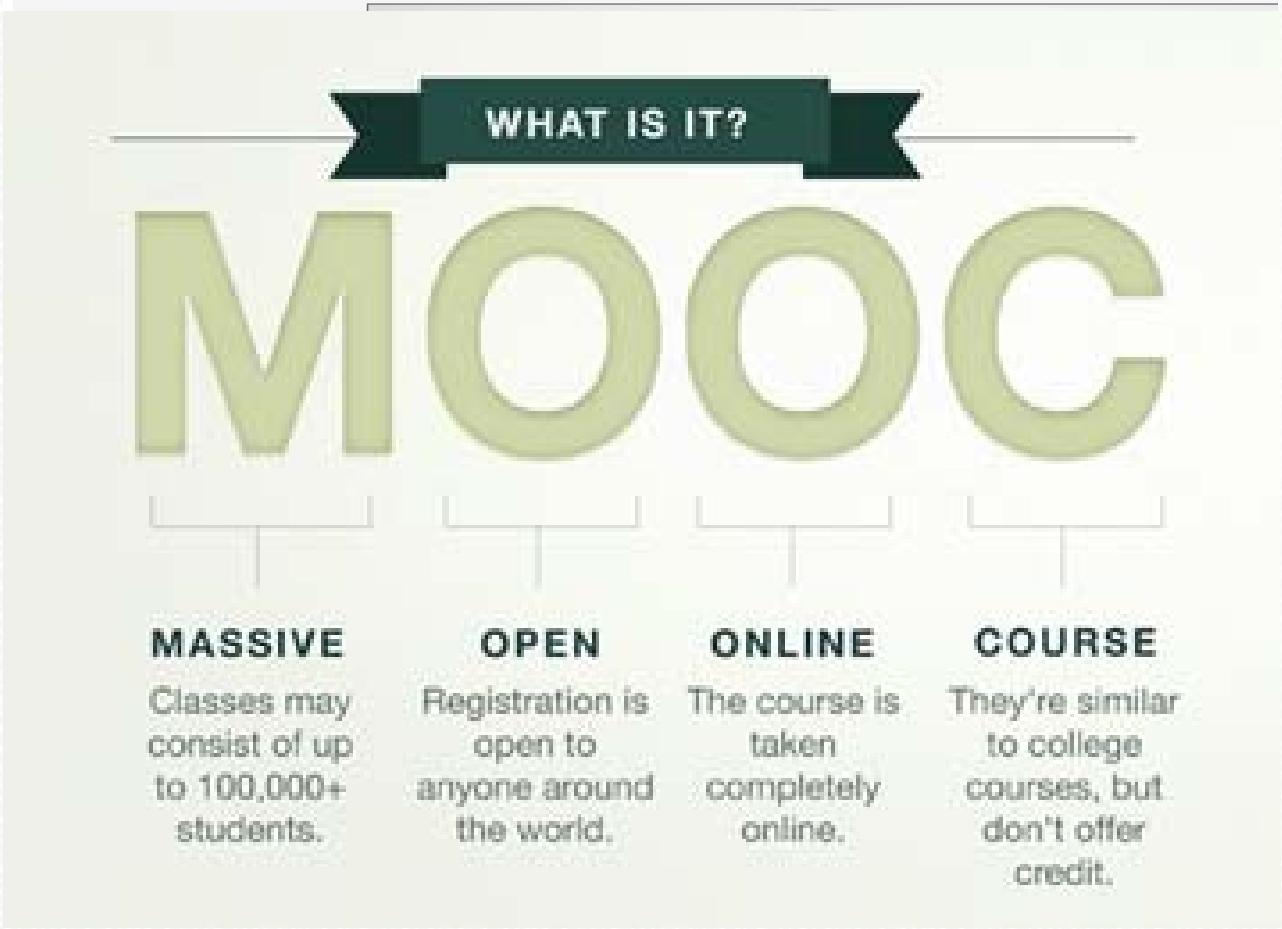
UNIVERSITY OF TORONTO

TECHNOLOGY & LEARNING

Governing Council Presentation

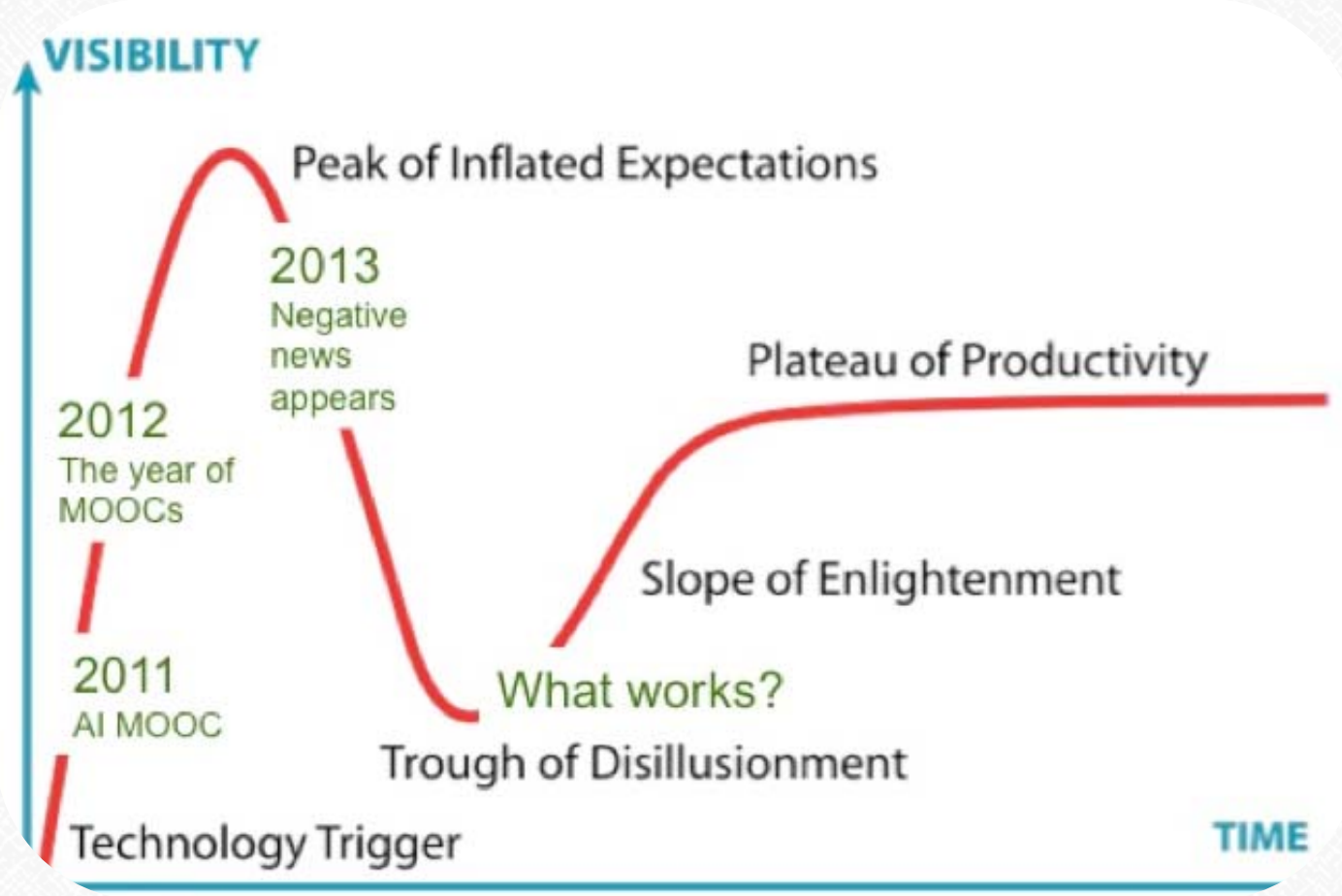
May 20, 2015

Vivek Goel – Vice President, Research and Innovation
Susan McCahan - Vice Provost, Innovations in Undergraduate Education
University of Toronto

