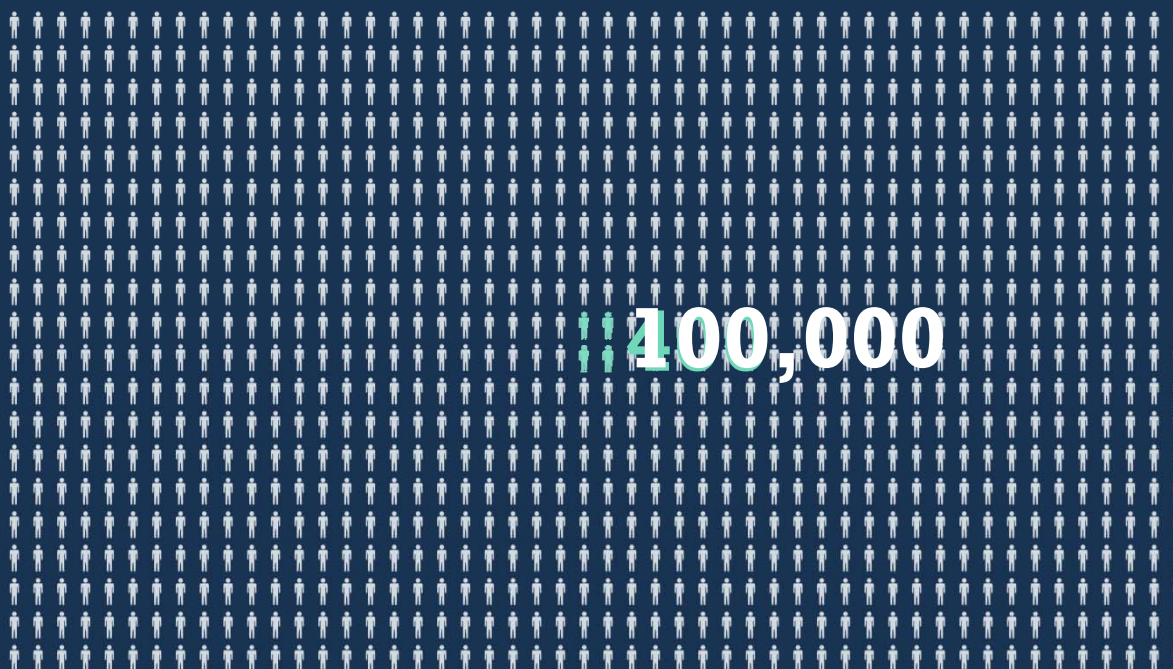




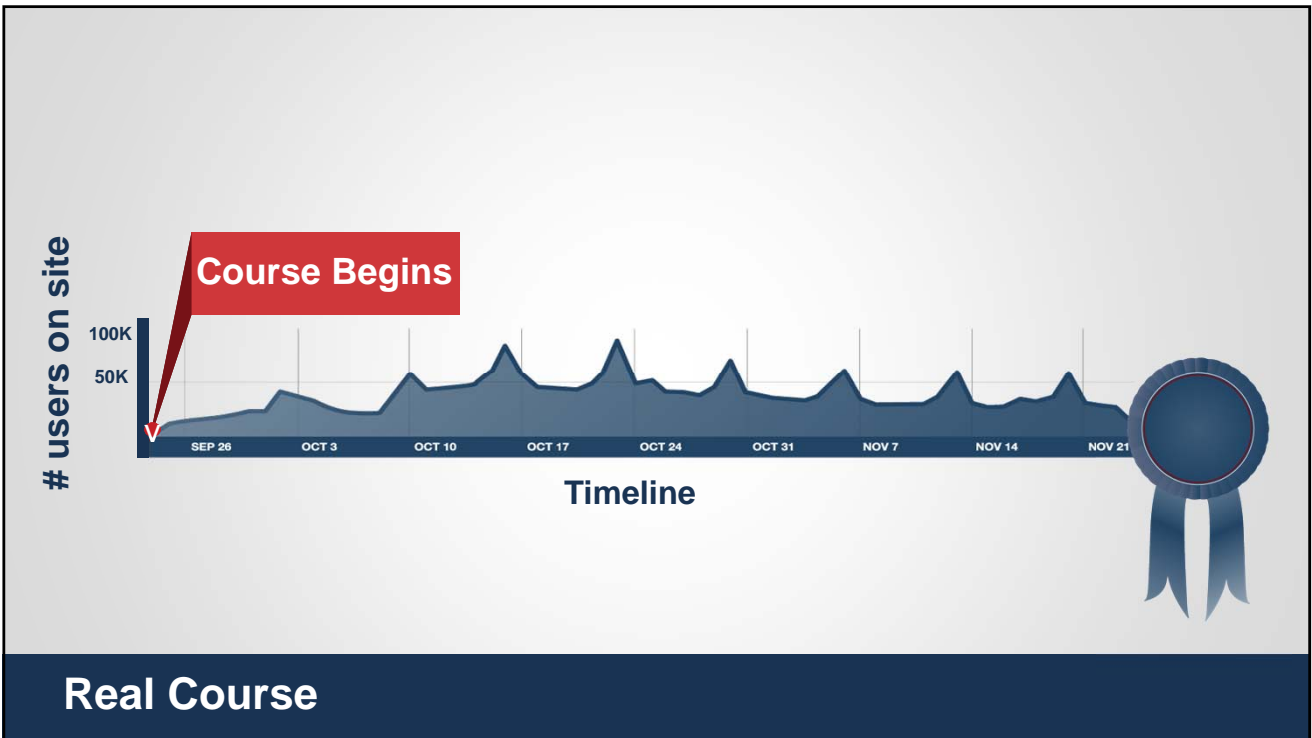
The Online Revolution: Education for Everyone

