talking about?
*Assignments to be completed **before** class this week*
- Read Koschmann. T. (1996). Paradigm shifts and instructional technology: An introduction. In T. Koschmann. (Ed.) *CSCL: Theory and practice of an emerging paradigm*, pp. 1-23. Mahwah, NJ: Lawrence Erlbaum Associates.
- Read Hoadley, C. M., & Enyedy, N. (1999). Between Information and Communication: Middle Spaces in Computer Media for Learning. In C. M. Hoadley and J. Roschelle (Eds.), *Proceedings of the Computer Support for Collaborative Learning (CSCL) 1999 Conference* (pp. 242-251). Mahwah, NJ: Lawrence Erlbaum Associates.
- 2-3 page paper on positive and negative experiences of communicating and collaborating with computers as part of learning processes.
- Participate in online discussion

Class Activity on Aug 30
- Discuss experiences paper
- Discuss readings
- Assign presentations and discussion leading

Monday, September 6 is Labor Day – no class meeting.

Week 3. Seeing what we build together
*Assignments to be completed **before** class this week*
- Read Pea, R. D. (1994). Seeing what we build together: Distributed multimedia learning environments for transformative communications. In T. Koschmann (Ed.) *CSCL: Theory*

and practice of an emerging paradigm, pp. 171-186. Mahwah, NJ: Lawrence Erlbaum Associates.
- Suthers, D. (2001). Collaborative Representations: Supporting Face to Face and Online Knowledge-building Discourse. *Proceedings of the 34th Hawai`i International Conference on the System Sciences (HICSS-34)*, January 3-6, 2001, Maui, Hawai`i (CD-ROM), Institute of Electrical and Electronics Engineers, Inc. (IEEE)
- Participate in online discussion

Class Activity on Sep 13
- Hands-on activity with Belvedere (http://lilt.ics.hawaii.edu/lilt/software/belvedere/)
- Discuss readings

Week 4. Making Thinking Visible
*Assignments to be completed **before** class this week*
- Read Linn & Hsi Chapter 1 (How do students respond to science instruction: Four case studies, pp. 3-38), and Chapter 3 (Making thinking visible, pp. 89-135).
- Participate in online discussion

Class Activity on Sep 20
- Hands-on activity with CLP and/or WISE materials.
- Discuss readings

Week 5. Helping Students Learn from Each Other
*Assignments to be completed **before** class this week*
- Read Linn & Hsi Chapter 4 (Helping students learn from each other, pp. 131-180).
- Read Roschelle, J. (1996) Learning by collaborating: Convergent conceptual change. In T. Koschmann (Ed.) *CSCL: Theory and practice of an emerging paradigm*, pp. 209-248. Mahwah, NJ: Lawrence Erlbaum Associates.
- Participate in online discussion

Class Activity on Sep 27
- Hands-on activity with CLP and/or WISE materials.
- Discuss readings

Week 6. Collaborating around computers : Writing
*Assignments to be completed **before** class this week*
- Read Neuwirth, C. M., & Wojahn, P. G. Learning to write: Computer support for a cooperative process. In T. Koschmann (Ed.) *CSCL: Theory and practice of an emerging paradigm*, pp. 147-170. Mahwah, NJ: Lawrence Erlbaum Associates.
- Participate in online discussion

Class Activity on Oct 4
- Hands-on activity with Prep Editor (http://eserver.org/software/prep/) and MSWord
- Discuss readings

Week 7. Communities of learners

*Assignments to be completed **before** class this week*

- Read Shumar, W. & Renninger, K. A. (2002). Introduction: On conceptualizing community. In K. A. Renninger & W. Shumar (Eds.), *Building virtual communities: Learning and change in cyberspace*, pp. 1-17. New York: Cambridge University Press.
- Read Riel & Polin (2004). Online learning communities: Common groung and critical differences in designing technical environments. In S. A. Barab, R. Kling, & J. H. Gray (Eds.), *Designing for virtual communities in the service of learning*, pp. 16-50. New York: Cambridge University Press.
- Read Foley, B. J., & La Torre, D. (2004). Who has Why-Pox: A case study of informal science education on the Net. In Y. B. Kafai, W. A. Sandoval, N. Enyedy, A. S. Nixon, & F. Herrera (Eds.), *Proceedings of the Sixth International Conference of the Learning Sciences 2004: Embracing diversity in the learning sciences* (p. 598). Mahwah, NJ: Erlbaum.
- Participate in online discussion