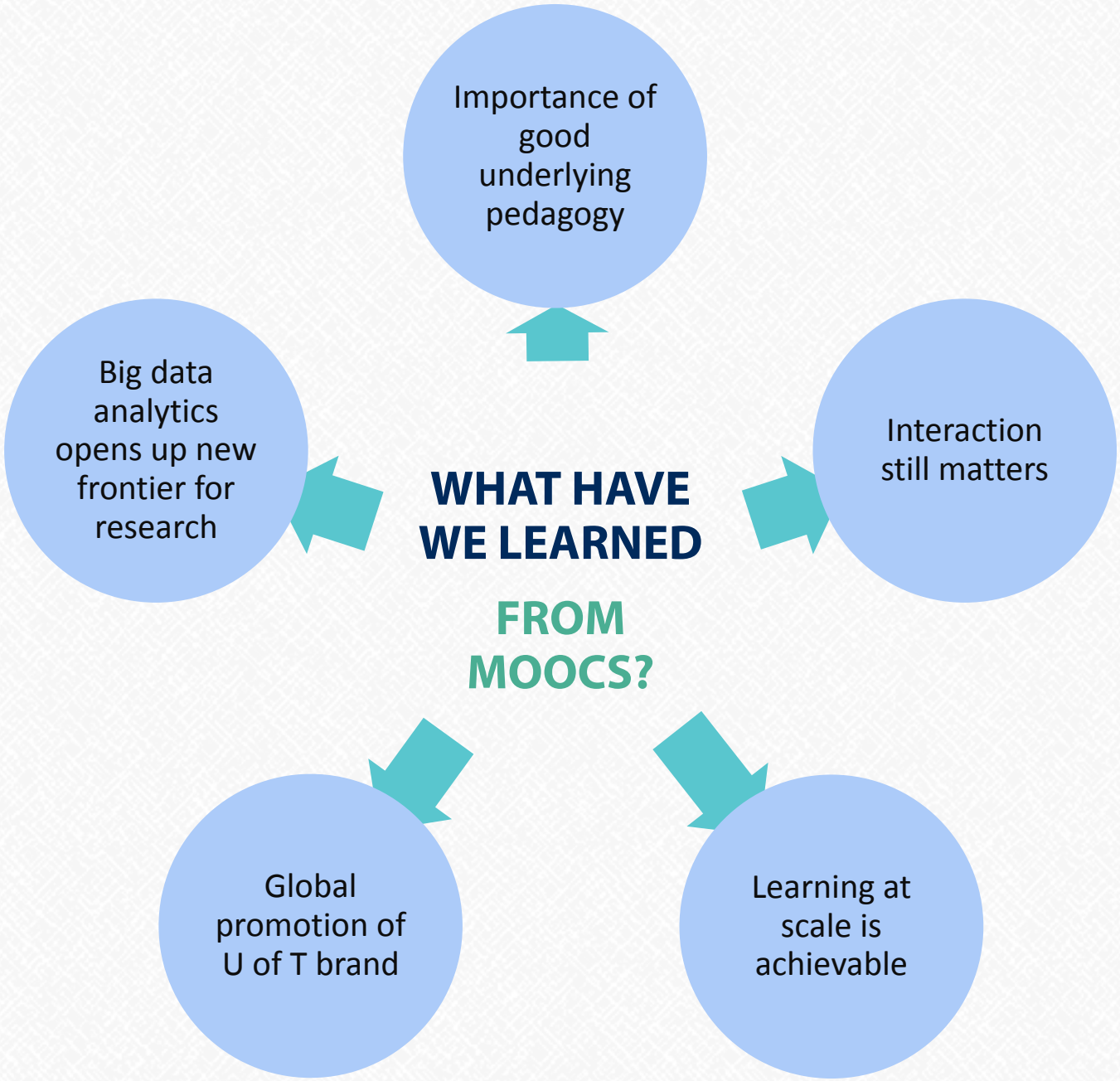

WHAT IS IT?
MOOC
MASSIVE
Classes may consist of up to 100,000+ students.
OPEN
Registration is open to anyone around the world.
ONLINE
The course is taken completely online.
COURSE
They're similar to college courses, but don't offer credit.