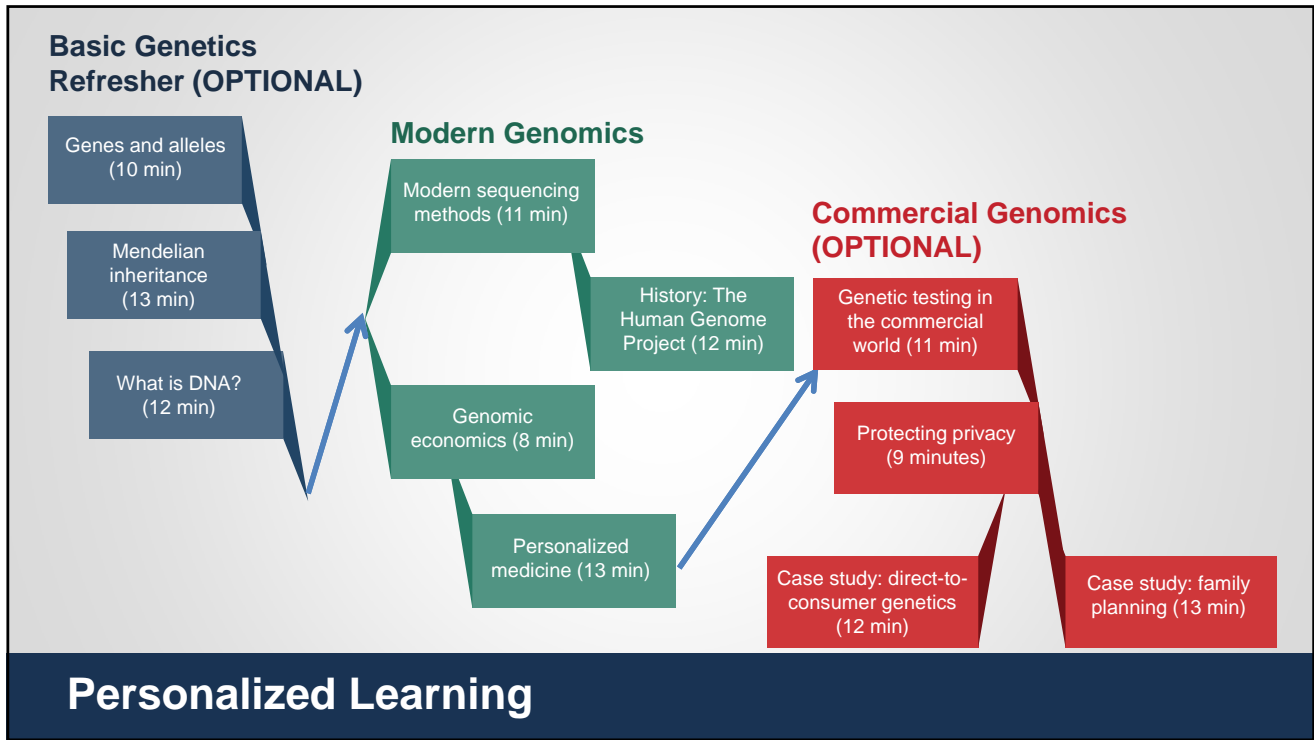
Daphne Koller & Andrew Ng
Stanford University & Coursera







