

EdTech Inc., Revisited



Join Dr. Tanner Mirrlees
for a talk on the rise of the
EdTech industry.

Using a political economy of communication framework, Mirrlees presents an overview of the EdTech industry and probes the forces and relations underpinning the digitization, commercialization, platformization, automation, and globalization of higher education.

Offering a counterpoint to techno-deterministic and techno-optimistic narratives about EdTech, Mirrlees considers the ethical and social dimensions of the EdTech industry's impact on teacher labour, student learning, and the public education sector as a whole.

*To subscribe to the
edutech mailing list,
send an email to: [d-edutech-l-
join@mcmaster.ca](mailto:d-edutech-l-join@mcmaster.ca)*

- Sponsored by:
- Leeds and Ruth Sherman Centre for Digital Scholarship
- Communications Governance Observatory
- Canada Research Chairs program
- Faculty of Humanities
- Department of Communication Studies and Media Arts

EdTech Inc. Revisited

Tanner Mirrlees

Communication and Digital Media Studies

Faculty of Social Science and Humanities



TANNER MIRREES
AND SHAHID ALVI



EDTECH INC.

Selling, Automating
and Globalizing Higher
Education in the
Digital Age



edtech learning technology digital classroom online

blended inquiry-based Teachers
Blog share BYOD Gamification
lab 1:1 Bring mobile flipped
whiteboard educators Flipped Classroom
EdTech informal course lifelong
Students EdTEch MOOC Media
platform open personalized Technology environment
e-book adaptive device
Technology differentiated PBL electronic
Device e-learning asynchronous individualized Interactive
Virtual iPad Podcast synchronous massive videos vlog approach Social VLE



**Instrumentalism
Determinism
Solutionism**



Blackboard

Teaching Machines

THE HISTORY OF
PERSONALIZED LEARNING

AUDREY WATTERS



TEACHERS AND MACHINES

The Classroom Use
of Technology
Since 1920

LARRY CUBAN

EVGENY MOROZOV

The Folly of Technological Solutionism

TO SAVE EVERYTHING, CLICK

Here

Copyrighted Material

The Promise of Access

"One of the most important books written on social institutions and the lived experiences of techno-solutionism in the United States."
—Tressie McMillan Cottom

