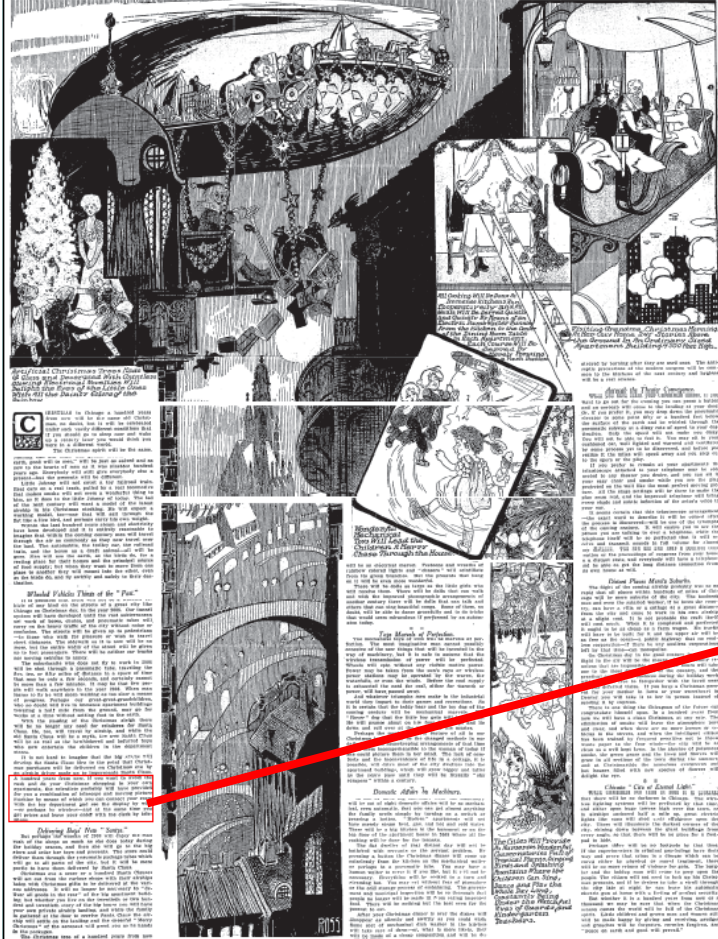Dr. Patrick Duparcq, Dean
Graduate School of Business
Nazarbayev University

Technology Disruptions: Content, Context, and Community in tomorrow's Educational Landscape

Chicago Daily Tribune,
"How Christmas Will Be Celebrated a Hundred Years From Now",
December 20, **1908**; pg. F3.

A hundred years from now, if you wish to avoid the rush and do your Christmas shopping in your own apartments, the scientists probably will have provided for you a combination of the telescope and moving picture machine by means of which you can connect your room with the toy department and see the display by wire - or perhaps by wireless - and at the same time you get prices and leave your order with the clerk by telephone.
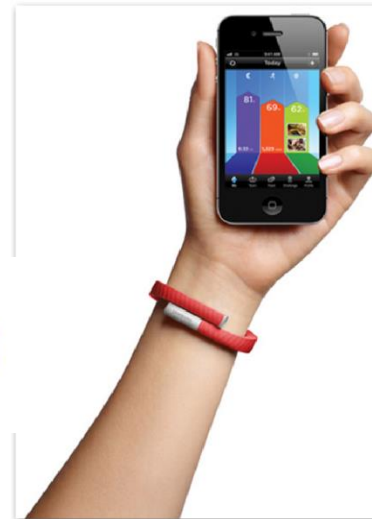
It's a crowded complicated world …

Evaluating The Potential of Technology

History	Conventional Wisdom at Introduction
Cars	Smelly noisy machines for rich people
Phone	Why would you want to talk over a wire
Radio	A toy for hobbyists
TV	No one will watch a box for hours
Computers	The world market for computers = 5
Internet	Will always remain a niche for college kids
What's Next?	
Smartphones	Gadgets – just need a good phone.
Twitter	Who needs constant updates?
Facebook	Just for the kids? Privacy Concerns?
3D-Printing	A niche tools for toys and technologists

All have changed our lives and how we work

?

Important Questions to Ponder

1. Do we really face a significant disruption?
   (Substitution – Scale – Structural Effects)
   Where are educational changes so far?
2. Where is most value created in education? Will it Shift?
   (Content – Context – Community)
3. Conclusions

IS EDUCATION ABOUT TO BE DISRUPTED ??

