

ITCP 70100: History, Theory and Practice of Interactive Media
Interactive Technology and Pedagogy Certificate Program
Greenbaum / Otte Fall '03
Office: Room 8111.1

General Description:

This is the initial core course in the Interactive Technology and Pedagogy certificate program. We will examine the economic, social and intellectual history of technological design and use in general and interactive media in particular. Our focus is on the mutual shaping of technology and teaching and learning; how people and ideas have shaped these interactions in the past, and how we are now shaping technological use and teaching and learning processes. By examining the use and design of technologies we are of course reflecting on what it means to be human as well.

Throughout the course the design, use and adaptation of technologies will be analyzed in terms of their reflection of, and application to, specific societal problems and ideologies. Technologies--- whether they are cell phones, personal digital assistants, palm pilots, computers, internet sites, software programs, checkout scanners, cash machines, or whatever-- represent situated artifacts of material culture. Examining the ways that they become embedded in our culture means that we need to be aware of the questions we ask and the assumptions we make about how they are designed, made, marketed and used.

This semester we include two books that reflect on the authors' close experiences with shaping and using computer software (Stephenson & Ullman). Our intent is to provide you with a broad analytical background, giving us all enough breathing room to step back from the hype about technology and education that we are generally bombarded with.

Expectations and Process:

The course will include two research papers (the second paper being an expanded and revised version of the first). The first paper will explore and analyze a theme from the course readings and begin to apply it to a pedagogical and/or technological issue you might expand on later. The second *version* of the paper will analyze the issue further from additional readings and hopefully apply it to a project you are currently thinking about and/or planning to do in Core II.

Throughout the course we'll use a course website <<http://online.cuny.edu:8001>> where we can have ongoing discussions about the readings and the in-class discussions. Each week we will post tips and hints of what to look for in the up-coming readings, as well as Discussion Threads for your reactions to events, experiences and topics about teaching and learning and technology. These online discussions and exercises will include experiences of films, fiction and interactions with technologies in our everyday lives. We expect to post an exercise each week to guide you in your reflective practice. You may also consider keeping a journal or writing a "blog" to record your ideas and impressions. The online life of the course we hope will be another way of understanding how we learn about each other and the ideas we are reading about.

In our course about new media and teaching and learning, we will attempt to explore how we learn using different technology-mediated experiences: web sites, listservs, email, chat, blogging, etc. As you find out what you want to learn about, the ITCP program will offer some workshops for software programs or applications you would like to get a chance to learn more about.

Core I: History, Theory and Practice of Interactive Media
ITCP 70100: Tuesdays 4:15-6:15 / Fall '03
Graduate Center / City University / Room 6421 / <http://online.cuny.edu:8001>
Joan Greenbaum <joanbaum@ix.netcom.com>, Environmental Psych
George Otte<getbh@cunyvm.cuny.edu>, English/Urban Education

