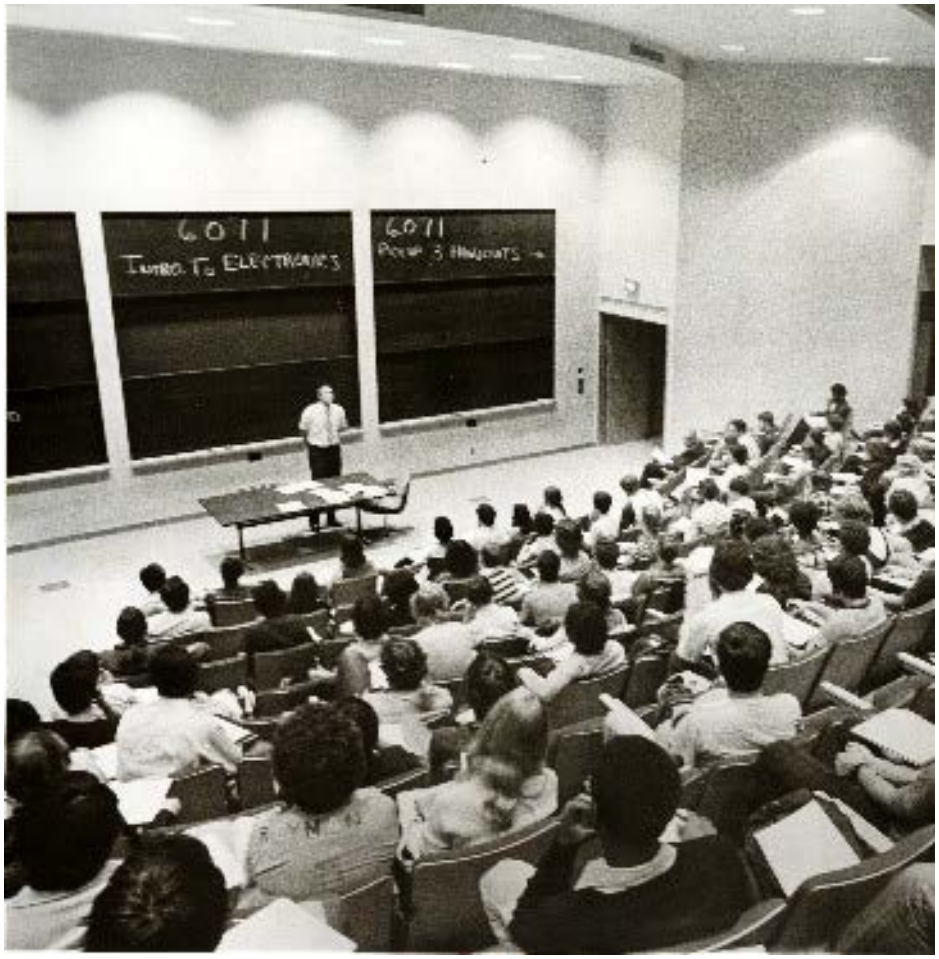
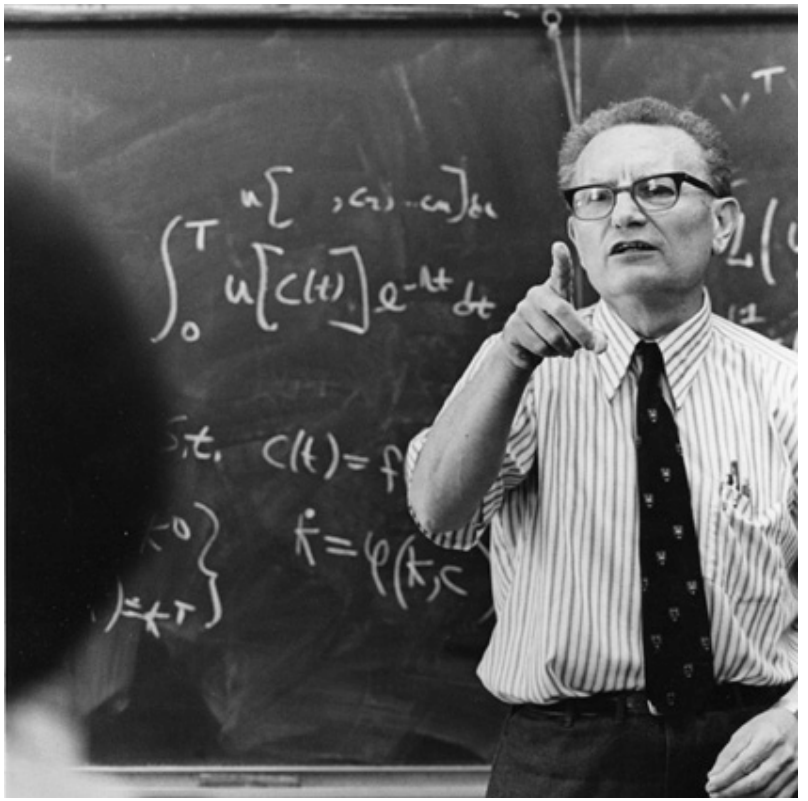