MOOCS

GARTNER HYPE CYCLE

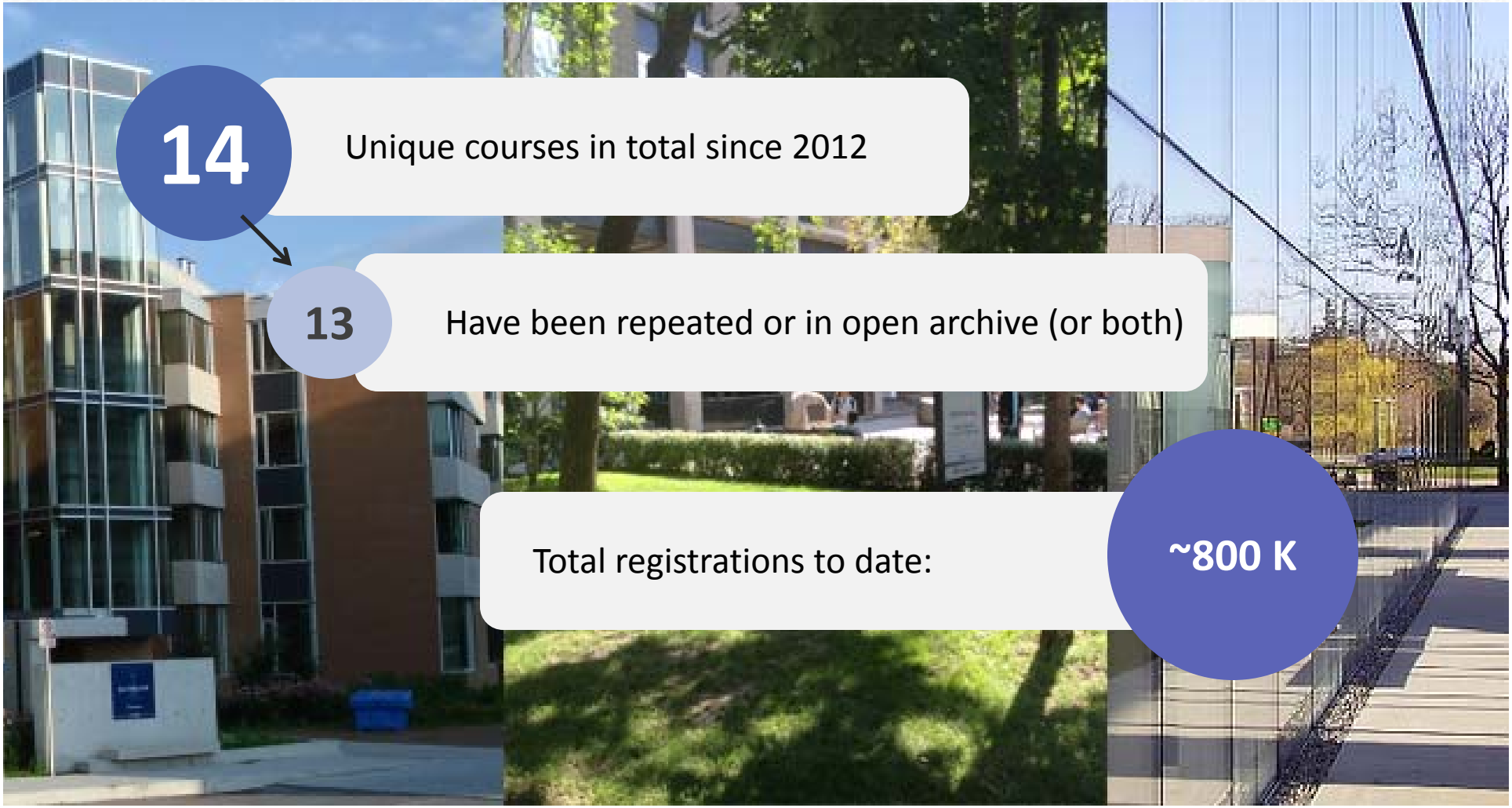


L Yuan, 2013


Importance of good underlying pedagogy
Big data analytics opens up new frontier for research
Interaction still matters
WHAT HAVE WE LEARNED FROM MOOCS?
Global promotion of U of T brand
Learning at scale is achievable

MOOCS AT THE UNIVERSITY

U of T MOOCS BY THE NUMBERS:

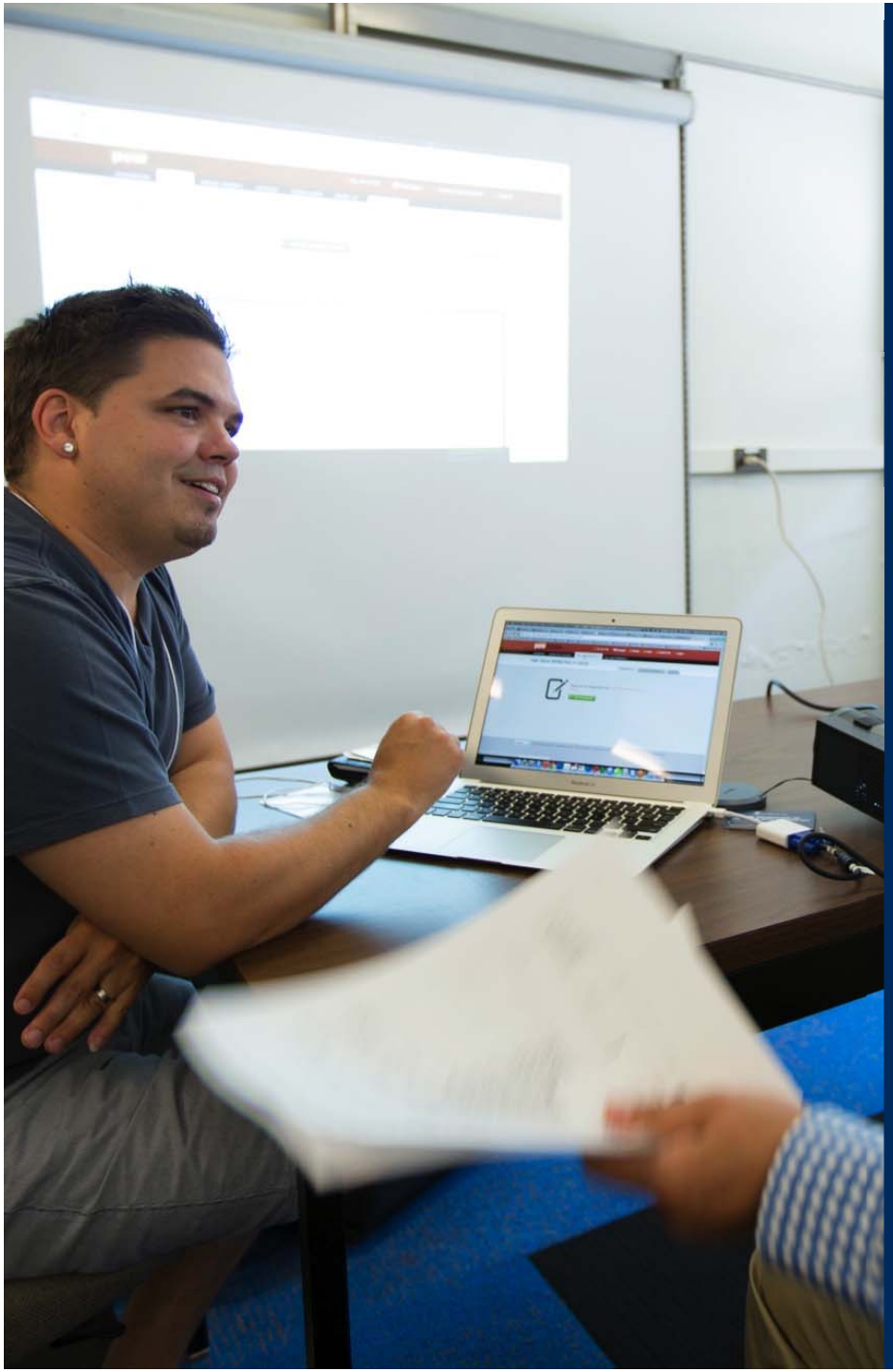


MOOC Directions

- This year we are renewing our contracts with edX and Coursera

FUTURE DIRECTIONS

- On-demand courses that do not have a start and end date
- Verified certificate option