Technology, Inequality,
and the Political Economy
of Hope

Daniel Greene

The Technical Fix

Education, Computers and Industry



Kevin Robins and Frank Webster

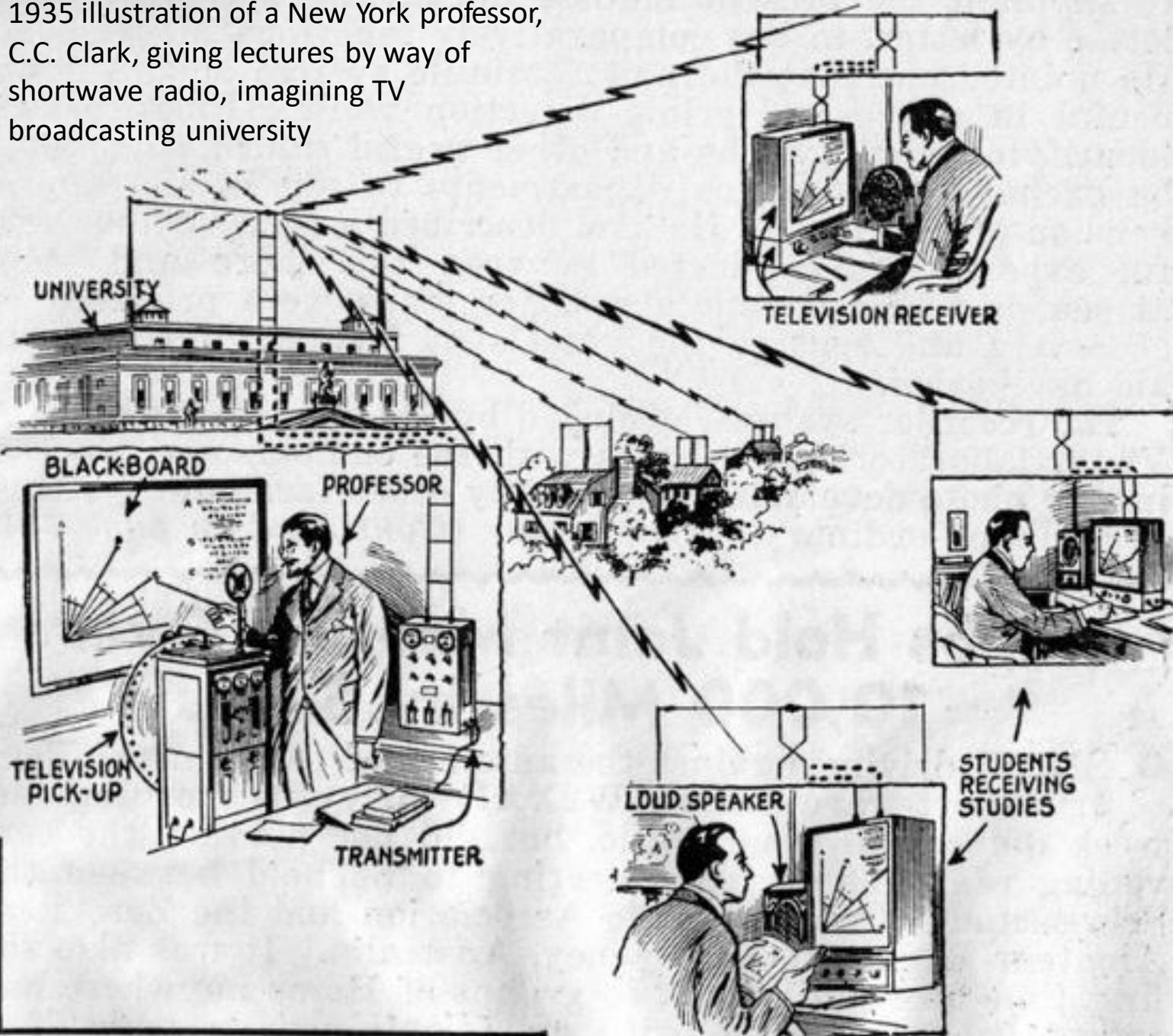
death glitch

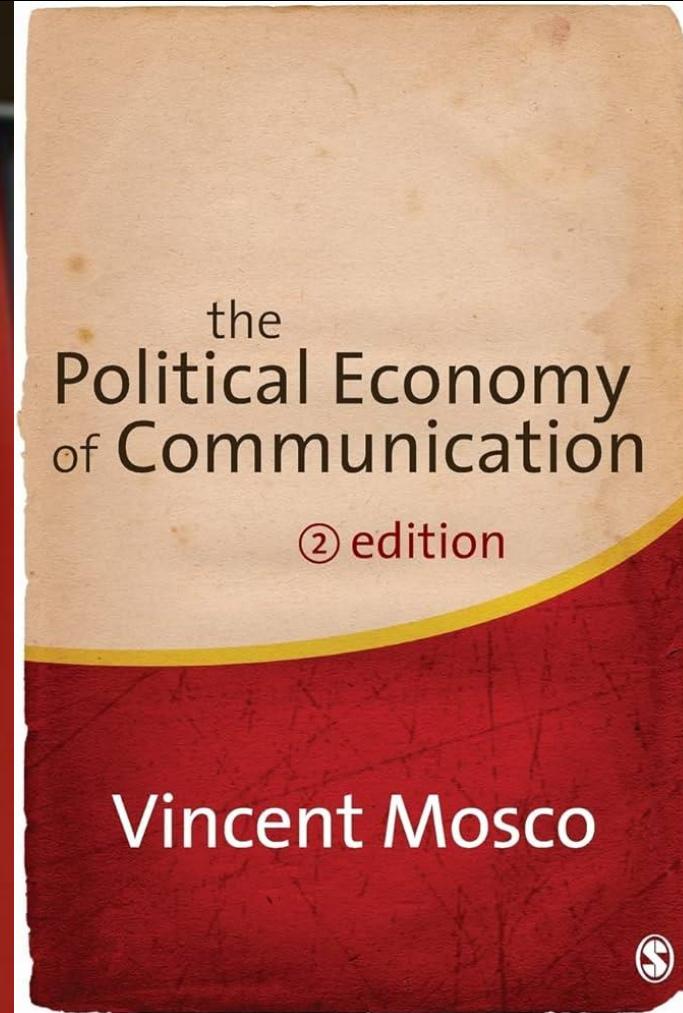
how techno-solutionism fails
us in this life and beyond

tamara kneeze



1935 illustration of a New York professor, C.C. Clark, giving lectures by way of shortwave radio, imagining TV broadcasting university





Remembering Vincent Mosco

“[T]his book interrogates how EdTech is shaped by old, new and emerging capitalist logics and disputes the idea that EdTech is in itself driving a ‘revolution’ that breaks from the social problems of the past and makes a new and better future. We demonstrate EdTech to be a significant and fast-growing sector of the current ICT and media industries and show how this sector is bankrolled by global financiers and is also constituted by publicly-traded profit-seeking firms that rely upon waged and unwaged human labor to produce, distribute and sell EdTech hardware, software and services as commodities to the growing ‘market’ of higher education...As EdTech’s private titans make inroads into the public institutions of education, we take stock of their attempt to reconfigure these into new spaces of capital accumulation and interrogate the...interests advanced and obscured”
(Tanner Mirrlees and Shahid Alvi, 2019)