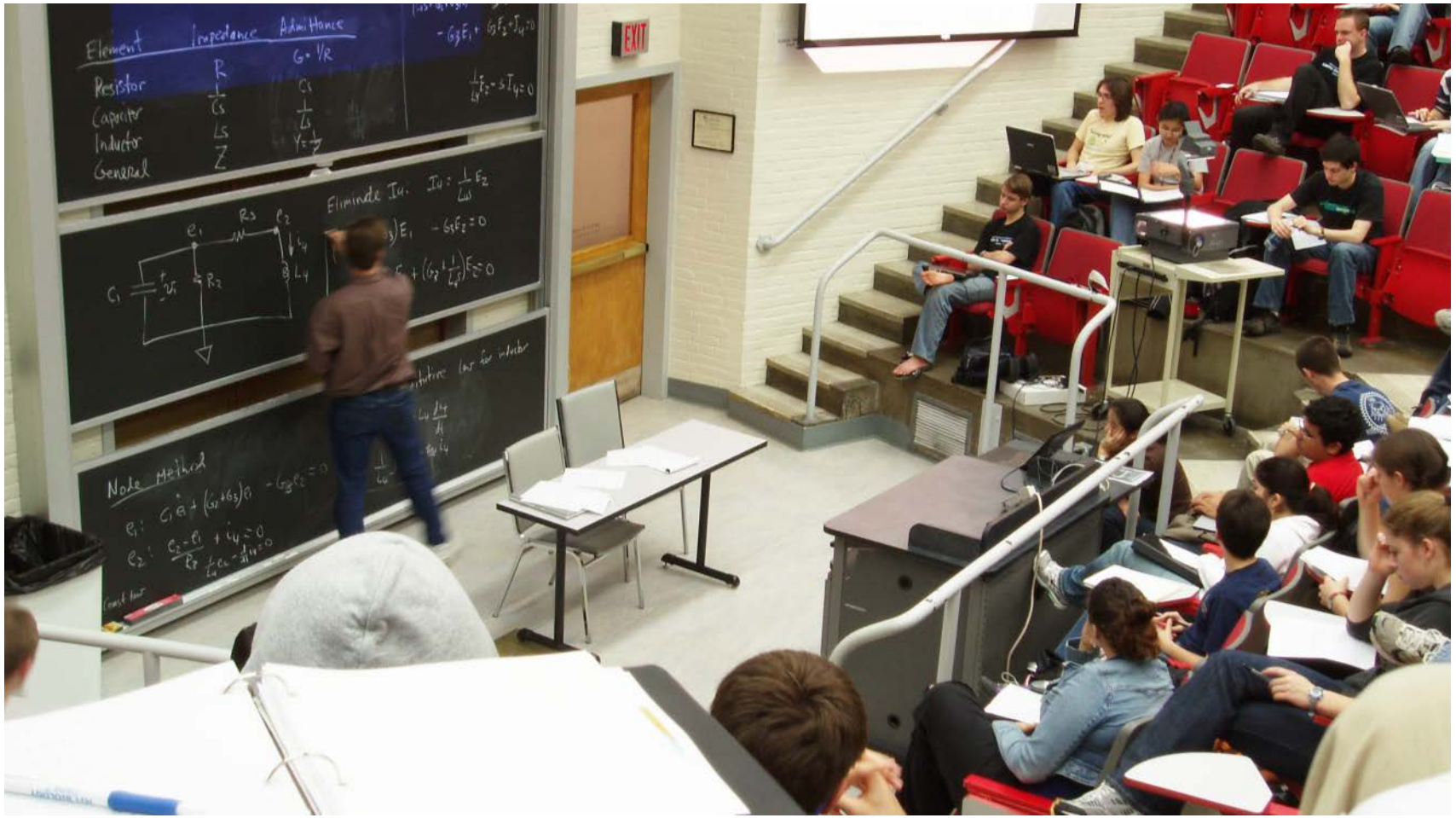
REINVENTING EDUCATION