- Sept. 2 Introduction to course (JG & GO)
Film clips: *Blade Runner*, "To New Horizons" (GM film from 1940 on life in 1960)
- Sept. 9 Experiential & Online/Tech-mediated learning (GO & JG)
Bass (*Engines of Inquiry*), Ehrmann ("Hard Questions"), Intro to *How People Learn*
Website selections on mediated teaching and learning
- Sept. 16 Teaching/Learning (JG & GO)
J. Dewey, *Experience and Education* (1938)
- Sept. 23 Historical perspectives (JG & GO)
Castells, *Internet Galaxy*, Chap. 1 (handout)
Kern, *Culture of Time & Space 1880-1918*, Intro & Chap. 1 (handout)
- Sept. 30 Issues of Perspective (JG)
Bowker & Star *Sorting Things Out*, (1999) Chap.1 (handout)
Latour, *Pandora's Hope* (1999), Chap. 2 (handout)
- (Oct. 7 Classes follow Monday schedule)
- Oct. 14 Student informal presentations & discussion of projects/research
- Oct. 21 Recent History/Issues (JG & GO)
Greenbaum & Kyng, *Design at Work* ('91), "Situated Design" (handout)
Issues of access, IP, globalization, etc. (Lessig, Nayyer, et al.)
- Oct. 28 Languages/Literacies of Cyberculture (GO) Paper I due
Selections from: Manovich (*The Language of New Media*) and
Crystal (*Language and the Internet*)
- Nov. 4 Some Classic Points of Reference (JG)
M. McLuhan, 1964, "The Media is the Message" -- Chap. 1 (handout/internet)
D. Haraway, 1991, "The Cyborg Manifesto" -- Chap. 8 (handout/internet)
- Nov. 11 Hypertext/Theory (GO)
The Hypertext Web (<http://www.cyberartsweb.org/cpace/ht/htov.html> -- with special
attention to <http://www.cyberartsweb.org/cpace/ht/jhup/contents.html>)
- Nov. 18 Place vs. Space (JG)
Hayden, *The Power of Place* (1995) Chap. 2 (handout)
Tuan, *Space and Place* (1977), Chap. 13: Time and Place (handout)
- Nov. 25 Speculative Fiction (GO)
Doctorow or Stephenson or Powers
- Dec. 2 & 9 Student project presentations & discussions
- Dec. 16 The Matrix Trilogy Paper II due

Core I: ITCP 70100
History, Theory and Practice of Interactive Media
Suggested Readings / Staff Picks
Fall 2003 / Greenbaum & Otte

Most courses have required and recommended reading lists. We depart from that linear practice by putting out a growing list of staff picks from the faculty and students who have been part of the ITCP program during the past two years. We've grouped these readings by some suggestive topics. Obviously this list is more than a semester's worth. (An * indicates that all or part of this selection is on the syllabus.) Start anywhere and enjoy!

Book Chapters (to be distributed and/or read online, but consider reading several of these books in their entirety at some point, based on your interests; try one this semester).

- *Geoffrey Bowker & Susan Leigh Star, 1999, *Sorting Things Out, Classification and Its Consequences* (MIT Press): Chap. 1 ("Introduction: to classify is human").
- *Manual Castells, 2001, *The Internet Galaxy* (Oxford UP).
- *Stephen Kern, 1983, *The Culture of Time and Space, 1880-1918* (Harvard): Intro & Chap. 1.
- *Joan Greenbaum & Morten Kyng 1991, *Design at Work* (Erlbaum): Chap. 1 ("Situated Design").
- *Donna Haraway, 1991, *Simians, Cyborgs and Women, the Reinvention of Nature* (Routledge): Chap. 8 ("The Cyborg Manifesto"), Chap. 10 ("The Biopolitics of Postmodern bodies").
- *Dolores Hayden, 1995, *The Power of Place* (MIT): Chap. 1 ("Contested Terrain").
- *Bruno Latour, 1999, *Pandora's Hope, Essays on the Reality of Science Studies* (Harvard): Chap. 2.
- *Lev Manovich, 2001, *The Language of New Media* (MIT).
- *Marshall McLuhan, 1964, *Understanding Media, the Extensions of Man* (MIT): Chap. 1 ("The Medium is the Message").
- *Y-F. Tuan, 1977, *Space and Place, The Perspective of Experience* (U of Minnesota P), Chap. 13.

Experience and feelings about technological artifacts

- *Joan Greenbaum, 1995 (2nd edition in draft), *Windows on the Workplace* (Monthly Review Press)
- *Ellen Ullman, 1997, *Close to the Machine* (City Lights)
- *Neal Stephenson, 1999, *In the Beginning was ... the Command Line*.