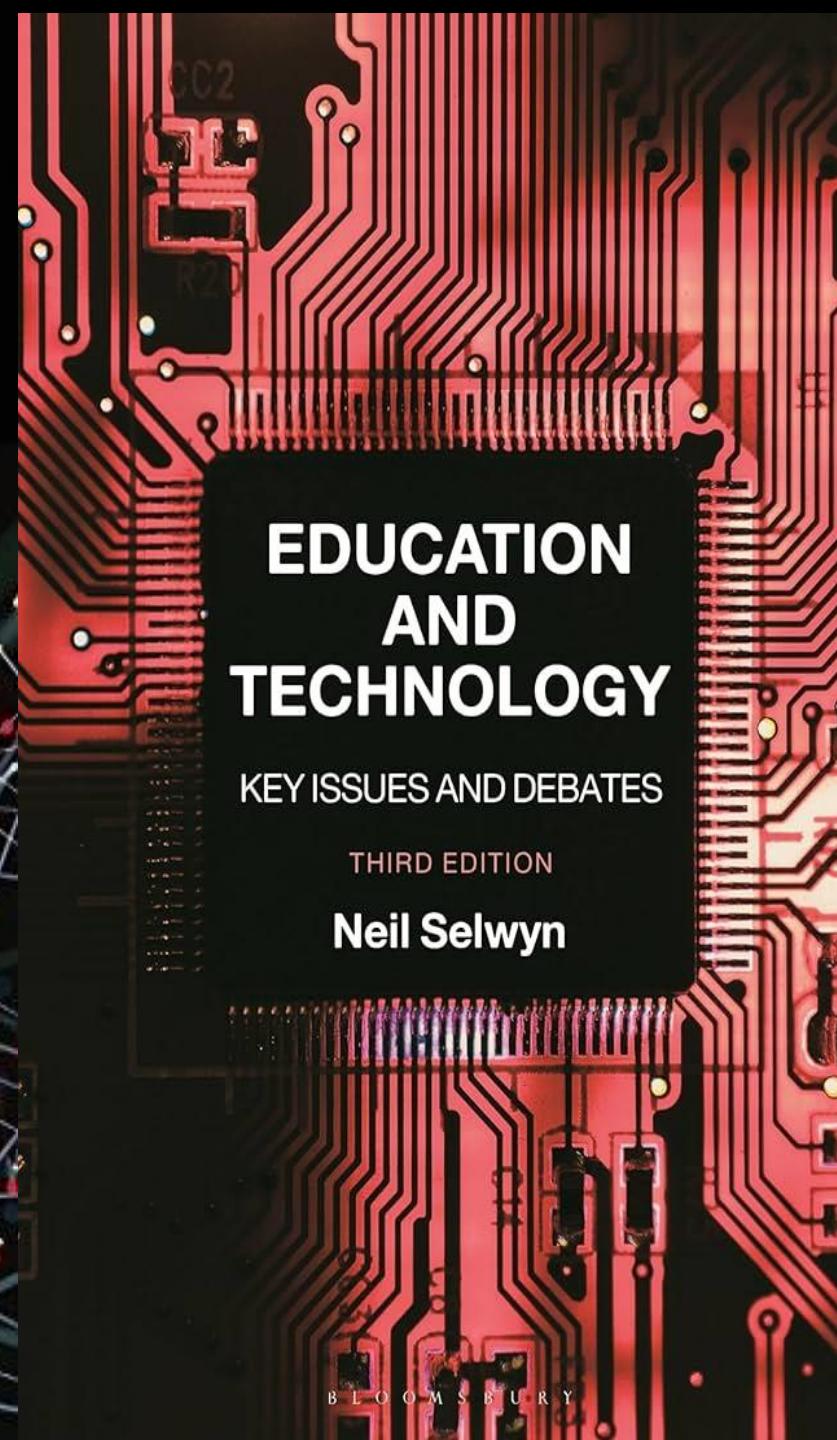


**Neoliberalism
Platformization
Automation
Data Colonialism**

BIG DATA IN EDUCATION

The digital future of learning, policy and practice

Ben Williamson



EDUCATION AND TECHNOLOGY

KEY ISSUES AND DEBATES

THIRD EDITION

Neil Selwyn

BLOOMSBURY

Volume 49 Issue 1 March 2024

ISSN 1743-9884

Learning, Media and Technology

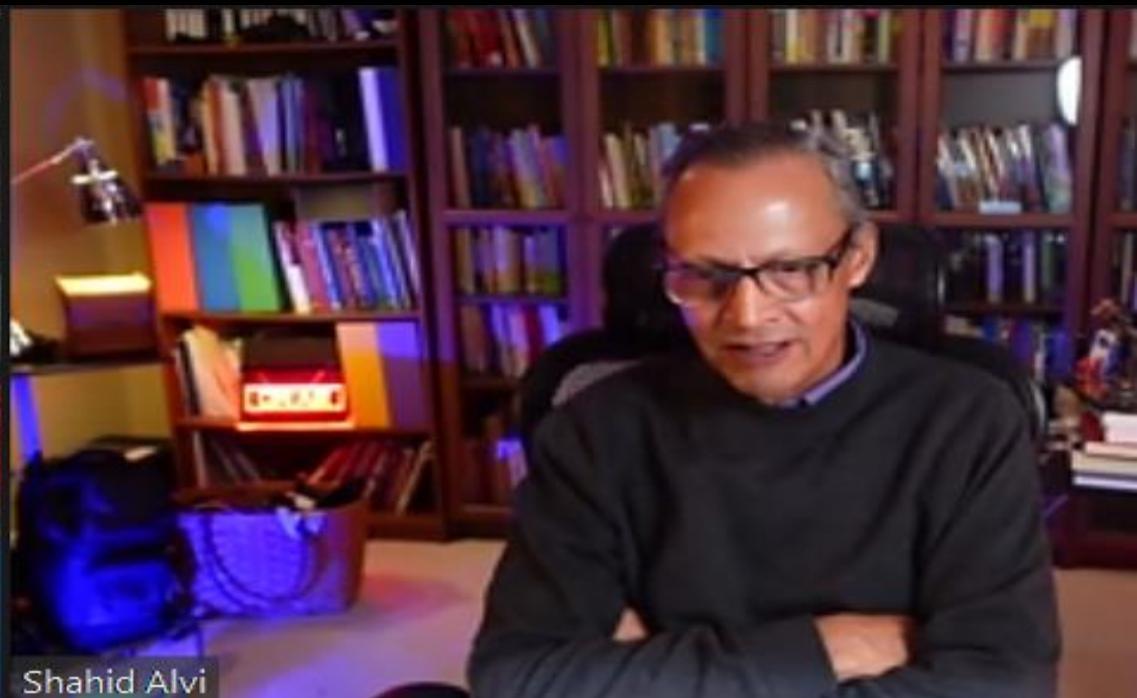
Special Issue: Global and Local Histories of Educational Technologies
Guest Editors: Katie Day Good and Barbara Hof

Routledge
Taylor & Francis Group

Included in Social Sciences
Citation Index®

Outline

- 1) Back to 2013: Why We Wrote the Book**
- 2) Forward to 2023: The Ed Tech Industry, Business Models and Controversies**
- 3) 2024 to the Future: Ed Tech Industry Research Directions**