ANANT AGARWAL
EDX



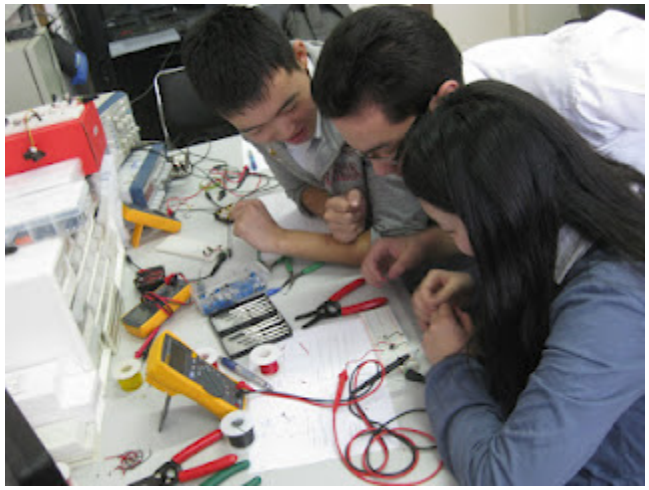


Courtesy Eric Klopfer



Courtesy Eric Klopfer

The new classroom



Where is this?

EDX IS A NOT FOR PROFIT VENTURE OF HARVARD AND MIT

Open source **Platform**

Portal for learning edx.org

Harvard → HarvardX

MIT → MITx

Berkeley → BerkeleyX