I've started a database management internship, based partly on my knowledge I gained through your course...



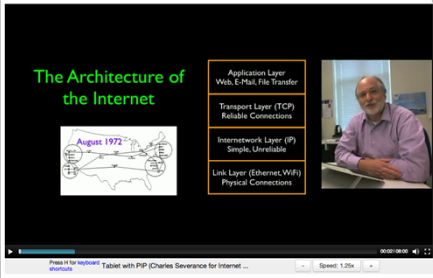




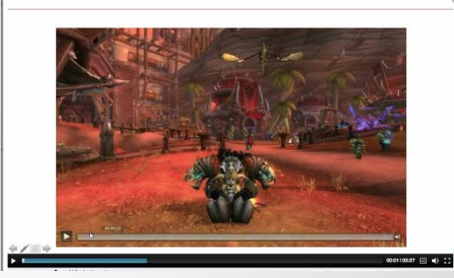
Sustainability



Health Policy and the Affordable Care Act



Internet History, Technology, and Security

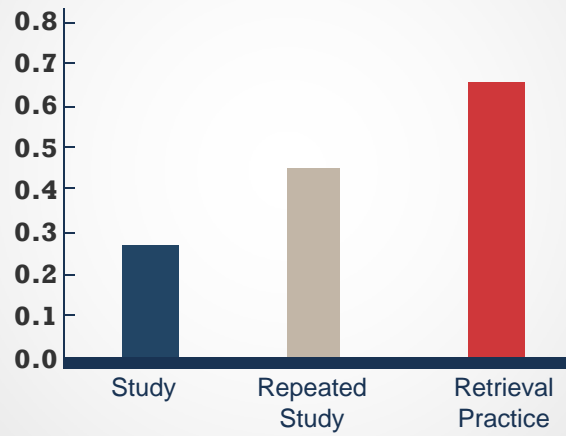


Gamification

Many Different Formats

Retrieval Practice Improves Learning

"Retrieval Practice Produces More Learning than Elaborative Studying with Concept Mapping."
J. Karpicke, J. Blunt. *Science* (2011).



Practice is Critical

Who discovered the theory of general relativity?

Albert Einstein

Submit

Question 1

What is the derivative of $\frac{\sin(x)}{x}$ w.r.t. x ?

$(x \cdot \cos(x) - \sin(x)) / x^2$

Preview

Your submission is equivalent to: $\frac{x \cos(x) - \sin(x)}{x^2}$

```
image = new SimpleImage("puzzle-copper.png");

for (pixel: image) {
    // your code here
    pixel.setRed(0);
    pixel.setGreen(pixel.getGreen() * 10);

    pixel.setBlue(pixel.getBlue() * 10);
}

print(image);
```

Run

	A	B	C	D
1		2012	2013	2014
2	Units sold	20,000	30,000	35,000
3	Revenue	400,000	600,000	700,000
4	COGS	100,000	150,000	175,000
5	Ad spend	30,000	40,000	40,000
6				
7	Distributor model			
8	Sales People	1	2	5
9	Dist. per sales person	3	5	8

Autograded Homeworks and Exercises



The key requirement of the project is that it is linked to multiple themes covered in the course. Beyond that, there is enormous flexibility. You might:

- Create a presentation for your local government
- Develop a policy plan for your place of work
- Write an article or textbook module
- Set-up a specialized wiki
- Formulate a lesson plan for students
- Make an interactive website
- Produce a miniature video documentary



I want to let you be as creative as possible with this project. If you have a different idea, share about it in the [Project Discussion](#) forum. While I can't approve every plan personally, it would be a good idea for you to run your idea by a few of your peers as they will ultimately be reviewing the project.