Screenshot of Tanner and Shahid, chatting on ZOOM, Summer 2020

Review of Contemporary Issues in Communication

Change the media, change the world

 Search

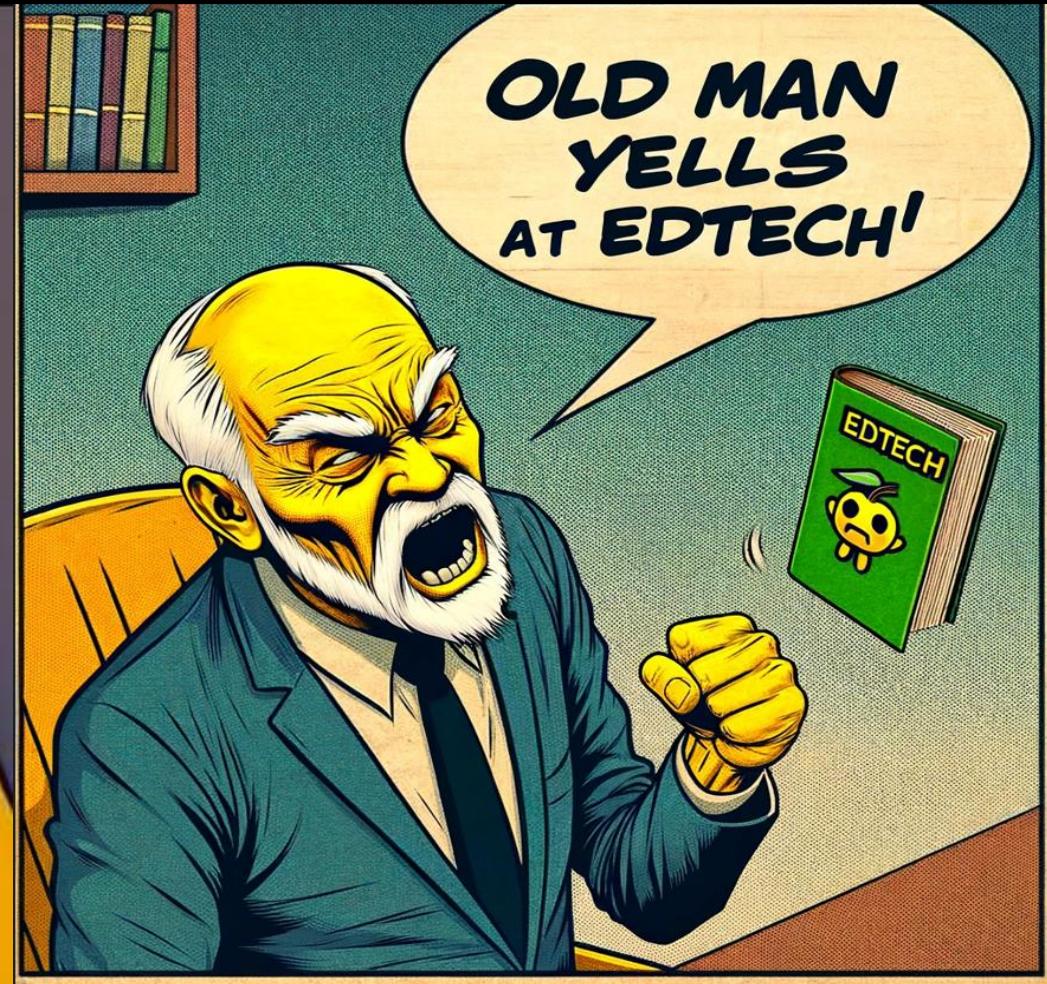


[About](#)