Introduction to Computer Programming

MECHANICS

Calculus for Engineers I & II

Molecular Biology, Biotechnology & You

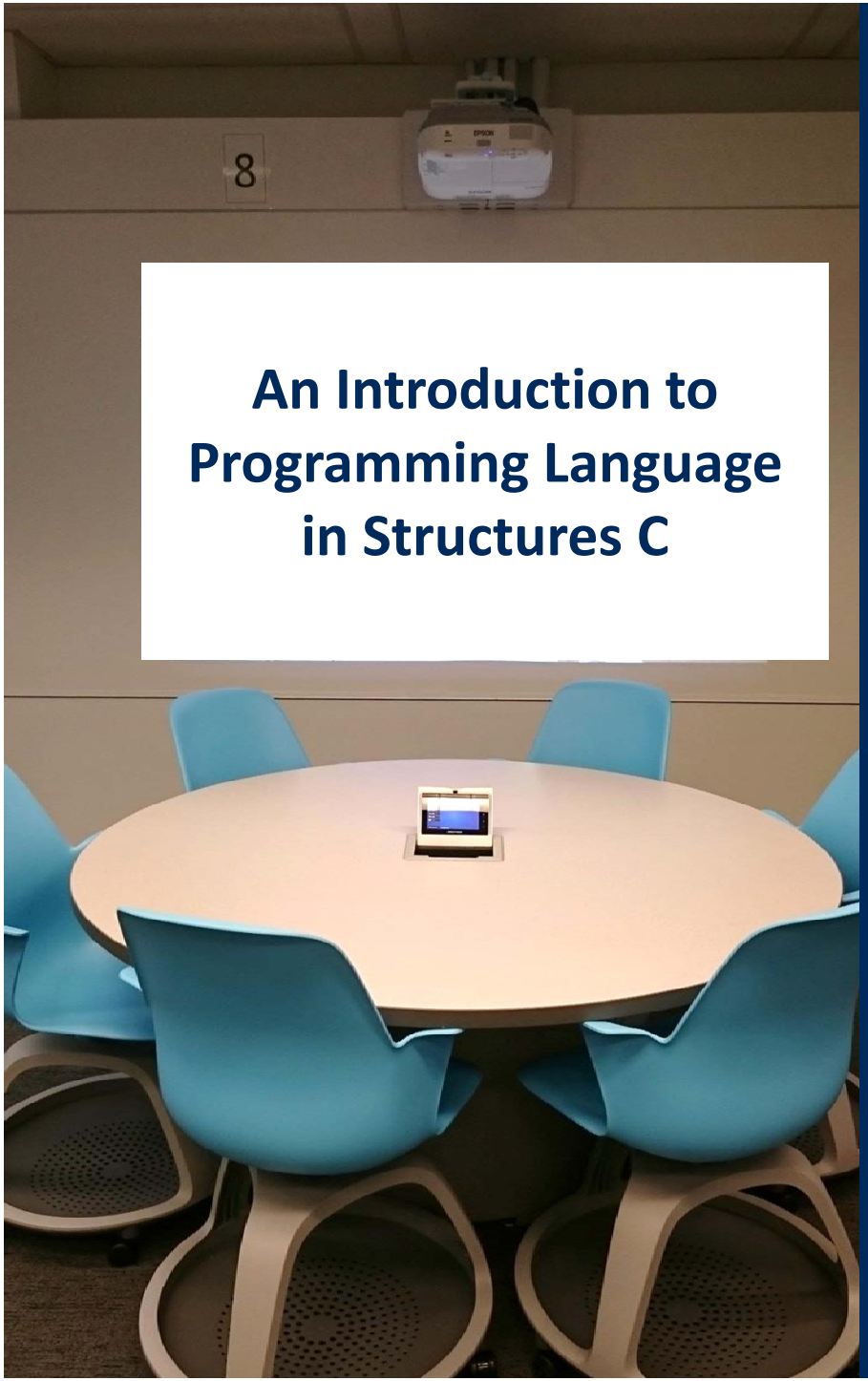
Ontario Shared Online Course Fund

Geographic Information and Mapping I

ENGLISH GRAMMAR

Introductory Chemistry from a Materials Perspective

Introduction to Neuroscience

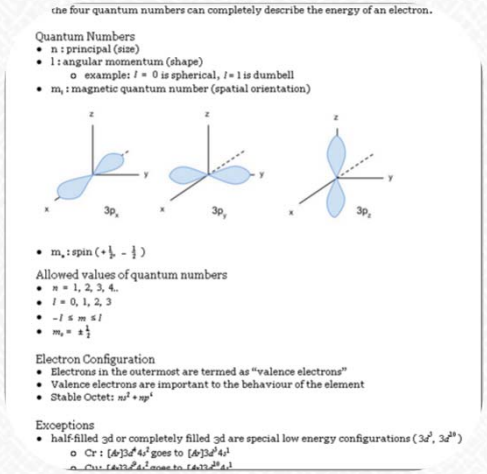


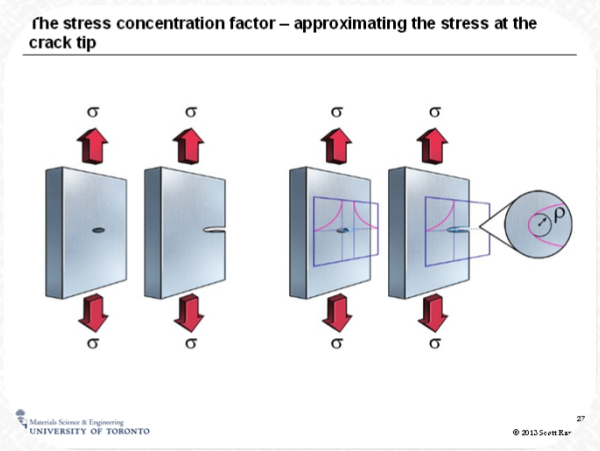
An Introduction to Programming Language in Structures C