Creative, open-ended assignments

16
vote(s)

^

▼

In one of the questions, it is suggested that we "Use the unix command line utilities". How do I solve this on a non-unix OS? I have never worked with this, so I am at a complete loss what to do. Thanks in advance

Posted by _____ (Student)
on Wed 7 Mar 2012 6:41:09 PM PST

✎

🗑️

[Add New Comment](#)

Median response time: 22 minutes

Time (Oldest to Newest) Time (Newest to Oldest) Votes (Most to Least)

11
vote(s)

^

▼

If you want the true 'Unix experience', running a virtual machine is better than using cygwin / gnuwin, imo.

[Oracle VirtualBox](#) is great, and you can find many preconfigured virtual machine image on [Virtualboxes.org](#). Choose Ubuntu, if you are new to the linux world. That one also has Python 2.7 included, while many other distributions like Debian still have Python 2.6

Open a terminal window by entering 'terminal' in the dashboard. You can also install 'Guake Terminal', then you can always open and close a terminal by pressing F12.

Posted by _____ (Student)
on Thu 8 Mar 2012 4:59:24 AM PST

✎

🗑️

👤

🔍

31
vote(s)

^

▼

Assuming you're using windows, you can

- install cygwin, or
- install gnuwin32, or
- run live linux in virtualbox (e.g. ubuntu live cd)

Posted by _____ (Student)
on Wed 7 Mar 2012 7:40:21 PM PST

✎

🗑️

👤


🔍

[Add New Comment](#)

Coursera

Students


6



Modern and Contemporary American Poetry

(Posted via the peer assessment system)
 Student Author
 on Mon 8 Oct 2012 12:11:05 AM PDT
 on Mon 8 Oct 2012 12:11:05 AM PDT

vote(s) on Mon 8 Oct 2012 10:23:32 PM PDT

Thread Title / Original Poster	Last Post	Votes	Posts	Views
 Submission: A Pounding Student Author	Student Author 3 hours ago	41	60	872