[Creators](#)

[Issues and Blogs](#)

[Videos](#)





**Technophiles
Technophobes**

“

Higher Education needs
to go digital or go home

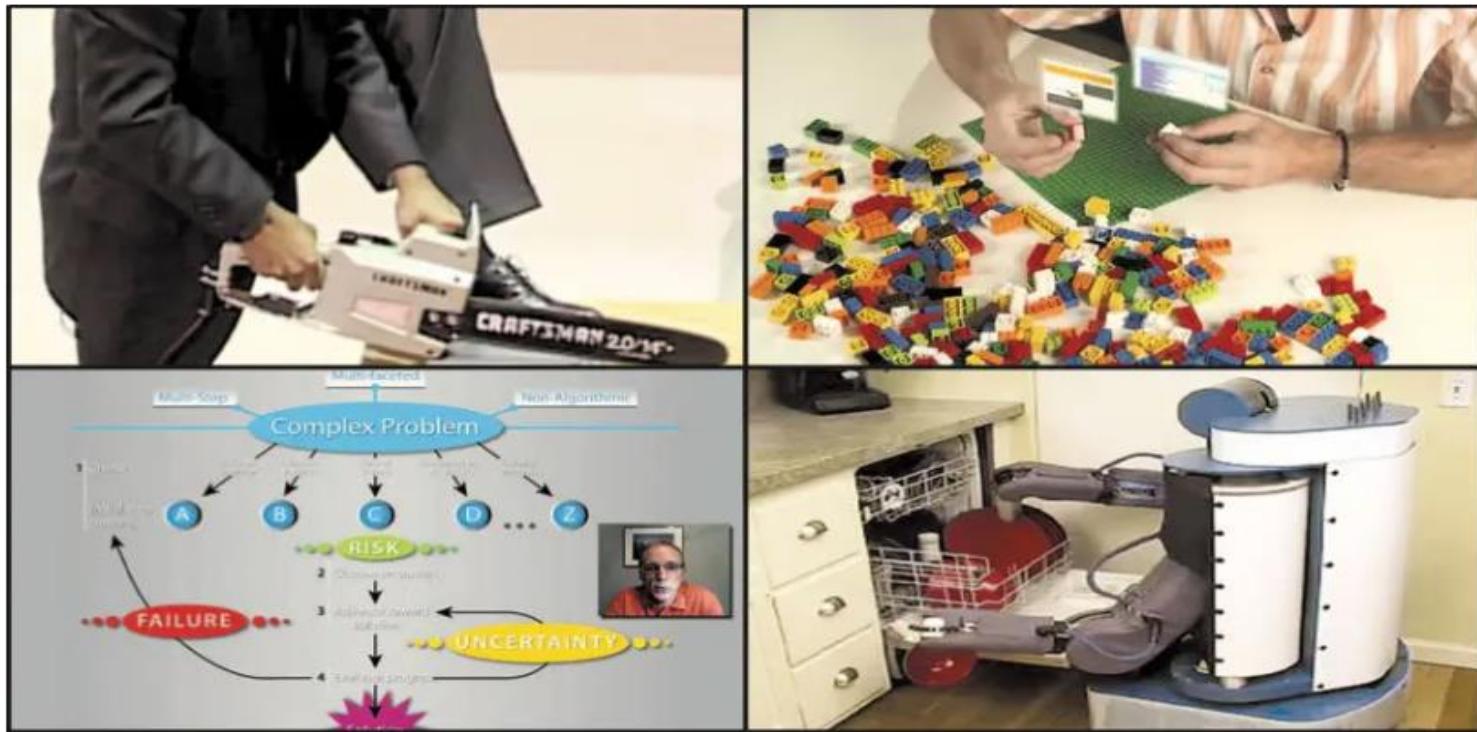
Simon Nelson, CEO of FutureLearn

”