Ontario Shared Online Course Fund

LEARNING MODULE SETS

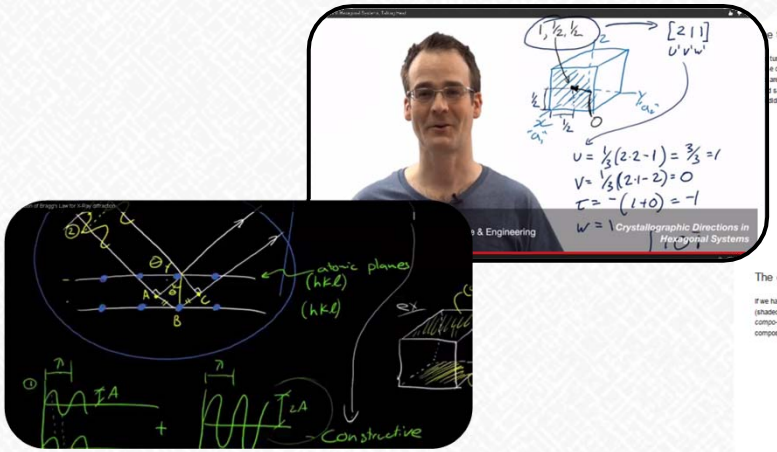
REUSABLE LEARNING OBJECTS (RLOs)