Open discussion around assignments



1500 communities
1344 cities

Vietnam

Nigeria Miami

Russian Austin, Texas
speaking students

Minnesota

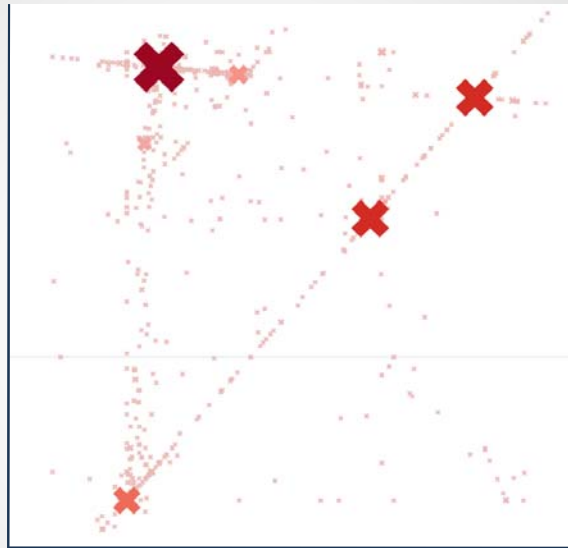
Guatemala Arabic speaking students

Athens Nepal Kenya

A multilingual universal study group

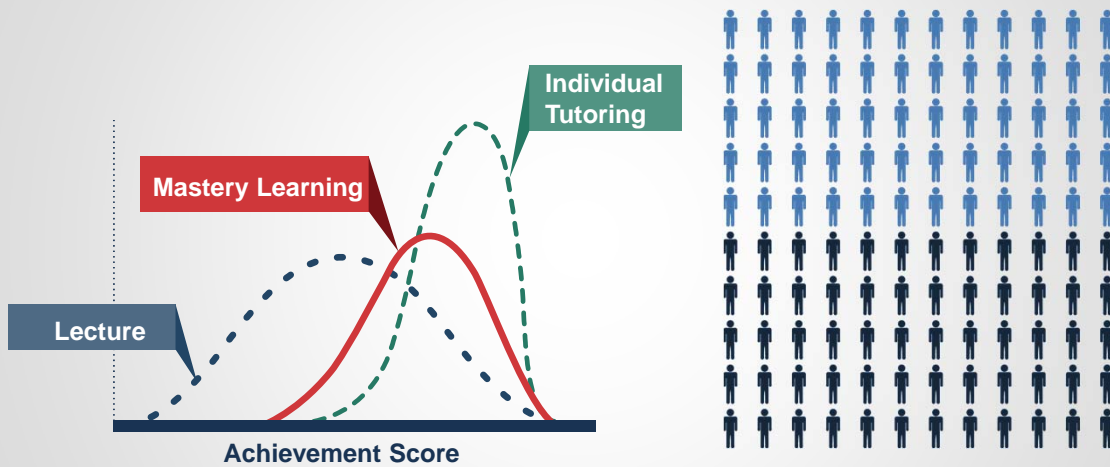
Student Study Groups

Wrong student answers



New Window into Human Learning

"The 2 Sigma Problem: The Search for Methods of Group Instruction as Effective as One-to-One Tutoring." *B. Bloom, Educational Researcher (1984).*



The 2 Sigma Problem

Discussion forum
196 countries
Video lectures
Community
6.5 million enrollments
Assessments



