

# Georgia Tech

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Dean

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# Georgia Tech Context

- Professional Education (annually)
  - 13,500 individuals from half world's countries
  - 3,000 companies
  - \$28.5M revenue (~50% back to GT)
- Coursera
  - ~750,000 enrollments in 2 years
  - 20+ courses, ~10/year created
  - Past year has seen many flipped classes
- Online Master Science Computer Science
  - With Udacity and AT&T
  - Fall 2014: 1,200 students; Spring 2015: 2,000 students
  - Non-credit courses also available

# Higher Education: Changing Context

- Public pressure on higher education
  - Student loan debt exceeds consumer credit debt
  - No longer just great graduates; must be employable
  - No longer initial job; interact for lifetime career
  - No longer just world class research; create companies/jobs and move research findings to industry faster
  - No longer just local impact; influence global activities
  - Qualities of graduates: innovative/creative problem solvers
- Changing federal/state/endowment budget landscapes
- Partnerships benefitting local economies and their workforce, global implications
- Compliance/governance more complex
- More emphasis on bottom line ROI

# Global Influences

- Technology rapidly influencing jobs
- Technology enhancing learning
  - Online around for some time, as has cognitive aids
  - New abilities, for residential and online
- Power of the human network
  - Circa 2010, Global ‘think tank’ at Aalto University
    - A new sociology of learning & work
    - Not only personal, but for network gain
    - Not random encounters, but meaningful networks
- Return on investment
  - Internal: recover costs before next technology
  - External: recover education cost through impacts

# Concrete Next Steps

If faculty interested:

- Consider focused/measurable partnerships
  - External, augment capabilities
  - Internal, seek out potential expertise
- Seek industry support
  - Changing workforce & corporate strategies
  - Alternative to federal research programs
- Provide student services for online (campus partner)
  - Adult learners have different needs
  - Showcase relevancy
  - Course/program completion may not be right metric

# Stanford ONLINE

John Mitchell

Vice Provost for Online Learning

# Pivotal moment in higher education

- Educational demands of an info-based society
- Rapidly improving digital technology
- Vibrant public debate about the cost, means and ends of higher education

# Distance learning is decades old



## Stanford Instructional Television Network

“Largest single university provider of live graduate courses in the world” (1993)

<http://news.stanford.edu/pr/93/931129Arc3033.html>





[Learn with OLI](#)

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[Get to Know OLI](#)

**WHAT WE DO**

The Open Learning Initiative offers online courses to anyone who wants to learn or teach.

Our aim is to combine open, high-quality courses, continuous feedback, and research to improve learning and transform higher education. [Learn More](#) ▶



**Active Learning**

Throughout our courses, students encounter activities, simulations, and virtual labs to help them apply and test their learning. [Learn More](#) ▶



**RECENT NEWS, EVENTS + MEDIA**

Updated Webinar Dates

OLI Anatomy & Physiology Faculty Webinar

Candace Thille at UCLA for "Leveraging Innovations in Online Education"

[See all News, Events + Media](#)

**FEATURED**



**WHAT PEOPLE ARE SAYING**

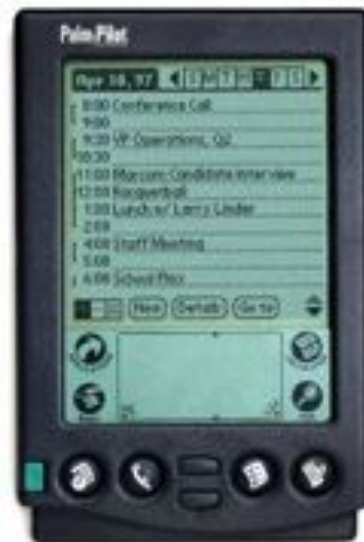
I recognize in these difficult times that there is no silver bullet. That no one thing is going to solve our education problems...but, I'm telling you this is a huge step forward, the work coming out of OLI.