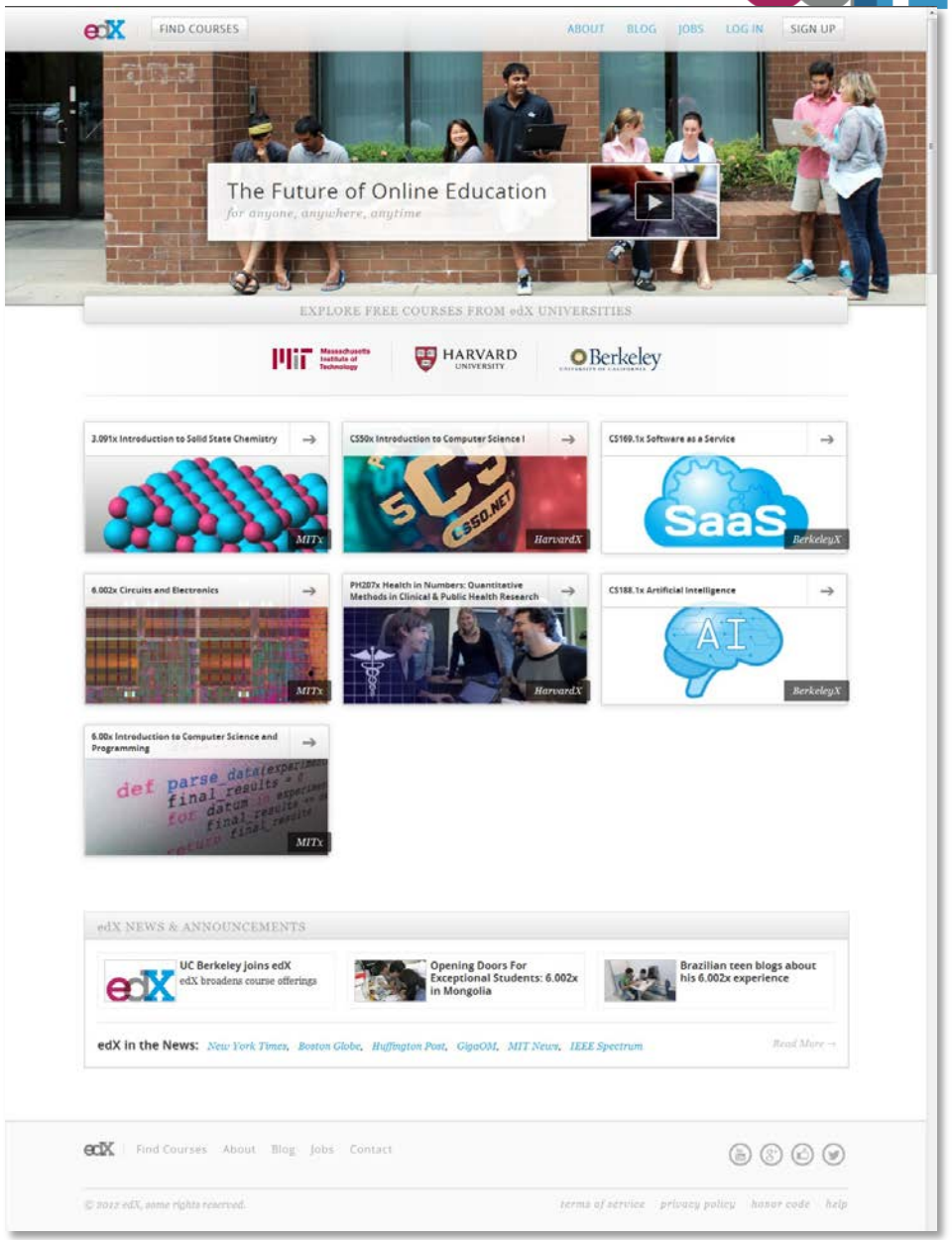
Un → Unx

X university consortium

X universities get access to data for research

Production support for high quality

**Harvard and MIT have committed $60M to the venture*



EDX VISION

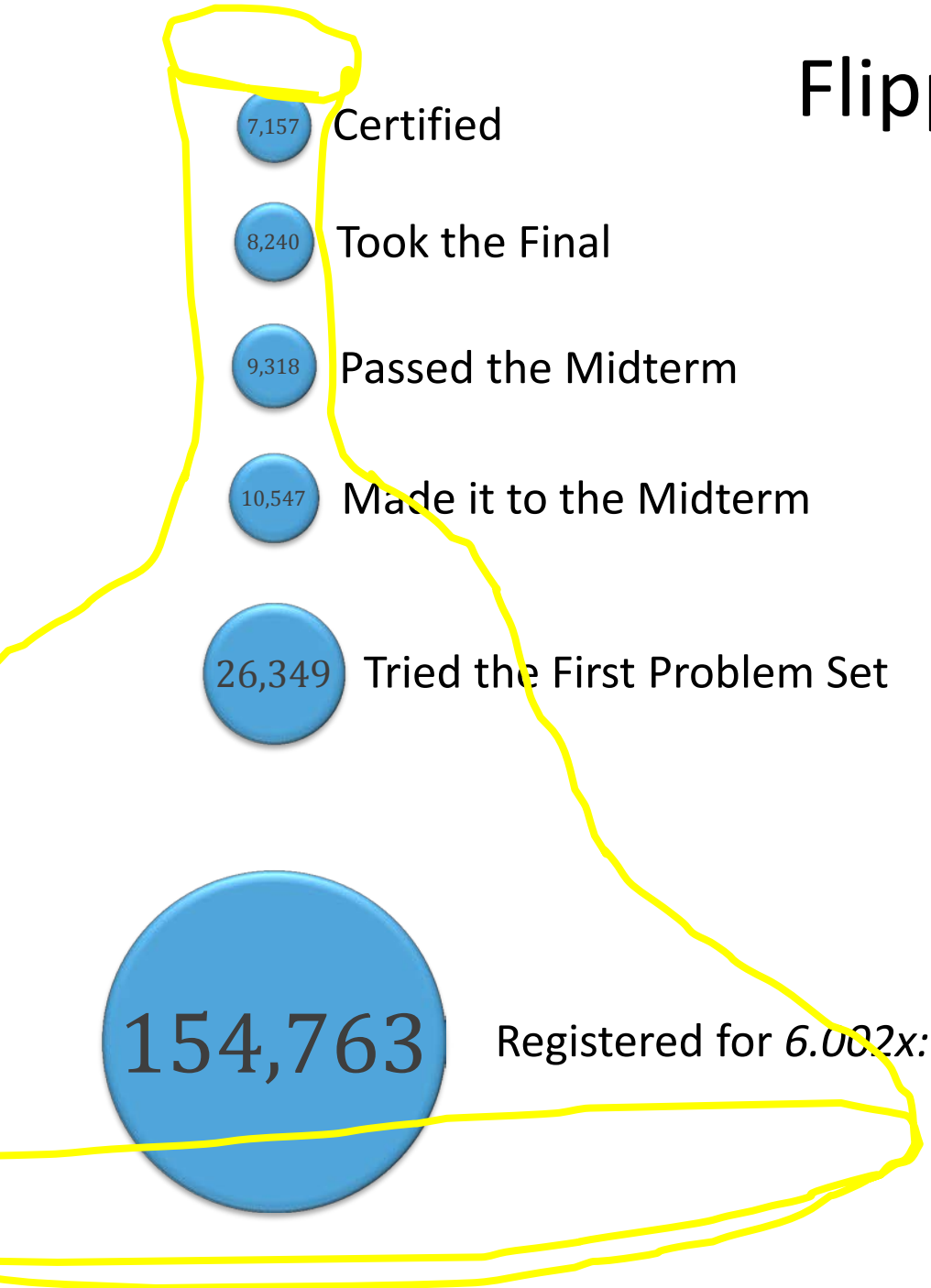
To expand access to education for students worldwide through online learning,