33 Universities

207 courses

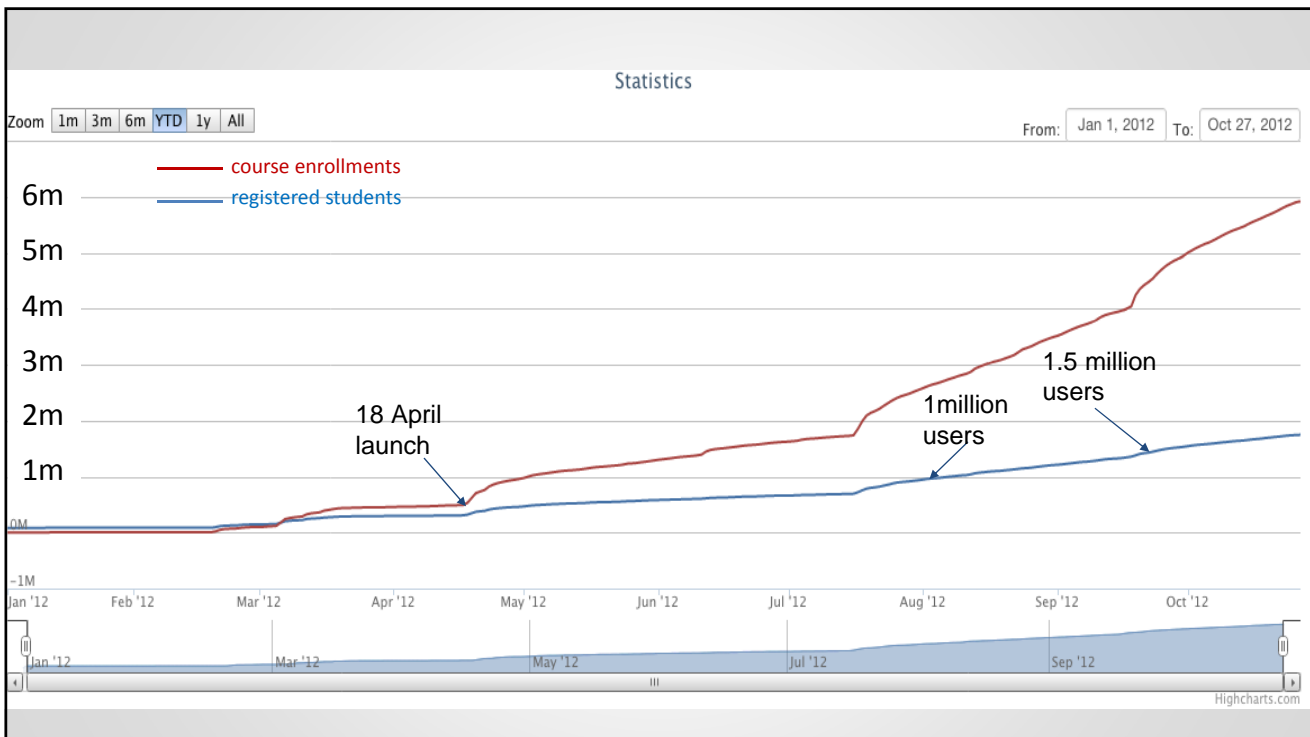
1.9 million students



Courses from Top Universities

	<p>UNIVERSITY OF MARYLAND, COLLEGE PARK</p> <p>E-learning and Digital Cultures Jeremy Knox, Sian Bayne, Hamish Macleod, Jen Ross, Christine Sinclair</p> <p>Jan 28th 2013 5 weeks long</p>
	<p>UNIVERSITY OF EDINBURGH</p> <p>Introduction to Philosophy Dave Ward, Duncan Pritchard, Michela Massimi, Sullin Lavelle, Matthew Chrisman, Allan Hazlett, Alasdair Richmond</p> <p>Jan 28th 2013 7 weeks long</p>
	<p>UNIVERSITY OF EDINBURGH</p> <p>The Social Context of Mental Health and Illness Charmaine Williams</p> <p>Jan 28th 2013 6 weeks long</p>
	<p>UNIVERSITY OF TORONTO</p> <p>Critical Thinking in Global Challenges Celine Caqueneau, Mayank Dutia</p> <p>Jan 28th 2013 5 weeks long</p>
	<p>UNIVERSITY OF EDINBURGH</p> <p>Introduction to Computer Networks Arvind Krishnamurthy, David Wetherall, John Zahorjan</p> <p>Jan 28th 2013 10 weeks long</p>
	<p>UNIVERSITY OF WASHINGTON</p> <p>Grow to Greatness: Smart Growth for Private Businesses, Part I Edward D. Hess</p> <p>Jan 28th 2013 5 weeks long</p>

The Humanities, Sciences, Engineering, Business,



“ College is a place where a professor’s lecture notes go straight to the students’ lecture notes, without passing through the brains of either. ”

—Edwin Emery Slosson

“ The mind is not a vessel that needs filling, but wood that needs igniting. ”

—Plutarch

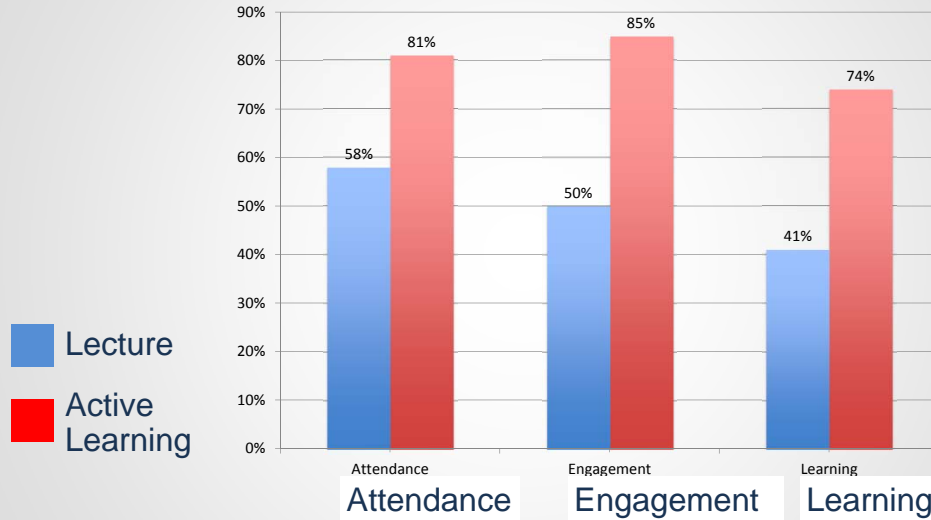
from Ian Kidd's translation of Essays

“ The mind is not a vessel that needs filling, but wood that needs igniting. ”

—Plutarch

from Ian Kidd's translation of Essays

"Improved Learning in a Large-Enrollment Physics Class."
 L. Deslauriers, E. Schelew, and C. Wieman. *Science* (2011).



Active Learning in the Classroom

Question 4

Plate Semantics. "Let A and B be random variables inside a common plate indexed by i . Which of the following statements must be true? You may select more than one option.