SUBSTITUTION (1-2 X)

SCALE (10 X)

STRUCTURAL (100 X)

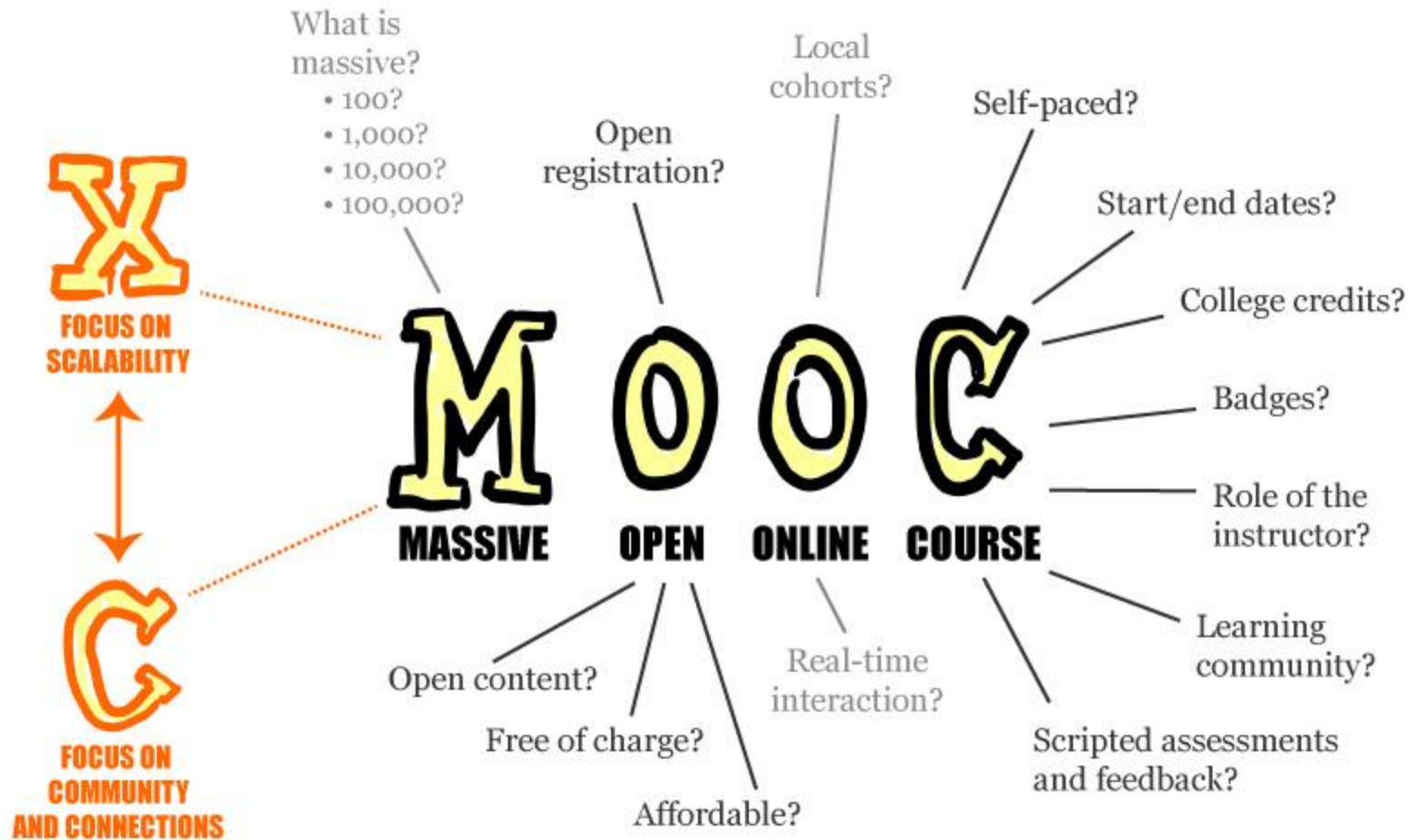— Only the Paranoid Survive, Andrew S. Grove, 1996

SUBSTITUTION (1-2 X)

SAME FUNCTION, NEW TECH, SMALL SCALE:

- Books ➔ eBooks, Tablets
- Classroom ➔ MOOCs
- 1 graph ➔ Simulation
- 1 prototype ➔ 3D printing
- Describe ➔ Virtual Reality

At this moment:
- Mostly "Coolness" factor
- Little overall impact
- Often costly at first

MOOC poster April 4, 2013 by Mathieu Plourde licensed CC-BY on Flickr

MOOCS in Numbers:

- Over 4000 courses in 2016
- Largest platform (Coursera): 11million users
- The largest MOOC course is offered by UC San Diego and has a total enrollment of 1,192,697. It's title: "Learning how to learn"
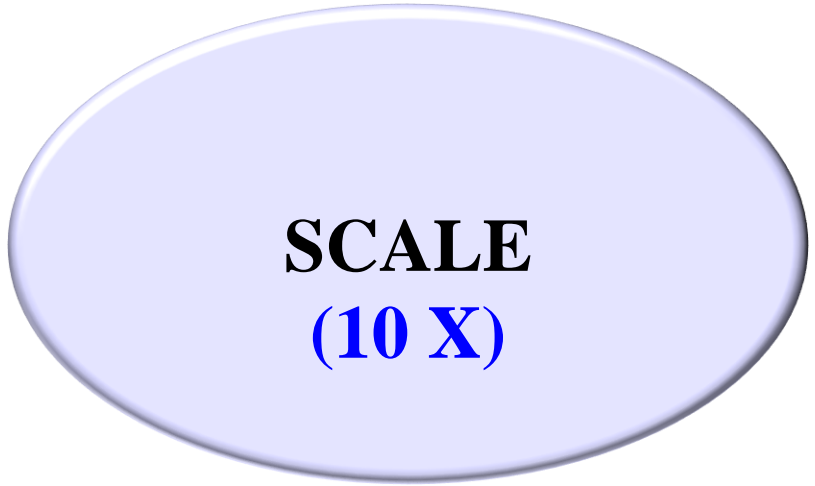
TECHNOLGIES WITH SCALE IN EDUCATION

SAME FUNCTION, NEW TECH, MASSIVE SCALE:

- Library ➔ Online Search
- Blackboard ➔ Powerpoint
- Handouts ➔ Course Portal
- Class vs online participation
- Tutoring vs CrowdLearning

At this moment:
- Widely used
- Increase Knowledge & Impact
- Reduce costs (time/money)

**SCALE
(10 X)**

STRUCTURAL CHANGES IN EDUCATION

DO ENTIRELY NEW THINGS: Who does What, Where, When?

- Redefining content of course materials
- Allowing students to self-select (online vs. class)
- Teach students over a lifetime (not 1 course long)
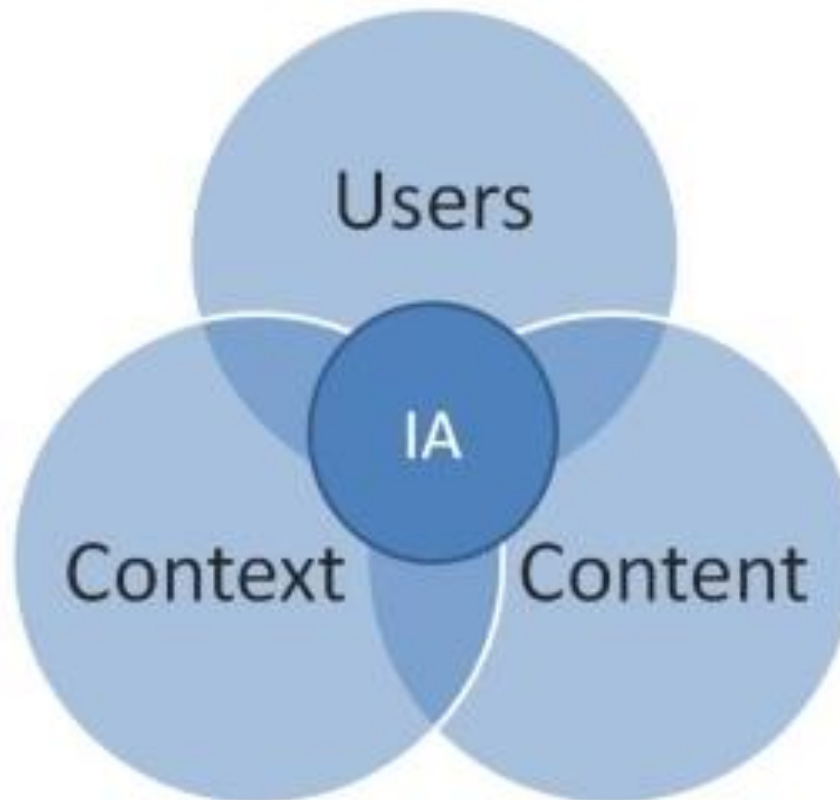- Feedback loop to knowledge creation

DISRUPTION

STRUCTURAL (100 X)

DISRUPTION

Technology will likely change our environment a lot. Where are these changes most likely to occur?