Dr. William E. "Bert" Kinian, Chancellor, University System of

# Change takes time



Apple Newton, 1987



Palm Pilot, 1997

iPhone, 2007



# CS has much to offer

- Forward-looking interdisciplinary field, open to new frontiers, new applications
- Know how to manage teams, address scale
- Our technology is everywhere

As academics we can

- Help advance learning for our institutions, broadly
- Improve teaching and learning of CS

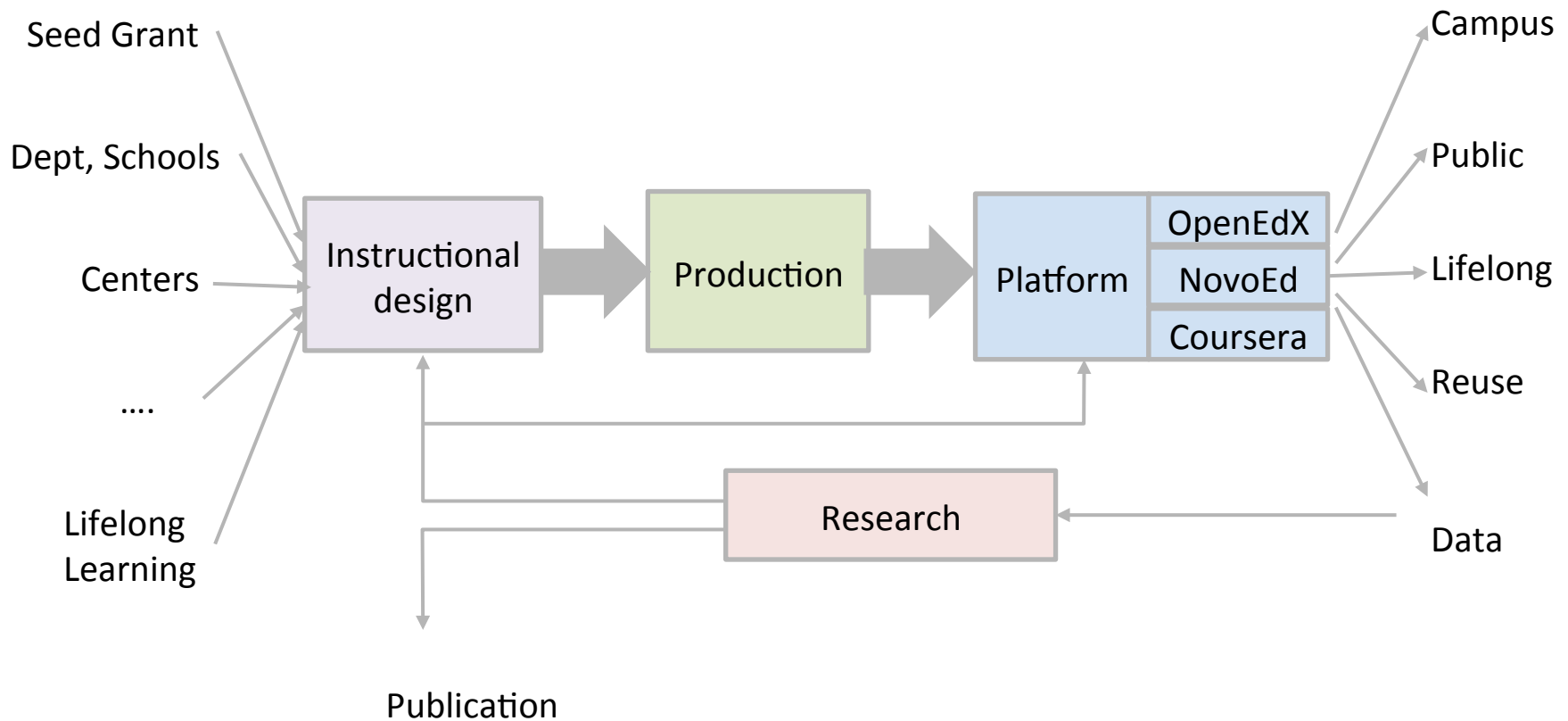
# Vice Provost for Online Learning (VPOL)