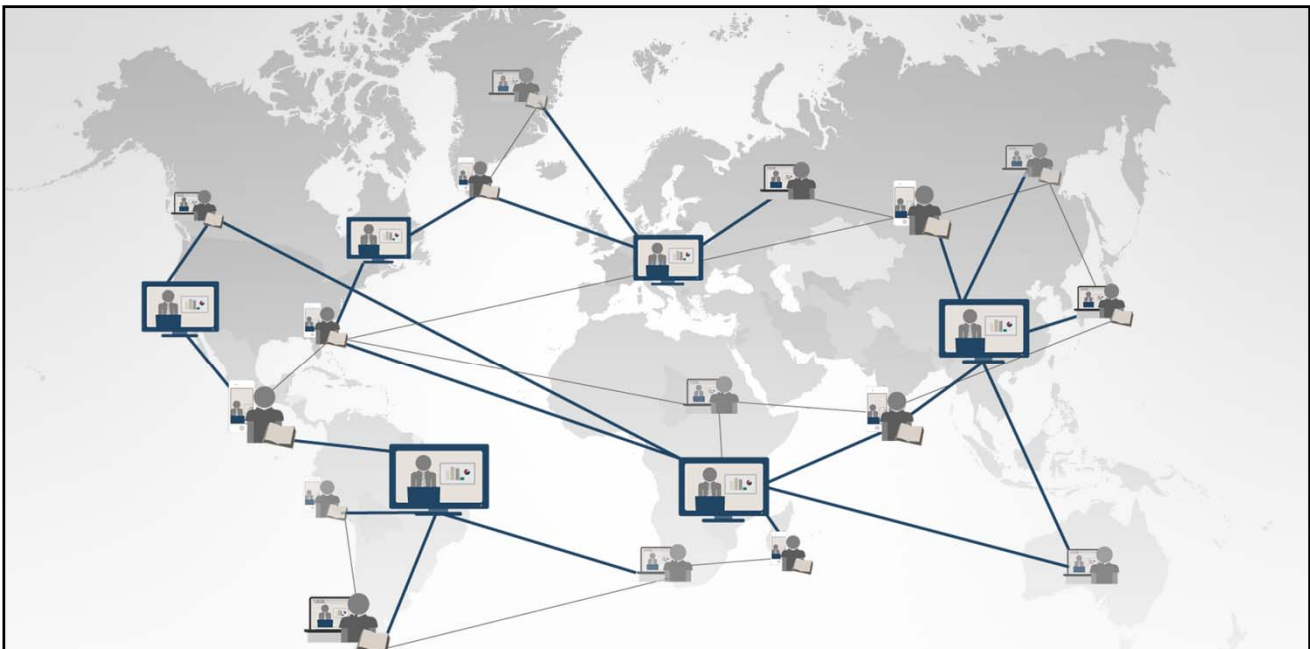
Option	Submissions	Progress
For each i , $A(i)$ and $B(i)$ have edges connecting them to the same variables outside of the plate.	33 / 143	<div style="width: 23%;"></div>
For each i , $A(i)$ and $B(i)$ have different CPDs.	10 / 143	<div style="width: 7%;"></div>
If there is an instance of A for some i , then there is no instance of B for that i .	0 / 155	<div style="width: 0%;"></div>
For each i , $A(i)$ and $B(i)$ have the same CPDs.	28 / 151	<div style="width: 18%;"></div>
There is an instance of A and an instance of B for every i .	291 / 301	<div style="width: 97%;"></div>
For each i , $A(i)$ and $B(i)$ are not independent.	5 / 162	<div style="width: 3%;"></div>
For each i , $A(i)$ and $B(i)$ are independent.	12 / 149	<div style="width: 8%;"></div>

- Just-in-time teaching
- Real-world case studies
- Team problem solving

Active learning in the classroom

- Using courses taken online
 - Risk-free exploration allows informed choices
 - Reduced course load to completion
 - Increase completion rate, reduce completion time
- Online courses in on-campus instruction
 - Decrease costs via online or blended learning
 - Reduce constraints on section sizes
 - Increase breadth of offerings at smaller schools

The best of both worlds



Universal Access to Education