Staff picks (from Brier, Greenbaum, Clough, Joseph, Otte, Jaffe of Core I & II --read as applicable in your life):

- Stanley Aronowitz, 2000, *The Knowledge Factory* (U of Minnesota)
- Edward Bellamy, 1888, *Looking Backward 2000-1887* (Penguin Classic, 1982), fiction.
- John Seeley Brown & Paul Duguid, 2000, *The Social Life of Information* (Harvard)
- Patricia Clough, 2000, *Auto Affection* (U of Minnesota)
- *John Dewey, 1938, *Experience and Education* (Touchstone, 1997)
- Paulo Freire, 1998, *Pedagogy of Freedom* (Rowman & Littlefield)
- Adrian Forty, 1986, *Objects of Desire, Design and Society Since 1750* (Thames & Hudson.)
- Katherine Hayles, 1999, *How We Became Posthuman* (U of Chicago)
- Evelyn Fox Keller, 1985, *Reflections on Gender and Science* (Yale).
- David Harvey, 1990, *The Condition of Postmodernity* (Blackwell).
- Steven Johnson, 1997, *Interface Culture* (Basic Books).
- Janet Murray, 1998, *Hamlet on the Holodeck: The Future of Narrative in Cyberspace* (MIT).
- Annette Markham, 1998, *Life Online: Researching Real Experience in Virtual Space* (Rowman).
- David Noble, 2001, *Digital Diploma Mills* (Monthly Review Press).
- Donald Norman, 1988, *Design of Everyday Things* (Doubleday).
- Sherry Turkle, 1995, *Life on the Screen* (Touchstone).
- *Ellen Ullman, 1997, *Close to the Machine* (City Lights).

Teaching/Learning (some sites to start your explorations):

*"Engines of Inquiry: Teaching, Technology, and Learner-centered Approaches to Culture and History" (introductory essay to *Engines of Inquiry: A Practical Guide to Using Technology in Teaching American Culture and History*, Randy Bass, Crossroads Project Publications, 1998).
<http://www.georgetown.edu/crossroads/guide/engines.html>

**How People Learn: Brain, Mind, Experience, and School* (John D. Bransford, Ann L. Brown, and Rodney R. Cocking, Editors; Committee on Developments in the Science of Learning, National Research Council, 1999). <http://books.nap.edu/html/howpeople1/>

"An Extended Epistemology for Transformative Learning Theory and Its Application Through Collaborative Inquiry," Elizabeth Kasl and Lyle Yorks, *TCRecord* (January 2002).
<http://www.tcrecord.org/Content.asp?ContentID=10878>

Online Ed (for starters try):

Technologies for Education: Potential, Parameters and Prospects (Wadi D. Haddad and Alexandra Draxler, Editors; UNESCO and Academy for Educational Development, 2002).
<http://www.aed.org/publications/TechEdInfo.html>

2020 Visions: Transforming Education and Training Through Advanced Technologies (DOE, 2002).
<http://www.technology.gov/reports/TechPolicy/2020Visions.pdf>

*"Asking the Hard Questions About Technology Use and Education," Stephen Ehrmann, *Change* (March/April 1999). <http://www.tltgroup.org/resources/fquestions.html>

"An Overview of Progress and Problems in Educational Technology," J. Michael Spector, *Interactive Educational Multimedia* (October 2001).
http://www.ub.es/multimedia/iem/down/c3/Educational_Technology.pdf

Language, Literacies, and New Media

**The Language of New Media*, Lev Manovich, MIT Press, 2001

**Language and the Internet*, David Crystal, Cambridge UP, 2001

Recent History/Issues (this list will grow, but these are suggested starting points):

Internet Access in U.S. Public Schools and Classrooms: 1994-2001 (National Center for Education Statistics, 2002). <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2002018>

*"Globalization of Information: Intellectual Property Law Implications," Kim Nayer, *First Monday* (January 2002). http://firstmonday.org/issues/issue7_1/nayer/

*"The Internet Under Siege," Lawrence Lessig, *Foreign Policy Review* (Nov/Dec 2001).
http://www.foreignpolicy.com/issue_novdec_2001/lessig.html