while reinventing campus education through blended models

Admitted: ~1600

Applied to MIT's Class of 2015: ~18,000

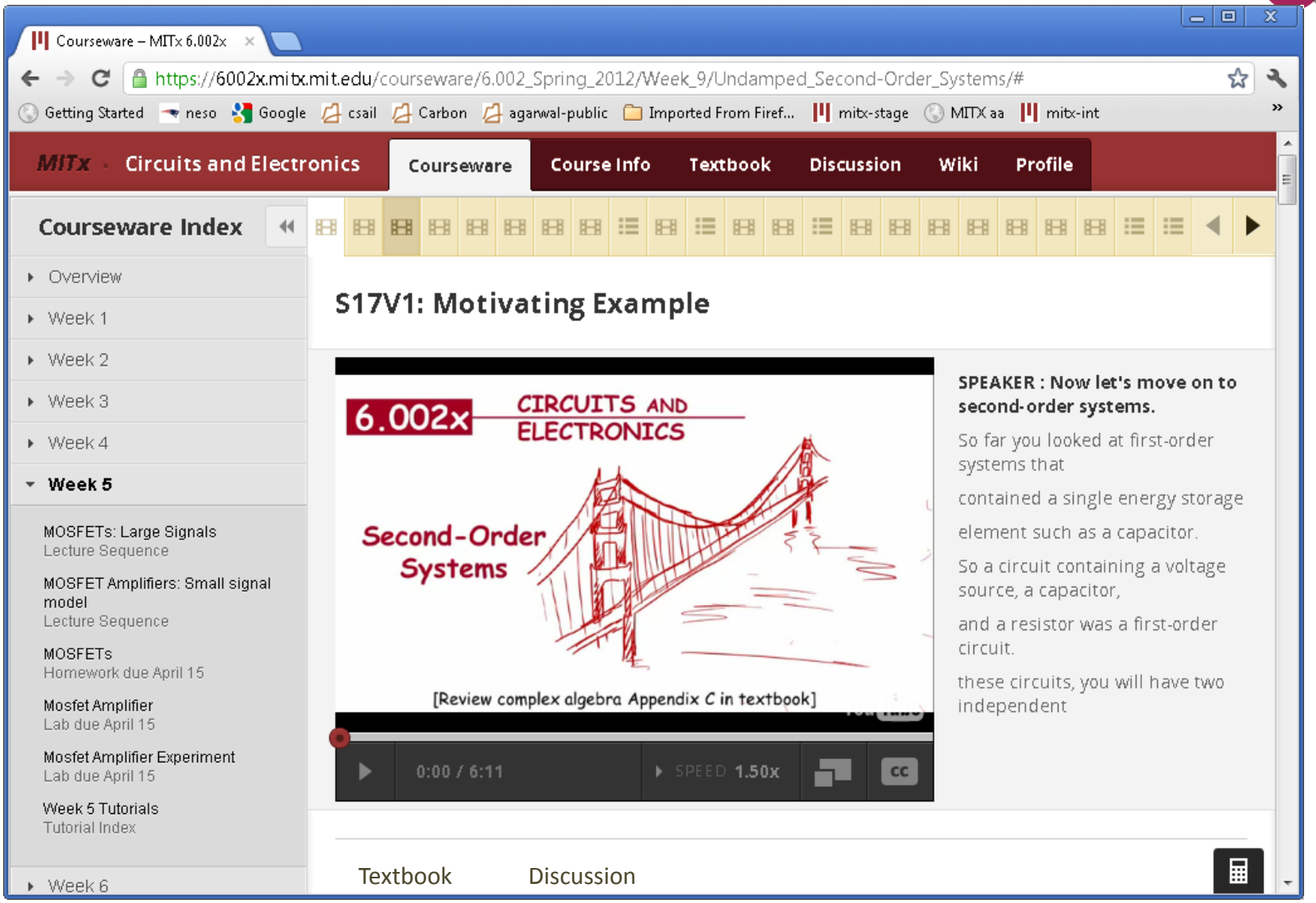
Flipping the funnel

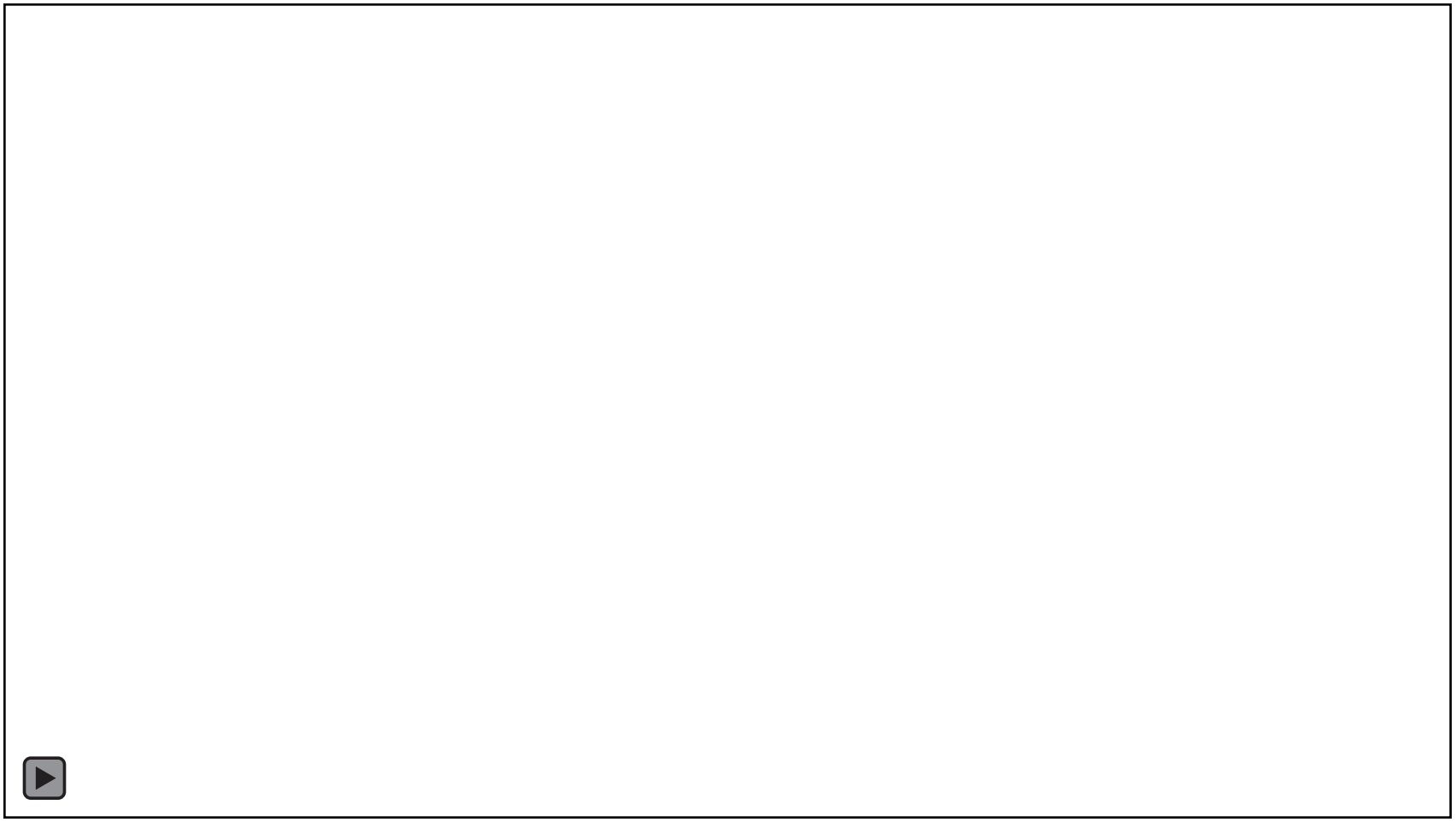


Same staff resources as 150 person on-campus class

Focus on efficiency not cost

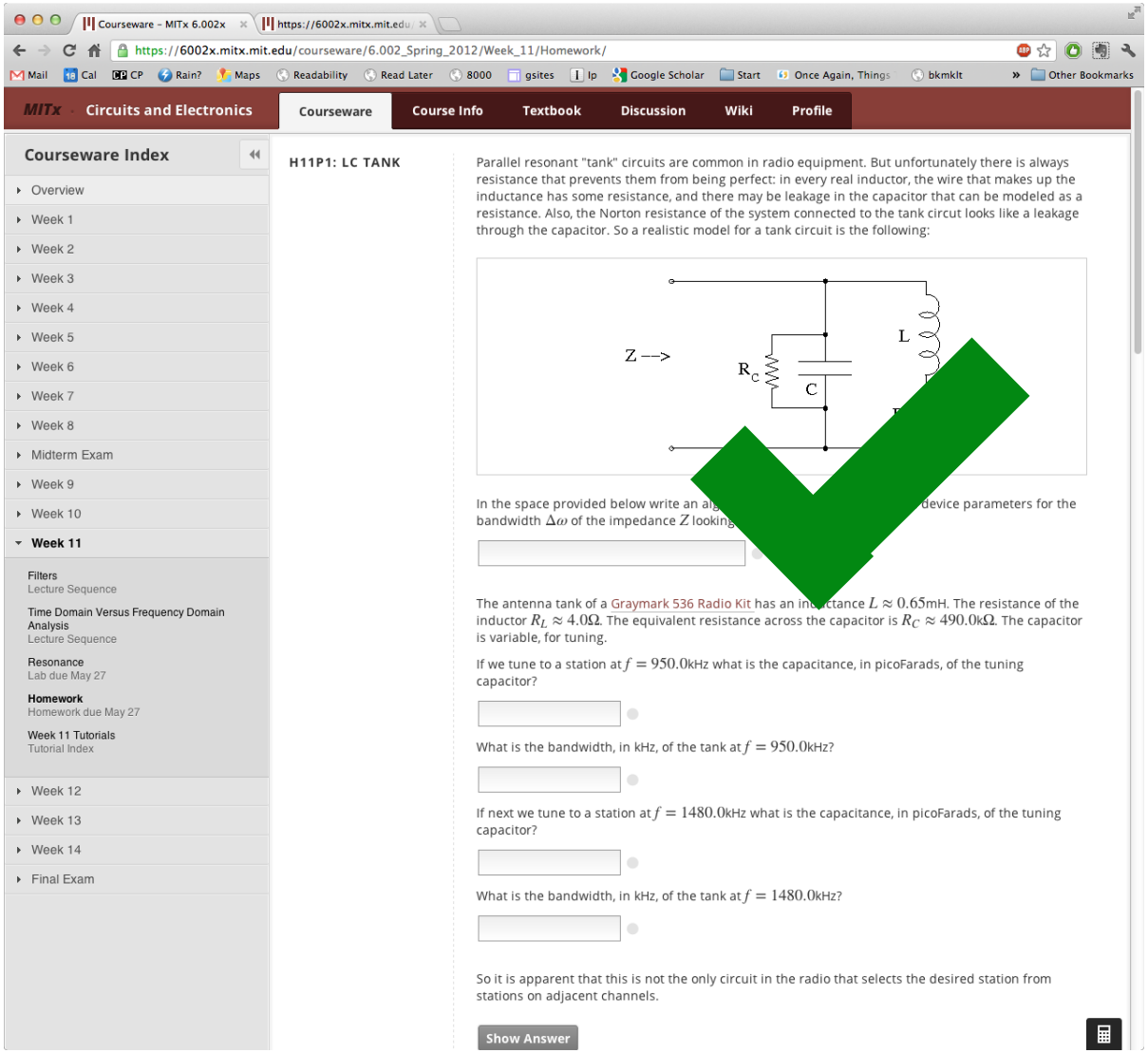
$$\text{Efficiency} = \frac{\text{Quality}}{\text{Cost}}$$


Courseware – MITx 6.002x
https://6002x.mitx.mit.edu/courseware/6.002_Spring_2012/Week_9/Undamped_Second-Order_Systems/#
Getting Started
neso
Google
csail
Carbon
agarwal-public
Imported From Firef...
mitx-stage
MITX aa
mitx-int
MITx · Circuits and Electronics
Courseware
Course Info
Textbook
Discussion
Wiki
Profile
Courseware Index
Overview
Week 1
Week 2
Week 3
Week 4
Week 5
MOSFETs: Large Signals
Lecture Sequence
MOSFET Amplifiers: Small signal model
Lecture Sequence
MOSFETs
Homework due April 15
Mosfet Amplifier
Lab due April 15
Mosfet Amplifier Experiment
Lab due April 15
Week 5 Tutorials
Tutorial Index
Week 6
S17V1: Motivating Example
6.002x
CIRCUITS AND ELECTRONICS
Second-Order Systems
[Review complex algebra Appendix C in textbook]
0:00 / 6:11
SPEED 1.50x
CC
SPEAKER : Now let's move on to second-order systems.
So far you looked at first-order systems that
contained a single energy storage
element such as a capacitor.
So a circuit containing a voltage source, a capacitor,
and a resistor was a first-order circuit.
these circuits, you will have two independent
Textbook
Discussion



