Education 403x: Education's Digital Future
Winter Quarter 2013 / Stanford University

Time　　　　Tuesdays 5:15 – 7:05 PM

Location　　CERAS 100B

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　　　　　　　　Cubberley 215　　　　　　　　　Wallenberg 232

Hours　　　by appointment　　　　　　　by appointment

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Purpose

This course provides intellectual context and regular occasion for critical dialogue about transformations in teaching, learning and education facilitated by the expansion of digital media throughout society. Our goals are to: (1) surface and discuss foundational questions about how educational practices and institutions are organized; (2) provide opportunities for the Stanford community to think together about how digital media might change the character of teaching and learning in fundamental ways. Education's digital future will be shaped only very partially by technology. The politics, organization, funding, content and ethics of education and schooling will define that future, and therefore are squarely within the purview of our discussions.

Overview of Winter Quarter

This term we will be focusing on four broad questions:

-- How was the boundary between high school and college established, and what are the consequences and limits of this categorical distinction? How might digital media enable more flexible organization of school and the life course?

-- What is the nature of our current credentialing and accreditation system, and how does this system facilitate or inhibit innovation in the postsecondary sector? Are there alternative models for credentialing education and learning?

-- What are the latest innovations in digitally mediated instruction in STEM and humanities fields?

-- What are the prospects for gaming approaches and technologies for digital education and learning?

Requirements

Participation. Critical inquiry is a collective enterprise. We aim to create a community of thinkers around central questions regarding the fate and future of education and schooling. Everyone is expected to attend all class meetings, complete all assignments on time, and routinely contribute to class discussions.

Preparatory and response activity: Each week will build on preparatory activity designed to enhance the quality of classroom exchange. You are expected to have completed these activities in advance of each class session, tentatively outlined below. Many of these tasks will be readings, available online. A Piazza web space is being created for 403X and will be used to distribute preparatory material, and for written work and dialogue. We will also draw on several books, the purchase of which is strongly recommended:

Recommended readings: We are maintaining a growing cache of related readings about teaching and learning digitally, as well as the larger digital revolution, at the EDF web site: **http://edf.stanford.edu/**

Written assignments: Some of the preparatory activity for this course will take the form of short written assignments. Details of these assignments, their submission format, and their deadlines will be clearly specified well in advance.

Note: We reserve the privilege to circulate, at our discretion and with attribution, for purposes of instruction and intellectual aggregation, any and all of the written work submitted by students and auditors for this course. In short, we will consider course contributions to be covered under the Creative Commons Attribution-Non Commercial license (http://creativecommons.org/licenses/by-nc/2.0/)

Evaluation

This is a one-unit, credit/no-credit course. Evaluation is based on:

- Class attendance (documented at every class session) and participation
- Completion of assigned preparatory activities

Tentative Course Schedule

WEEK 1 (01.08): COURSE INTRODUCTION; DIGITAL FUTURE OVERVIEW AND THEMES FROM FALL QUARTER

During fall quarter we engaged a variety of themes – building a broad intellectual foundation on the pre-history and contemporary experience of education's digital

expressions. We had serious discussion around the nature and purposes of education; the complexity of the contemporary university; the character of work, life, and subjectivity in the digital age; and the current frontiers of curriculum development and educational assessment through digital media.

During Winter Quarter we will explore four broad themes: the dynamic boundary between high school and college, accreditation, digital curriculum innovations in STEM and humanities education, and gaming to learn.

During Spring Quarter we will take up questions related educational equity in the digital era, new media literacy and youth culture, and learning analytics and new forms of educational research.

Preparation (due in advance of class on 01/08):

Read the white papers produced by students during Fall Quarter of EDUC 403x.

Submit a brief Piazza post about why you have enrolled in EDUC 403x this quarter (or have chosen to continue your enrollment from Fall 2012)

WEEK 2 (1.15): CHANGING BOUNDARIES BETWEEN HIGH SCHOOL AND COLLEGE **(10-14)**

The boundaries between high school and college were established during a very different epoch of industrial capitalism. Digital technology is finally making it possible to consider other ways of structuring education, connecting school and work, and integrating both into the life course of young adulthood. This section summarizes the origins of the formalization of high school and college as separate, internally coherent times and places, and considers the possible benefits and challenges of reorganizing the time/space of what we now call grades 10 – 14.