"Technology, Schools and the Decentralization of Culture," Brian Carolan, *First Monday* (July 2001).
http://firstmonday.org/issues/issue6_8/carolan/index.html

"Through a Glass Darkly: Anticipating the Future of Technology-Enabled Education," Thomas P. Hughes, *EDUCAUSE Review* (July/August 2001). <http://www.educause.edu/ir/library/pdf/ERM0140.pdf>

Weaving the Web: The Original Design and Ultimate Destiny of the World Wide Web, Tim Berners-Lee with Mark Fishetti (Harper, 1999)

Hypertext/theory

The Hypertext Web. <http://www.cyberartsweb.org/cpace/ht/htov.html>

See (especially) "Hypertext and Critical Theory" (Chapter 1 of Landow's *Hypertext*).

<http://www.cyberartsweb.org/cpace/ht/jhup/contents.html>

"Object Lessons: Towards an Educational Theory of Technology," Suzanne de Castell, Mary Bryson and Jennifer Jenson, *First Monday* (January 2002). http://firstmonday.org/issues/issue7_1/castell/

"You Say You Want a Revolution? Hypertext and the Laws of Media," Stuart Moulthrop, (in *Essays in Postmodern Culture*, ed. Amiran and Unsworth, Oxford UP, 1993).

Speculative Fiction (Some of our picks; please add your own recommendations):

Philip Dick, *Do Androids Dream of Electronic Sheep* (1968)

William Gibson, *Neuromancer* (1984) and *Pattern Recognition* (2003)

Neal Stephenson, *Snowcrash* (1992) and *Cryptonomicon* (2000)

Richard Powers, *Galatea 2.2* (1996) and *Plowing the Dark* (2001)

Cory Doctorow, *Down and Out in the Magic Kingdom* (2003)

Marge Piercy, *He, She It* (1991)

Ellen Ullman, *The Bug* (2003)

The *Matrix* Trilogy, The Wachowski Bros. et alia

Antidotes to 'Technology as the answer' books (take 2 to dissolve media hype):

Michael Adas, 1989, *Machines as the Measure of Men*, Cornell.

Mark Dery, 1996, *Escape Velocity* (Grove)

David Noble, 2001, *Digital Diploma Mills*, Monthly Review Press.

Donald Norman, 1988, *Design of Everyday Things*, Chap. 1 "The Psychopathology of Everyday Things"

Neil Postman, 1992, *Technopoly*, Vintage.

Dan Schiller, 1999, *Digital Capitalism*, MIT Press.

Merritt Roe Smith & Leo Marx, 1994, *Does Technology Drive History: The Dilemma of Technological Determinism*, MIT.

Classics of sorts (read 1 if you have not):

S. Giedion, 1948, *Mechanization Takes Command*, Oxford Press.

Donna Haraway, 1991, *Simians, Cyborgs and Women, the Reinvention of Nature* (Routledge)

K. Marx, F. Engels 1847, *The Communist Manifesto*, Monthly Review Books.

M. McLuhan, 1964, *Understanding Media, the Extensions of Man* (MIT)

L. Mumford 1966, *The Myth of the Machine*, Vol I (Harcourt)

Articles/book reviews/essays (the beginning of a never-ending list)

Stephen Brier & Roy Rosenzweig, review of Noble's *Digital Diploma Mills*, in 22 April 2002, *The Nation*.

Nancy Kaplan, "Literacy Beyond Books, Reading When All the World's a Web", in Herman & Swiss, 2000, *The World Wide Web and Contemporary Cultural Theory* (Routledge).

Roy Rosenzweig & Steve Brier, "Historians and Hypertext: Is It More than Hype" in L. Dowler (ed), *Gateways to Knowledge, the Role of Academic Libraries in Teaching, Learning and Research* (MIT).

Ilana Snyder "Beyond the Hype: Reassessing Hypertext"