Great lectures were theater, but the future is in games

Instant feedback

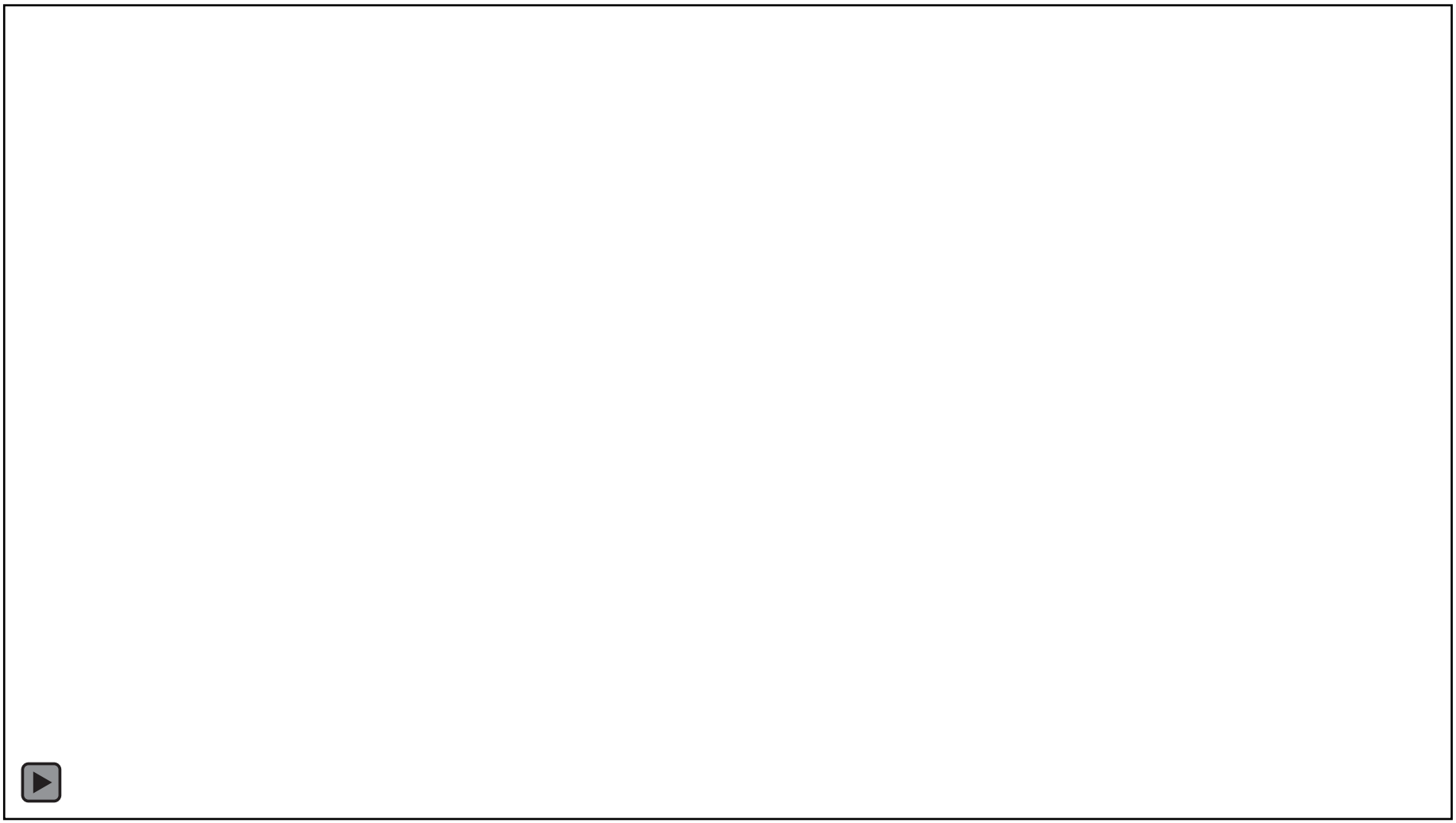


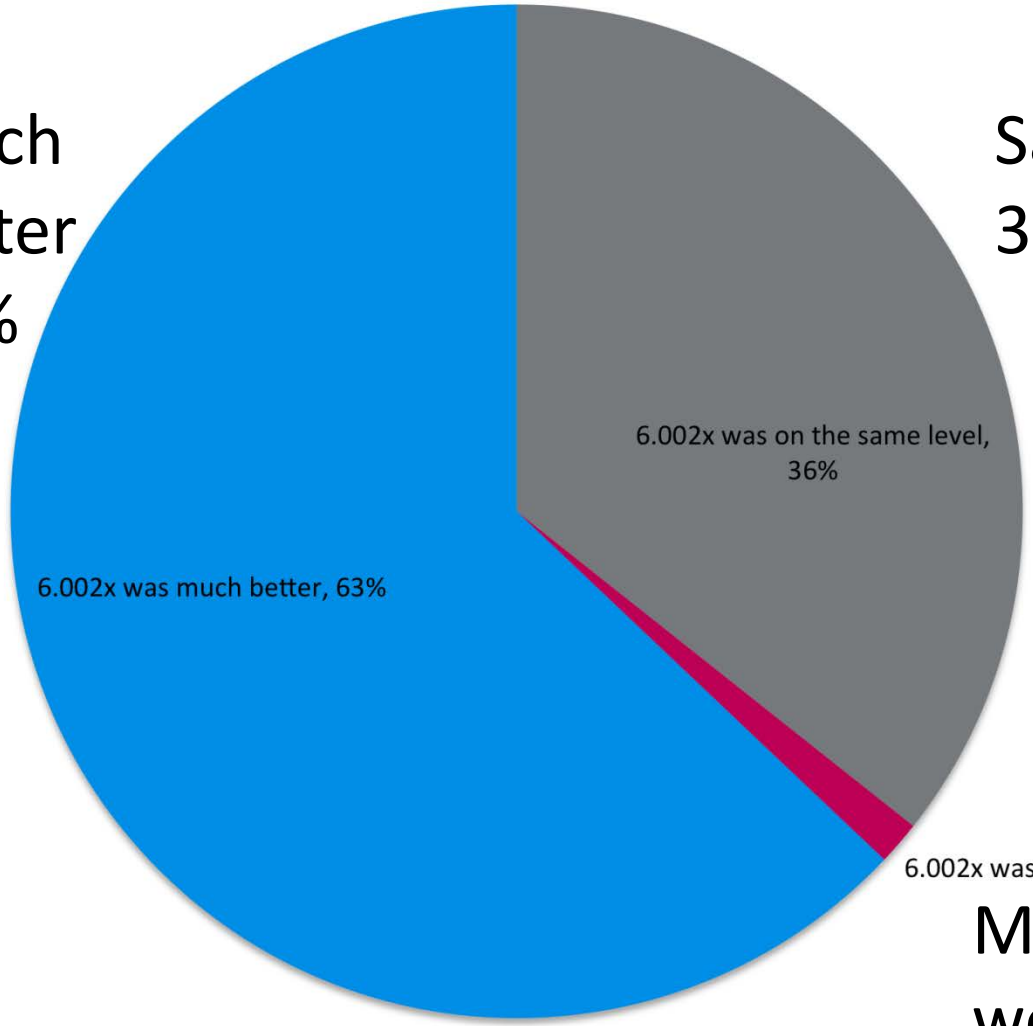
An edX cult symbol?