Preparation:

Labaree, David F. 1988. "Introduction: Politics, Markets, and the Middle Class." Pp. 1-8 in Labaree, *The Making of an American High School: The Credentials Market and The Central High School of Philadelphia, 1838-1939*. New Haven: Yale University Press.

Wechsler, Harold S. 1977. "Admission to College and University." Pp. 3-15 in Wechsler, *The Qualified Student: A History of Selective College Admission in America.* New York: John Wiley & Sons.

WEEK 3 (1.22): SYMBOLIC DEFERENCE: THE INHERITED SYSTEM OF CREDIT AND ACCREDITATION IN US HIGHER EDUCATION

Credentialing and accreditation are crucial features of our current educational system. Both the high school diploma and the college degree are widely recognized standards by which graduates are sorted into jobs and other social positions, and by which we as a society certify that certain skills and knowledge are reproduced over time. The current credentialing system developed as a series of independently negotiated compacts between particular schools sharing similar prestige and status: courtesy agreements now being challenged by seismic changes to the political economy of US higher education. How should credentialing happen in education's digital future?

Preparation:

Collins, Randall. 1971. "Functional and Conflict Theories of Educational Stratification." *American Sociological Review* 36:1002-1019.

Meyer, John W., and Brian Rowan. 1978. "The Structure of Educational Organizations." Pp. 78-109 in Marshall W. Meyer, editor, *Environments and Organizations*. San Francisco: Jossey-Bass.

WEEK 4 (1.29): DESIGN STUDIO: ALTERNATIVE CREDENTIALING SYSTEMS

Revolutions create opportunity for imaginative rethinking of long-established institutions. This is such a moment for academic credit and accreditation. Today's class will provide opportunity for students, working in small groups, to imagine novel systems for certifying instruction, learning, and credit accumulation over the life course.

Preparation:

TBD

WEEK 5 (2.5): EDF FORUM: COLLEGE CREDENTIALS IN THE DIGITAL FUTURE

Reception: CERAS Lobby 5-6 PM

Forum: CERAS Learning Hall 6 – 7.30 PM

This forum assembles a variety of thought leaders who will assess our inherited system of credit and accreditation in US postsecondary education, and provide imaginative alternatives for the digital era.

Richard Arum, NYU, co-author of *Academically Adrift*

Therese Cannon, former Executive Vice President, Western Association of Schools and Colleges

Emily Golinkoski, Mozilla Open Badges

John Katzman, founder Princeton Review, 2U, and Noodle Education

WEEK 6 (2.12): EVOLUTION OF DIGITAL CURRICULUM – NEW WAYS OF TEACHING STEM

Digital technology creates wholly new ways of teaching and learning. At the same time, they make new forms of educational measurement possible. These two class sessions – a first dedicated to new ways of teaching science, technology, engineering, and math (STEM) and a second dedicated to the teaching of humanities – will engage in questions related to the evolution of the digital curriculum and new ways of assessing it.

Preparation: TBA

WEEK 7 (2.19): EVOLUTION OF DIGITAL CURRICULUM – NEW WAYS OF TEACHING HUMANITIES

Preparation: TBA

WEEK 8 (2.26): GAMING TO LEARN

Reception: CERAS Lobby 5-6 PM

Forum: CERAS Learning Hall 6 – 7.30 PM

Play has always been central to human learning. In the digital era the potential for learning through games has drawn ever more scholarly, practitioner, and business interest. This forum will consider the prospects of gaming to learn in education's digital future.

James Gee, University of Wisconsin-Madison

Dan Schwartz, LIFE Faculty Leadership Team; Stanford University

Constance Steinkuehler, Senior Policy Analyst at the White House Office of Science and Technology Policy; University of Wisconsin-Madison

Preparation: TBA

WEEK 9 (3.5): WHITE PAPER STUDIO: THEMES OF THE QUARTER

Working in small groups, we begin to curate and summarize the work accomplished this quarter.

Preparation: TBA

WEEK 10 (3.12): WHITE PAPER REPORTS

Presentations of white papers for Winter Quarter 403x.

Preparation: Brief PowerPoint presentations of white papers submitted in advance of class