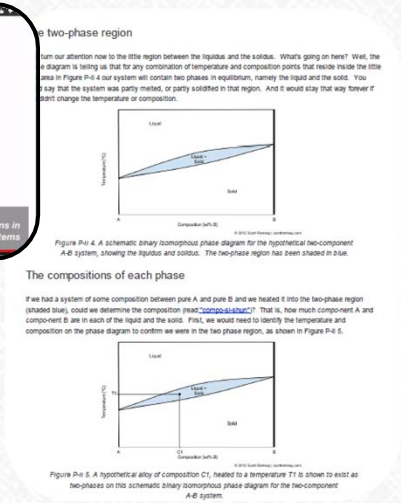




Instructor RLOs

- Lecture slides & teaching guides
- Lecture demonstrations



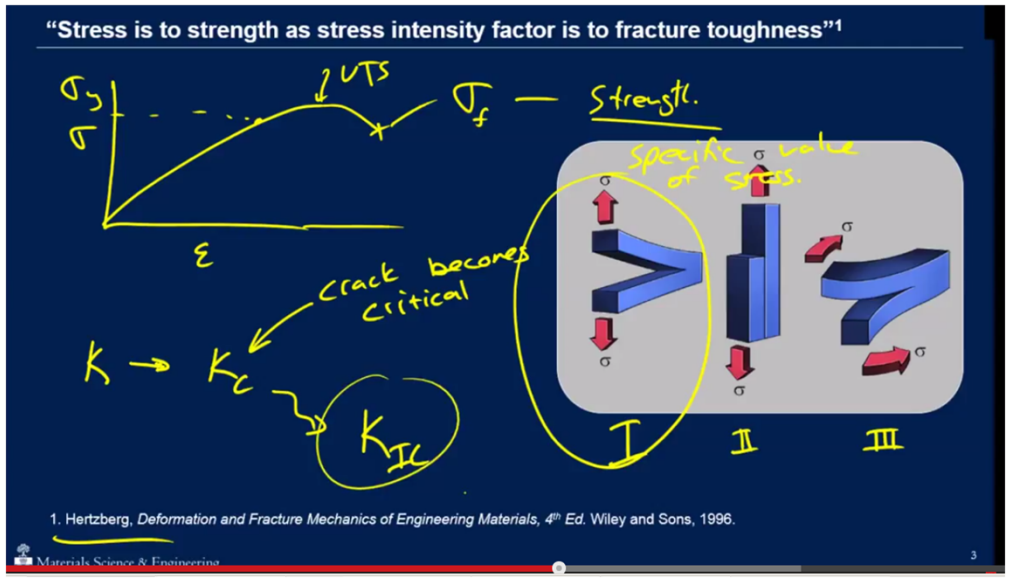


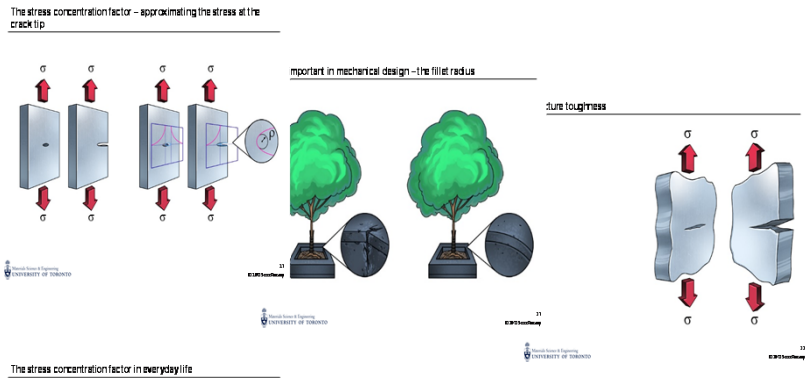
Student RLOs

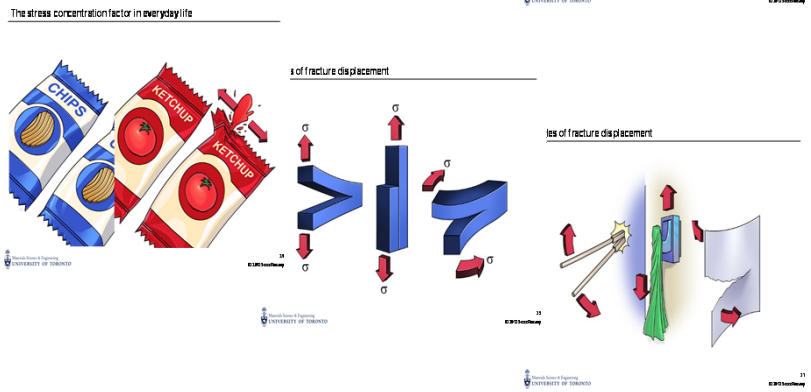
- Online videos: lectures, examples, demos
- Assignments: traditional or online
- Assessment instruments

Objects can be used to research student preferences:

Do students prefer PowerPoint slides with voice over or handwritten explanation?







ONLINE PROJECTS OFTEN BUILD FROM ONE TYPE TO ANOTHER

Example 1

Statistics (Alison Gibbs):

MOOC

INVERTED CLASSROOM

LEARNING MODULES

ONLINE COURSE

Example 2

Psychology (Steve Joordens):

ONLINE COURSE

MOOC

ALOR (MTCU Funding)

LEARNING MODULES

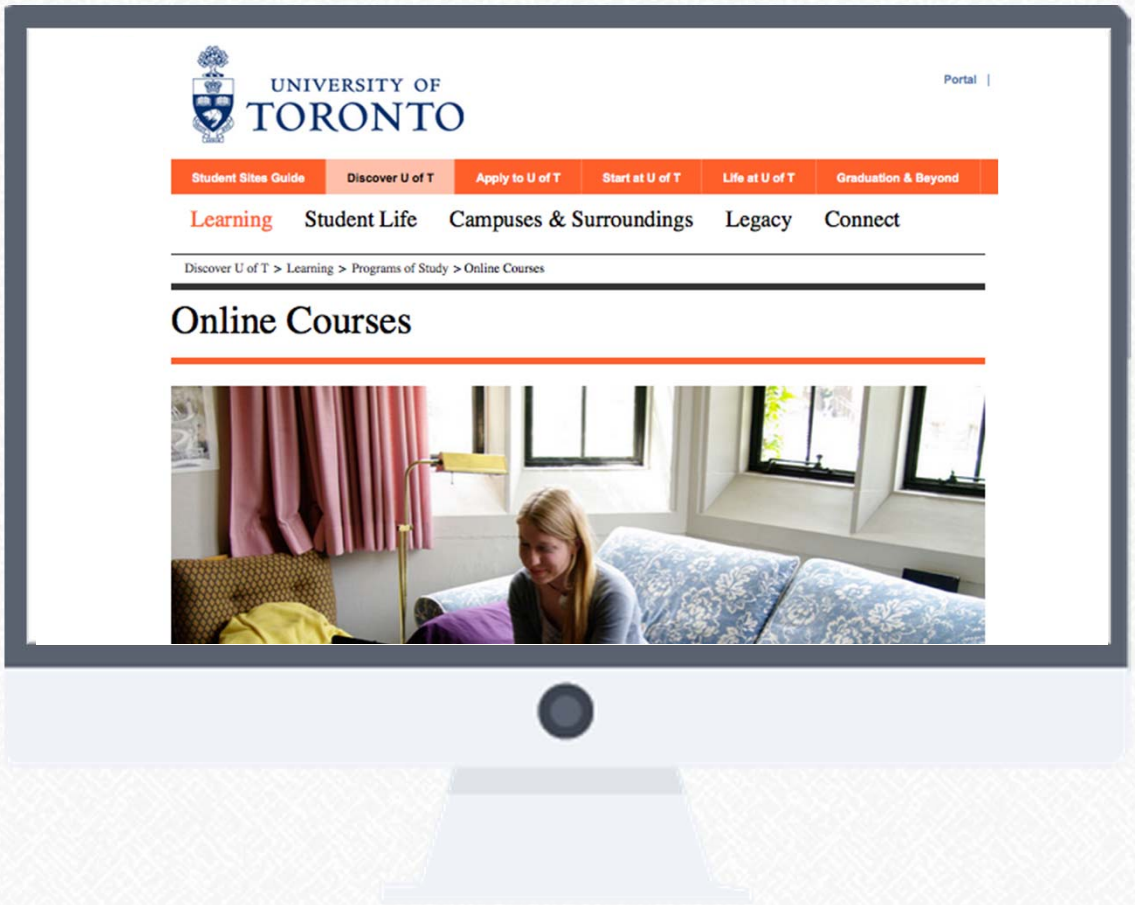
Example 3

Materials Science (Scott Ramsay):