CONTENT: Content Selection and Content Creation

- Has our new environment changed <u>what</u> we should teach?
- Less focus on memory
- More focus on lifelong learning
- Educators need to be knowledge curators as much as knowledge broadcasters
- Shift from data acquisition (knowledge) to data processing (analysis)

Every course becomes a life-long resource

Marketing Management
Professor Duparcq

Global Marketing
Professor Duparcq

Internet Marketing
Professor Duparcq

Mobile Marketing
Professor Duparcq
THE GROWTH OF MOBILE COMMERCE

Product Management
Professor Duparcq

Tech Consulting
Professor Duparcq

Financial M
Professor D

CLICK HERE TO OPEN

Courses Bookshelf
G L O B A L   M A R K E T I N G ▼
Lectures/Topics:5/10wks
Course Materials
> Course Syllabus
> Cases & Readings
> Classnotes / Slides

C O M M U N I T Y ▼
Connect/Contact me
Course Photos
Collaboration Portal

R E S O U R C E S ▼
☑ Links: Global Marketing
☑ Databases: Global
☑ Indicators: Global
- - - - - - - - - - - - - - - -
☑ Emerging Markets
☑ Country Statistics
- - - - - - - - - - - - - - - -
☑ Data - Rankings
☑ Data - United Nations
- - - - - - - - - - - - - - - -
☑ = requires internet

READ MORE (21)

Video Materials:
- Concept Experts on Branding:
  - ➡ David Aaker, How Brand Relevance Makes Competitors Irrelevant + Q&A
  - ➡ NameQuest: Global Brand Naming (view more videos on YouTube)
- Branding Advertising Examples:
  - ➡ British Airways: (1983,Manhattan), (1989,Lips), (1992,Island), (2005,India), (2007,Australia), (2011,To Fly To Serve)
  - ➡ Apple: (**1984**,1984), (**1997**,Think Different: Here's to the crazy ones), (**2011**,This is what we believe)

Online Links:
- Journals, Magazines, Books, Industry Associations, Blogs and Portals:
  [Journals, Magazines, and Books]
  International Journal of Advertising
  International Journal of Internet Marketing and Advertising
  Journal of Brand Management
  Journal of Product & Brand Management
  Place Branding and Public Diplomacy
  Global Brands Magazine
  [Institutes & Associations]
  Centre For Nation Branding
  Brand Science Institute
  The Chartered Institute of Marketing
  World Association of Newspapers and News Publishers
  World Federation of Advertisers
  [Blogs and Portals]
  World Advertising Research Center
  Global Brand Blog

CONTEXT: Context Creation and Knowledge Transfer

Traditional Context - Forced

- Depository of Knowledge: Books
- Facilitate Transfer & Illustrate: Instructor
- Facilitating Technology: Blackboard, Powerpoint

Current and Future Context - Choice:

- Depository of Knowledge: Books, eBooks, Content Portals, Digitized off-line content, Online Encyclopedias, databases
- Facilitate Transfer & Illustrate: Instructor, MOOCs, Online Video (YouTube), learning communities, education marketplaces, semantic search
- Facilitating Technology: Simulations, Virtual Reality, Augmented Reality, 3D-Printing, Personalization

Khan Academy (bite-size modules, easy to combine) has over 5,000 courses with resources for students and teachers

An Australian Business school makes learning "platform agnostic": students can decide themselves whether they come to class, learn online, or pick-and-choose according to the topic of the class.

Artificial Intelligence and robot teachers

UC Irvine School of Medicine and Queen Mary University London are integrating Google Glass into their curriculum

(anatomy courses and clinical skills training to third- and fourth-year hospital rotation)

New Education Marketplace, Wisewire, Opens Doors

Feb 3, 2016

GRAND OPENING: <u>Wisewire</u>, a startup based in Washington, DC, is launching a platform for learning resources and assessments. Its marketplace has been pre-populated with 50,000 learning objects, playlists and teaching guides that focus on middle and high-school math, science and language arts topics. Educators can freely browse the website and search for free and paid content specific to their class and academic standards.
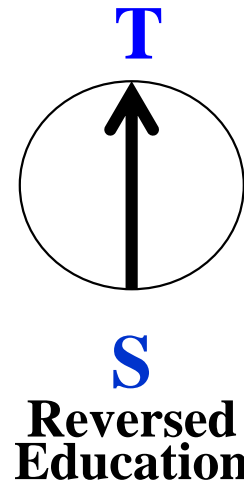
Education has mostly always been a community-based activity (on a small scale); will a hyper-connected world provide challenges as well as opportunities?
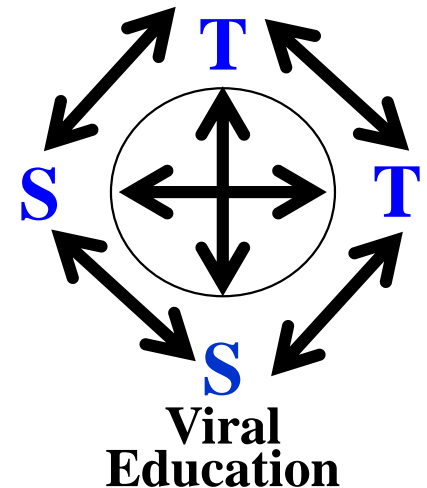