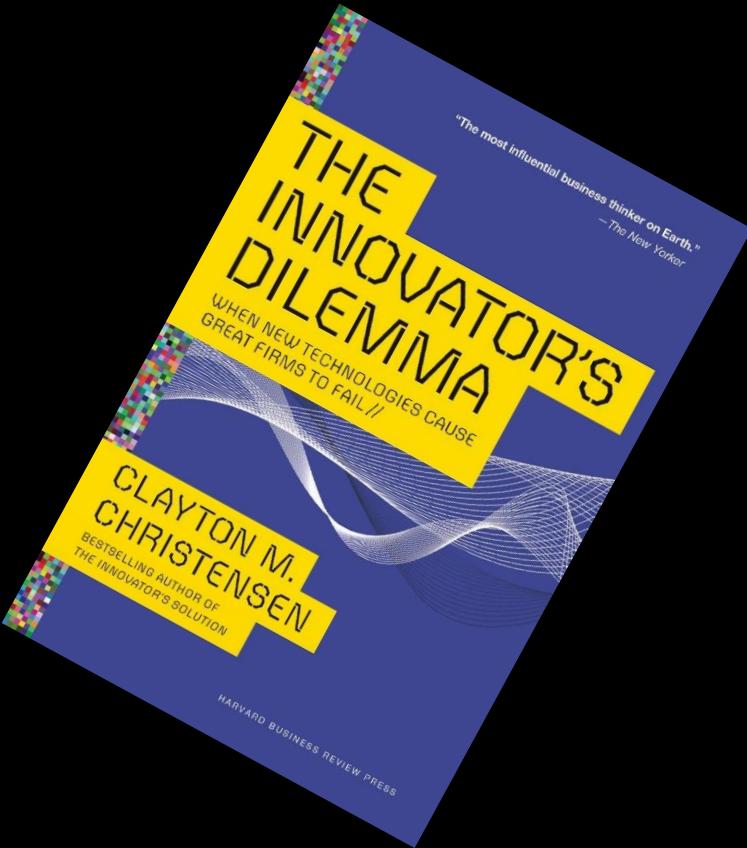


The Year of the MOOC

 Share full article



Clockwise, from top left: an online course in circuits and electronics with an M.I.T. professor (edX); statistics, Stanford (Udacity); machine learning, Stanford (Coursera); organic chemistry, University of Illinois, Urbana (Coursera).



“Fifteen years from now more than half of the universities will be in bankruptcy, including the state schools. In the end, I am excited to see that happen” – Clay Christensen, 2013



The MOOC Post-Mortem: Bibliometric and Systematic Analyses of Research on Massive Open Online Courses (MOOCs), 2009 to 2022

Jon Billsberry¹  and Irit Alony¹

Abstract

Massive open online courses (MOOCs) are online-based teaching programs designed to accommodate thousands of students without charging any fees. They began appearing in 2009 and 2010, became popular for a while, but are in decline now. This paper contains bibliometric and systematic reviews of research on MOOCs to see what can be learned from the innovation. The primary goals of these reviews are (1) to bibliometrically chart the research conducted on MOOCs and highlight significant milestones, (2) to reveal themes in MOOC research and discover key lessons, and (3) to surface any management education-specific lessons. The results show an increasing interest in scholarly work on MOOCs that demonstrates an enduring interest in reducing drop-out rates, although remedies have not yet been found. Studies demonstrate the importance of increasing opportunities for engagement and interaction. Few studies have explored MOOCs related to business and management. As universities have sought to monetize MOOCs,

The “Depressing” And “Disheartening” News About MOOCs

Derek Newton Contributor 

I write about education, edtech and higher education.

Follow

Massive Open Online Course Market is Anticipated to Surpass a Valuation of US\$ 48.4 Billion by the year 2033, Advancing at a CAGR of 16.2% | Future Market Insights, Inc.



2013:
\$1 million revenue



2023:
\$636 million revenue

GAFAM's EdTech Game Plan: Platformizing, Automating and Globalizing Higher Education in a Digital Age [Workshop]

Past Event! Note: this event has already taken place.

