

The Beauty and Joy of Computing

**Lecture #12
Social Implications
of Computing II**

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Sr Lecturer SOE
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Project spec is posted

Consider coding in Snap!

You have a few chapters of reading during these weeks, don't wait...




BERKELEY JOINS EDX!

Online education now has a player in the open access / free education space, it's called edX, and UC Berkeley was the first west coast school to become involved with the initiative. Several UC Berkeley classes are now available!

Your project partners may be in different sections, try to attend "Project Work" labs together



Read BYOB project tips!

www.edx.org/university_profile/BerkeleyX







Overview

- **META: This course is NOT just about programming!**
 - Lecs + Reading: Big ideas
 - Labs: Programming
 - Disc: Distillation
- **META: plug CS195 Social Implications of Computers**
- **Computers in Education**
 - Most important use?
 - Judah Schwartz' continuum
 - RSA Animate "Changing Education Paradigms"
 - UC Online Pilot



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
Peer Instruction (thanks to BH)

The most important use of computers in education so far...

- Web search
- Arithmetic drill programs
- Word processing
- iclicker-like technologies
- Social networking

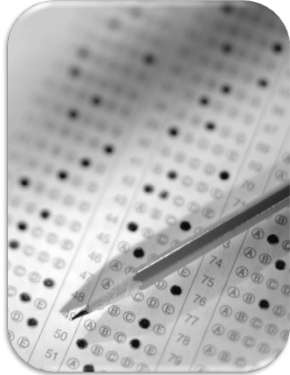




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Answer

- *"Multiple choice tests have changed what counts as knowledge in schools. Open-ended questions were the norm 30 years ago. The kind of knowledge you can report on multiple-choice tests is unimportant in the big scheme of things, and what's really important is not what you already know, but how you can take what you already know and apply it something you've never seen before. Multiple choice tests make that hard. Teaching follows tests! The folks who invented Standardized Testing didn't foresee how it would affect what knowledge means! (unintended consequence)" – Brian Harvey*

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Computers in Education (open?)

Judah Schwartz

Tools	Microworlds	Courseware
Word Processor	Interactive geometry	Arithmetic drill
Browser	Physics simulation	Computer-assisted instruction
Programming language	Databases(e.g., atlas)	Computer-managed instruction

Myphysicslab demo
ASSIST movie

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www.youtube.com/watch?v=zDZFcdGpL4U

RSA Animate : Changing Education Paradigms

SIR KEN ROBINSON CHANGING PARADIGMS

EVERY COUNTRY ON EARTH, AT THE MOMENT, IS REFORMING PUBLIC EDUCATION

THERE ARE TWO REASONS FOR IT

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groups.ischool.berkeley.edu/onlineeducation/

UC Berkeley Online Pilot

- Basics of Pilot
 - Blended vs Online
- What should we do?
 - How can CS10 be the course for everyone?
 - How can we use peers?
 - What'd help you most?
- Would you take this course if it'd been offered at another UC?
 - Does f2f matter?

UC Berkeley EECS
CS10: The Beauty and Joy of Computing
Spring 2011

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Taking CS10 Online (via UCOP, edX)

The most effective thing for your learning, if you were taking CS10 online (remotely)...

- "Test yourself" mini-quizzes
- More illustrations to learn hard concepts
- Tree-structure interface to lectures
- "In the browser" Snap! coding for labs so you don't have to leave the browser
- A "smart" system that adjusts the difficulty of a problem to match your ability

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