Relationship Learning

Transactional Education

Reversed Education

Viral Education
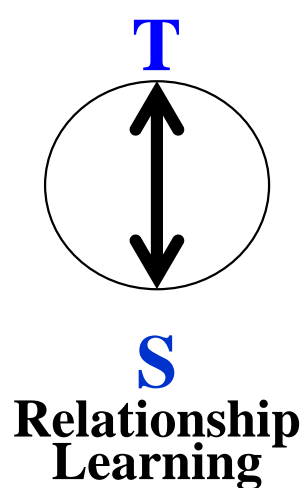
Plato Socrates
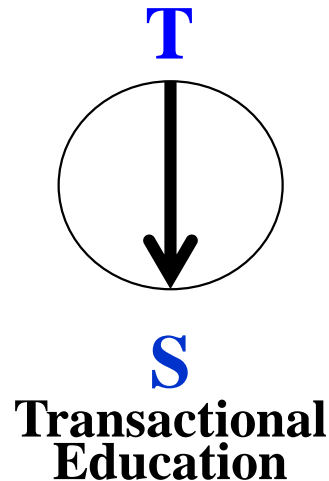
Traditional Schools

Self Education

Future Education

Multiplicity of platforms:

Computers, Smartphones, Tablets, Game Consoles, TV's

Scalability & Super-granularity:

Reach each student with insight and a relevant learning plan

Connectivity:

Everyone, Anytime (24/7), Anywhere, Any platform

Integration:

Of student insights across platforms and applications

Leading To

Superior Student Learning

- **Content is no longer King** (but it is the Kingdom!). The internet made the phrase "I don't know" obsolete.

- **Content processing will dominate content delivery in the education value chain.** Value creation will shift away from mostly content delivery to mostly content curation, creativity, analysis, and innovation.

- **Crowd-Learning will dominate single-source learning.** Value delivery will shift from the traditional 1-to-few to **"crowd-learning"**

CONCLUSIONS

- **Digital Platforms will dominate in-person platforms**, many-to-many, globally available, and in a blended bundle of formats chosen by students (in person, in video, virtual reality, online, mobile)

- **Education will be "democratized":** Everyone can learn almost anything, irrespective of location, materials means, language, or proximity of educational institutions.

Download Presentation
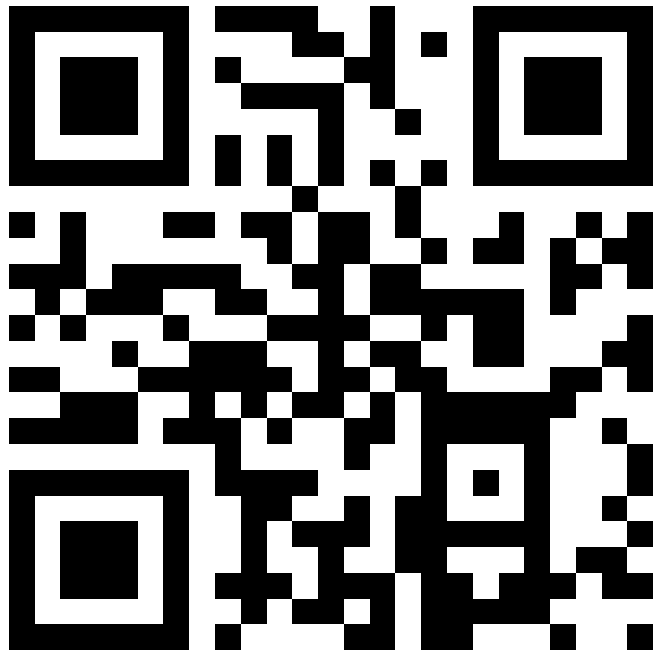
goo.gl/RGlXKU

Connect on Linkedin

goo.gl/yXg8rO