The screenshot displays the Stanford VPOL website. At the top, the navigation menu includes 'ABOUT', 'ID & PEDAGOGY', 'PLATFORMS', 'PRODUCTION', 'STANFORD ONLINE', 'OPENEDX', and 'NEWS & EVENTS'. The 'About VPOL' section features a photo of the Vice Provost and text describing the office's mission to advance faculty-driven online learning. Below this, the 'Stanford ONLINE' section highlights 'Learning Opportunities' with thumbnails for 'Foundry of Selfhood & Pe...', 'Environmental Physiology: Foot...', and 'Automata'. A news article titled 'The Future of Learning' features a photo of Instructor Aneesh Nainani and mentions a seed grant to flip Stanford's EE292L Nanomanufacturing course. The bottom section includes 'Transformation of Teaching' and 'Incubation' for online learning, with a 'COURSE DESIGN AND PRODUCTION' sub-section.

Advance the understanding and use of new technologies and pedagogical methods, for Stanford students and faculty and in service to higher education and lifelong learning

[online.stanford.edu](http://online.stanford.edu)  
[vpol.stanford.edu](http://vpol.stanford.edu)

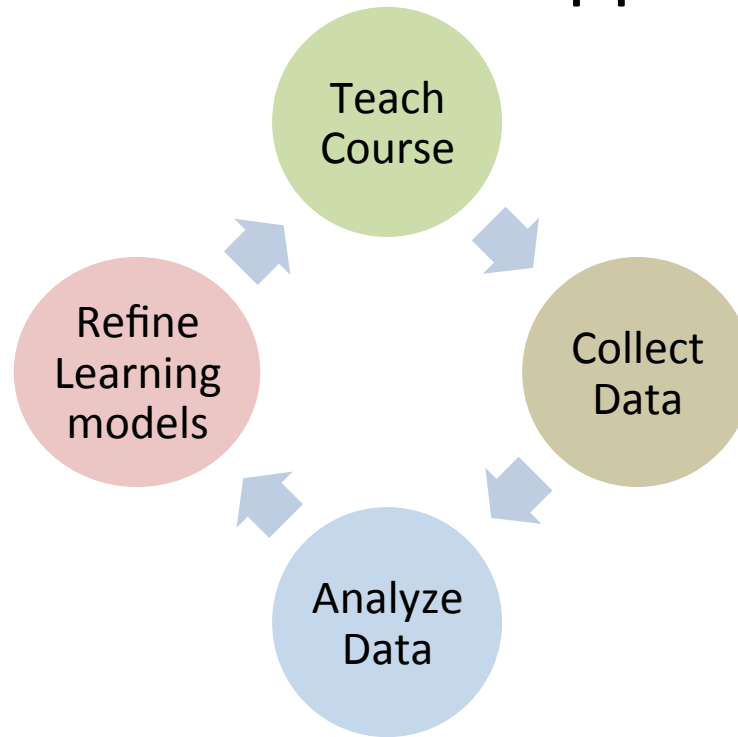
# Development process





# Lessons learned

- Promising technology supporting innovation
- Value and excitement of large audiences
- Tremendous research opportunity