When: Tuesday, March 10th, 2020

Time: 12:30 pm – 2:00 pm

Location: [Richcraft Hall](#), Reader's Digest Resource Centre, room 4400

Audience: [Current Students, Faculty](#)

Contact: Rena Bivens, Rena.Bivens@carleton.ca

Workshop with Dr. Tanner Mirrlees, Associate Professor in
Communication and Digital Media Studies (Ontario Tech
University)



unesco



An ed-tech tragedy?

Educational technologies and school closures
in the time of COVID-19

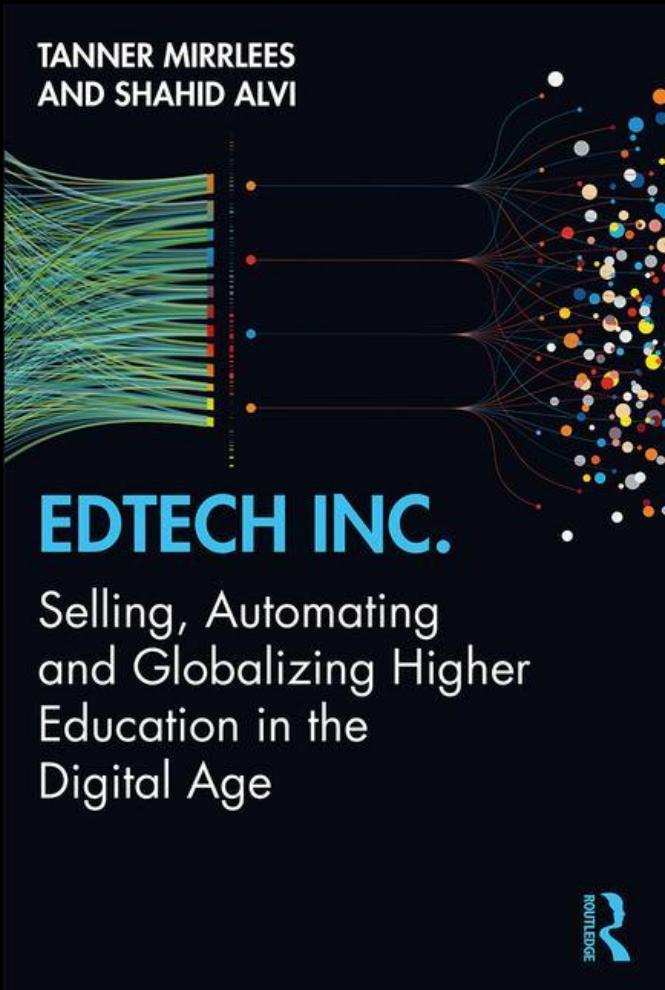


“Powerful organizations, from big tech corporations and financial investors to EdTech consultancies and international bodies, exploited school closures to try to reform the social institution of schooling into a digital-first or even digital-only ecosystem” - Ben Williamson, 2023

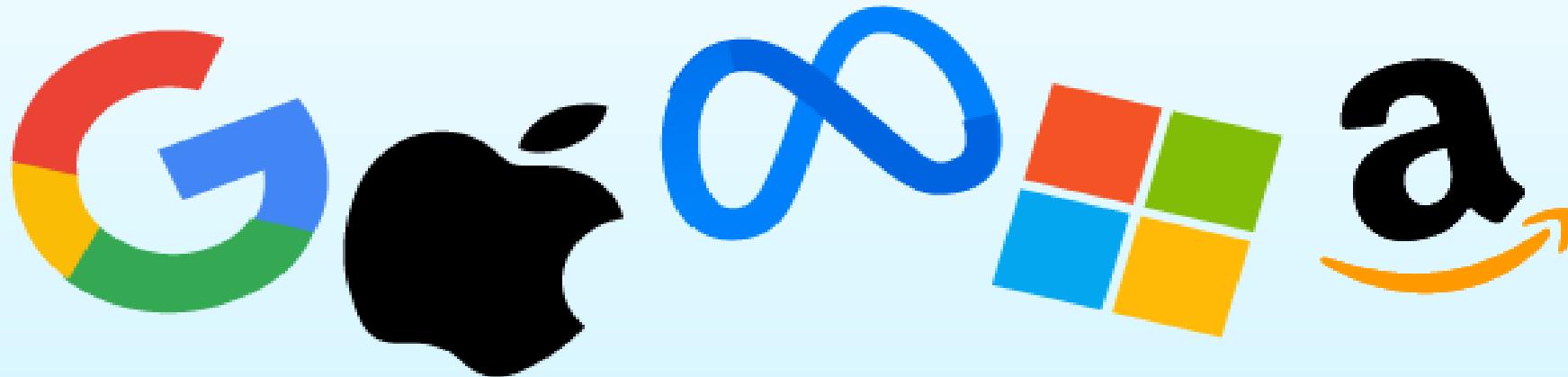
Testing Tech Products in the Classroom



TANNER MIRREES
AND SHAHID ALVI



The EdTech industry is “all the companies currently involved in the financing, production and distribution of commercial hardware, software, cultural goods, services and platforms for the educational market with the goal of turning a profit” - Tanner Mirrlees and Shahid Alvi, 2019



Combined market valuation of Microsoft (\$3.09 trillion), Apple (\$2.68 trillion), and Google (\$1.8 trillion) = \$7.57 trillion / Global annual public expenditure on education = \$5.4 trillion



The logo consists of a white circle centered on a black background. Inside the circle, the word "Google" is written in its signature multi-colored font (blue, red, yellow, and green). Below "Google", the words "for Education" are written in a smaller, dark gray sans-serif font.