Class Activity on Oct 11

- Hands-on activity with Whyville (http://www.whyville.net)
- Discuss readings

Week 8. Telecollaboration communities

*Assignments to be completed **before** class this week*

- Read Riel, M. (1996). Cross-classroom collaboration: Communication and education. In T. Koschmann (Ed.) *CSCL: Theory and practice of an emerging paradigm*, pp. 187-208. Mahwah, NJ: Lawrence Erlbaum Associates.
- Read Harris, J. (1998). Activity structures for curriculum-based telecollaboration. *Learning and Leading With Technology, 26*(1), 6-15.
- Participate in online discussion

Class Activity on Oct 18

- Hands-on activity with TERC telecollaborations (http://teaparty.terc.edu/testbed.html) or Learning Circles (http://www.iearn.org/circles/)
- Discuss readings

Week 9. Blogs (Weblogs)

*Assignments to be completed **before** class this week*

- Read Downes, S. (2004). Educational blogging. *Educause Review*, September/October, 15-26.
- Ferdig, R. E., & Trammell, K. D. (2004). Content delivery in the blogosphere. *T.H.E Journal Online: Technology Horizons in Education*. February. Available: http://www.thejournal.com/magazine/vault/A4677.cfm?kw=0
- Participate in online discussion

Class Activity on Oct 25

- Exploration of blogging, including http://www.weblogg-ed.com
- Discuss readings

Week 10. Knowledge building networks

*Assignments to be completed **before** class this week*

- Read Scardamalia, M. & Bereiter, C. (1996) Computer support for knowledge-building communities. In T. Koschmann (Ed.) *CSCL: Theory and practice of an emerging paradigm*, pp. 249-268. Mahwah, NJ: Lawrence Erlbaum Associates.
- Participate in online discussion

Class Activity on Nov 1

- Hands-on activity with Knowledge Forum
- Discuss readings

Week 11. Assistive technologies for communication and collaboration

*Assignments to be completed **before** class this week*

- Read Pisha, B., and Coyne, P. (2001). Smart from the start: The promise of universal design for learning. *Remedial and Special Education, 22* (4), 197-203.
- Participate in online discussion

Class Activity on Nov 8

- Hands-on use of assistive technologies or special applications
- Discuss readings

Week 12. Teacher professional development communities

*Assignments to be completed **before** class this week*

- Read Linn & Hsi Chapter 9 (Partnerships for professional development, pp. 325-351).
- Read Shlager, M. S., Fusco, J., & Schank, P. (2002). Evolution of an online education community of practice. In K. A. Renninger & W. Shumar (Eds.), *Building virtual communities: Learning and change in cyberspace*, pp. 129-158. New York: Cambridge University Press.
- Participate in online discussion

Class Activity on Nov 15

- Hands-on exploration of TAPPED IN
- Discuss readings

Week 13. Collaborating on PBL and Simulations

*Assignments to be completed **before** class this week*

- Read Kupperman, J., Weisserman, G., Goodman, F. (2001). The secret lives of students and politicians: Online and face to face discourse in two political simulations. Paper presented at the Annual Meeting of the American Educational Research Association, Seattle, WA.
- Koschmann, T., Kelson, A. C., Feltovich, P. J. & Barrows, H. S. Computer-Supported Problem-Based Learning: A Principled Approach to the Use of Computers in Collaborative Learning. In T. Koschmann (Ed.) *CSCL: Theory and Practice of an Emerging Paradigm*, pp. 83-124. Mahwah, NJ: Lawrence Erlbaum Associates.

- Participate in online discussion

Class Activity on Nov 22

- Arab-Israeli conflict or Confllix activity from the "Interactive Communications and Simulations Group at the University of Michigan" (http://ics.soe.umich.edu/)
- Discuss readings
- Discuss Technology Use Plan

Week 14. Learning in multi-user virtual environments (MUVEs) and MOOs (Multi-user object-oriented)

*Assignments to be completed **before** class this week*

- Read Bruckman, A. (2004). Co-evolution of technological design and pedagogy in an online learning community. In S. A. Barab, R. Kling, & J. H. Gray (Eds.), *Designing for virtual communities in the service of learning*, pp. 239-255. New York: Cambridge University Press.

Class Activity on Nov 29

- Hands-on activity with MOOSE Crossing (http://www.cc.gatech.edu/elc/moose-crossing/)
- Discuss readings
- Begin summarizing discussion using Inspiration

Thanksgiving Holiday

Week 15. Final Class Meeting

*Assignments to be completed **before** class this week*

- Reflection paper on your experience using CMC in the course as it relates to the readings and ideas from the course
- If you are turning in a draft of your technology use plan, it must be in by today.

Class Activity on Dec 6

- Evaluations.
- Present and discuss Technology Use Plans

Final version of technology use plan due by the assigned time of the final exam, Monday, December 13, at 5:30pm.