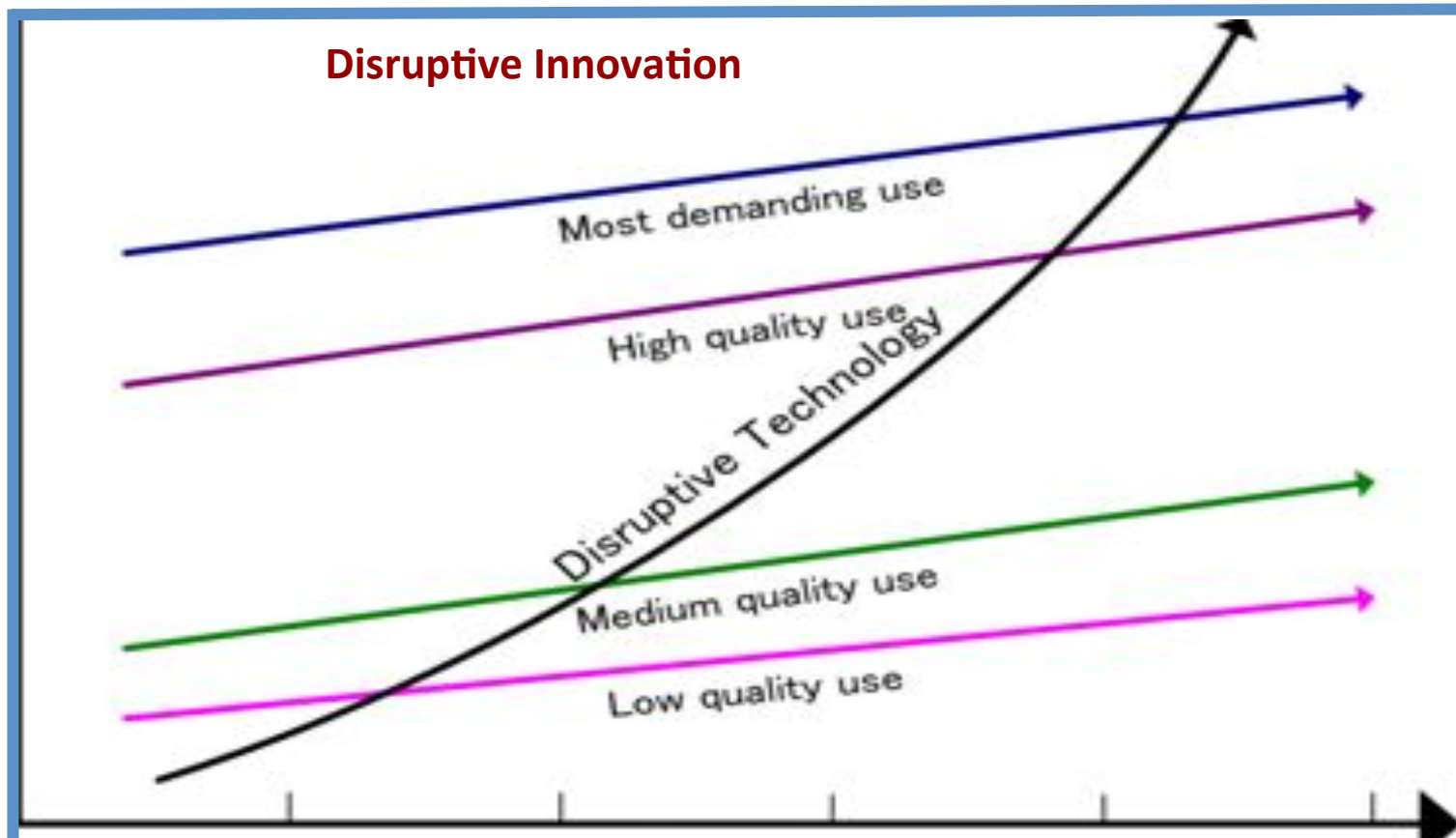


# We are Progressing Along Two Curves





# We are Progressing Along Two Curves



# Directions for future

- Research-based teaching
- Teaching-based research
- Online tools, resources, programs
- Experiential learning

# Information available on our websites

**LYTICS**

LyticsLab@Stanford

HOME ABOUT US PHILOSOPHY RESEARCH SEMINAR PUBLICATIONS PEOPLE EVENTS CONTACT

## Home

A research laboratory at Stanford, the Lytics Lab is a center for research and data-driven design to develop our collective...