MITx
6002x Circuits and Electronics

Oh god; have I missed you... :~}

Virtual game-like laboratory





Much better 63%

Same 36%

Much worse 1%

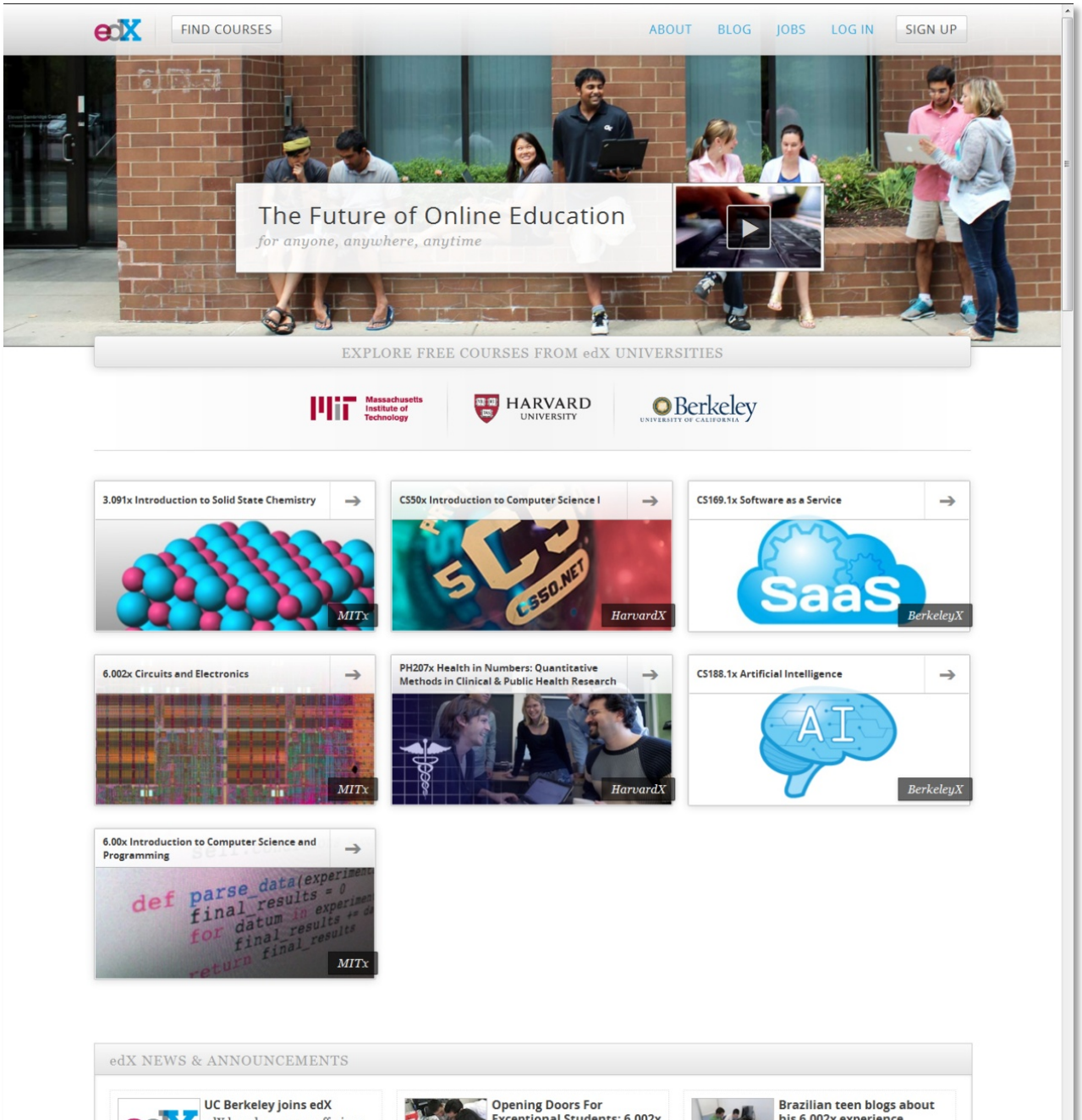
“This course was the most rewarding experience of my life.”

-Student, Pakistan

Flipped class using edX at San Jose State University

Improving learning efficiency

edX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HARVARD UNIVERSITY
Berkeley
UNIVERSITY OF CALIFORNIA
3.091x Introduction to Solid State Chemistry
MITx
CS50x Introduction to Computer Science I
CS50.NET
HarvardX
CS169.1x Software as a Service
SaaS
BerkeleyX
6.002x Circuits and Electronics
MITx
PH207x Health in Numbers: Quantitative Methods in Clinical & Public Health Research
HarvardX
CS188.1x Artificial Intelligence
AI
BerkeleyX
6.00x Introduction to Computer Science and Programming
def parse_data(
final_results = 0
for datum in
final_results
return final_results
MITx
edX NEWS & ANNOUNCEMENTS
UC Berkeley joins edX
Opening Doors For
Brazilian teen blogs about