ALOR (MTCU Funding)

LEARNING MODULES

ONLINE COURSE & MOOC (in development)


UNIVERSITY OF
TORONTO
Portal |
Student Sites Guide
Discover U of T
Apply to U of T
Start at U of T
Life at U of T
Graduation & Beyond
Learning
Student Life
Campuses & Surroundings
Legacy
Connect
Discover U of T > Learning > Programs of Study > Online Courses
Online Courses

ONLINE COURSES
AT THE UNIVERSITY OF TORONTO

umber of Courses			
	UNDERGRAD	GRAD	TOTAL
Asynchronous	26	54	80
Synchronous	3	11	14
Grand Total	29	65	94

Number of Registrations			
	UNDERGRAD	GRAD	TOTAL
Asynchronous	4425	1641	6066
Synchronous	128	114	242
Grand Total	4553	1755	6308

THE USE OF EDUCATIONAL TECHNOLOGY *(ED TECH)*

LEARNING MANAGEMENT SYSTEM (LMS) USE:

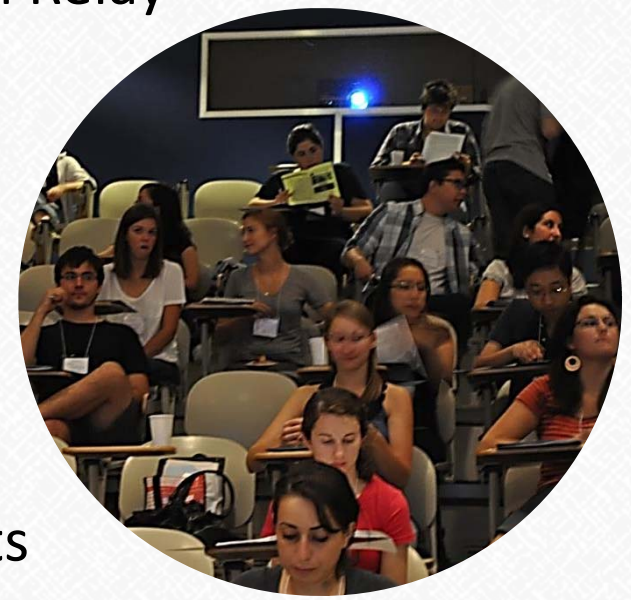
- Every course is supported with an LMS website
- Substantial **mobile** use: **98,436** unique LMS mobile users
- Substantial **library** use: **~270,000** student views of library resources page through the LMS

Data is over the last 3 years

THE USE OF EDUCATIONAL TECHNOLOGY *(ED TECH)*

LECTURE CAPTURE IS GROWING.

- We use **three systems**: Echo360, Techsmith Relay and MyMedia (hosting)
- 652 Echo video uploaders
  – 19,404 active students on Echo360
- 434 TechSmith Relay Users
  – 1708 recordings this year
- 1,240 faculty/staff MyMedia video accounts
  – 3,416 Student Accounts

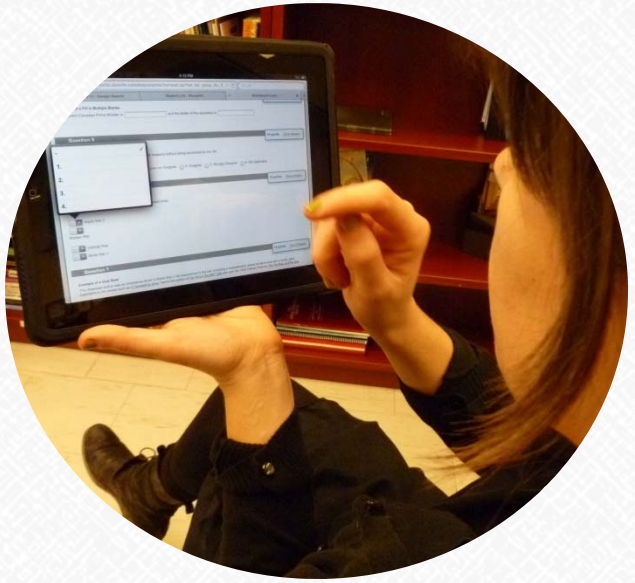


Data is over the last 3 years

THE USE OF EDUCATIONAL TECHNOLOGY *(ED TECH)*

GROWING USE OF ONLINE COLLABORATION TOOLS FOR TEACHING

- **28,981** Unique Collaborate Webinar attendees
- **7,221** Collaborate Virtual Rooms Used



Data is over the last 3 years

WHAT'S HAPPENING IN ED TECH

AT THE UNIVERSITY OF TORONTO

Review of the current **educational technology suite**

Review of the current **learning management system**

Development of **protocol for quickly adopting important new technologies** as they emerge

Vivek Goel – Vice President, Research and Innovation
vivek.goel@utoronto.ca

Susan McCahan – Vice Provost, Innovations in Undergraduate Education
susan.mccahan@utoronto.ca

UNIVERSITY OF TORONTO