Building on the foundations of multiple disciplines and... among researchers, technologists, designers, educators... Communication, Psychology, Statistics, Design and Social... and comment on our current [research projects](#).

**NEXT LYTICS SEMINAR**

Date: Thu, 5 December 2013  
Location: CERAS 101  
Schedule: TBA

Google+ 15 | Twitter 22 | Facebook Like 34

Stanford University

## Stanford ONLINE

HOME COURSES NEWS & EVENTS ABOUT OPENEDX FACULTY RESOURCES ACROSS CAMPUS VPOL Connect with us

### Learning Opportunities

Finance of Retirement & P... Environmental Physiology: Four... Automata Developing iOS 7 Apps for iPhone... Colonial...

### The Future of Learning

Instructor Aneesh Nainani used a seed grant to flip Stanford's EE292L Nanomanufacturing course. The next seed grant deadline is November 15. >>

### Events

VPOL Information Session #2  
November 12, 2013

Faculty Forum: Designing Online Learning for WOOD learners  
November 14, 2013

Education Reimagined - Sal Khan  
November 14, 2013

Public Forum - the art and science of online learning  
November 18, 2013

VPOL Information Session #3  
December 3, 2013

VPOL Information Session #4  
January 21, 2014

### Speaking Engagements

UCLA Marchak Colloquium  
November 6, 2013

Surviving the End of Higher Education: Technology and Pedagogical Innovation  
November 13, 2013

CUNY Keynote  
December 5, 2013

### Transformation of Teaching

INCUBATION

VICE PROVOST FOR ONLINE LEARNING

Sharing as we innovate: Stanford Online is a university-wide initiative coordinated by the Office of the Vice Provost for Online Learning (VPOL). As we develop new capabilities to enhance teaching and learning on our physical campus, we're sharing our work worldwide through publicly available courses, teaching strategies, and research findings on digitally-mediated instruction.

**COURSE DESIGN AND PRODUCTION**

The Office of the Vice Provost for Online Learning (VPOL) provides support to Stanford faculty and staff for course design and...

Stanford University

## Stanford Office of the Vice Provost for Online Learning

ABOUT ID & PEDAGOGY PLATFORMS PRODUCTION STANFORD ONLINE OPENEDX NEWS & EVENTS

Search this site...

### About VPOL

The Office of the Vice Provost for Online Learning (VPOL) advances faculty-driven online learning initiatives and research, providing exceptional educational...

### Meet the Vice Provost John Mitchell

### Getting Started

The Instructional Design & Pedagogy Team provides an array of services to assist faculty conceptualizing, designing, developing, and fixing their online and blended courses or projects.

### Platforms

The platform team evaluates and supports various online course delivery platforms. This group helps build OpenEdX, the next generation open source learning platform.

### Production

The production team in the Office of the Vice Provost for Online Learning (VPOL) offers a broad range of audio and video services to help faculty create multimedia content.

### OpenEdX

The Office of the Vice Provost for Online Learning (VPOL) supports OpenEdX as part of its commitment to advance creative teaching and learning practices and data-driven educational research.

OpenEdX is the open-source release of the edX platform developed by the non-profit organization founded by Harvard and MIT. In April 2013, Stanford and edX agreed to collaborate on future development of the edX platform.

In July 2013, the platform was released as open source for developers everywhere to use, improve, and share. Stanford engineers have contributed new functionality to the open source software, including real-time chat, bulk email, new installation scripts, operations tools and integration with external survey tools.

### Faculty Seed Grants

Each quarter, the Office of the Vice Provost for Online Learning offers funds to support design and development of innovative online and blended courses. The goals of these grants are to 1) promote innovative blended and online teaching approaches; 2) to assess the effectiveness of these teaching strategies; and 3) to gauge faculty interest in developing these courses. We encourage interested faculty to read the call for proposals and submit their proposals at least one quarter prior to the quarter in which they will offer the course.

online.stanford.edu  
lytics.stanford.edu  
vpol.stanford.edu