Google
for Education



Apple and Education

Inspiring every kind of mind.

Everyone has their own way of learning and expressing creativity. Apple technology and resources empower every kind of educator — and every kind of student — to learn, create and define their own success. Let's move the world forward.



K-12

Ignite the creativity
in every student.

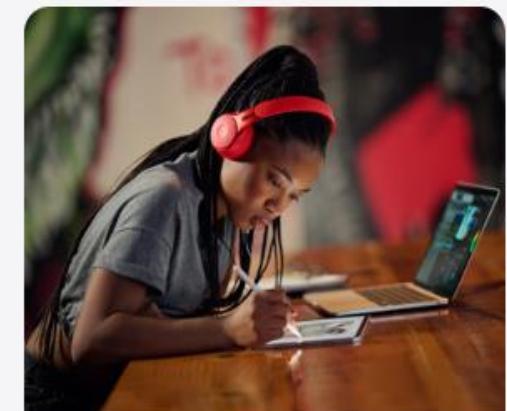
[Learn more >](#)



Higher Education

Teach. Innovate. Inspire.
Every which way.

[Learn more >](#)



University and College Students

Unstoppable you.

[Learn more >](#)

A photograph showing two individuals from behind, wearing VR headsets and holding motion controllers. They appear to be interacting with a virtual environment, possibly a landscape or a historical site. The scene is dimly lit, emphasizing the glowing screens of their headsets.

Meta for Education

Equipping educators with immersive technology to
transform student learning.



Teach Tomorrow's Cloud Workforce Today

With the increasing demand for cloud employees, AWS Educate provides an academic gateway for the next generation of IT and cloud professionals. AWS Educate is Amazon's global initiative to provide students and educators with the resources needed to accelerate cloud-related learning.

[Join AWS Educate](#)[Login to AWS Educate](#)

education



Education



Microsoft Reimagine

Learn more about the announcements from Reimagine Education, including Microsoft Copilot and Microsoft Defender for Endpoint offerings.

[Watch now >](#)

Equitable learning for all

Inclusively designed

We believe each student deserves to have the resources and support they need to fully engage in learning. That's why accessibility checks and learning tools are built into our suite of products.

[Explore Learning Tools >](#)

Accelerate learning

We see real-time data and insights as opportunities to accelerate learning and prepare students for the future. Our learning tools build foundational skills and allow teachers to track student progress.

Foster well-being

We understand that with the right data, teachers can help students navigate new feelings, situations, and emotions, while improving all aspects of learning for short- and long-term success.

[Social-emotional learning resources >](#)

Simplified & secure IT

We create technology solutions for education that unlock digital transformation through security, privacy, compliance, and transparency to keep schools safe and maximise learning.

The Ed Tech Market Map

Learning Management Systems

HotChalk

Blackboard schoology

remind

brightwheel

fresh grade

学科网 www.zxxk.com

nearpod

Schoolzila

eSpark

CLASS DOJO

echo

CIVITAS LEARNING

一起作业 17zixueye.com

EVERFI

FLAT WORLD LEARN ON

TOP HAT

MasteryConnect

PowerSchool

Tynker

kidaptive

SPEAKABOOS

tinkergarten

TINYBOP

Knowledge Adventure

curious.com

KHANACADEMY

popexpert

descomplica.

WriteLab

Kahoot!

picmonic

Next-Gen Study Tools

agnitus

lumosity

curriculet

Course Hero

dreambox LEARNING

VARSITY TUTORS

Language Learning

Okpando

沪江网 HUJIANG.COM

babbel

open english

TutorGroup

noredink

duolingo

Colingo

51Talk 无忧英语

EVERSPRINGS

BloomBoard

parchment

SchoolMint

Clever

FULL MEASURE EDUCATION

chalkable

BrightBytes

ALLOVUE

admit see

Search

GREAT!SCHOOLS

决胜网 juesheng.com

EDUNAV

admit see

小站教育 zhan.com

Test Prep

BYJU'S

toppr

BenchPrep

小站教育 zhan.com

Test Prep

PLURALSIGHT

Udacity

codecademy

codementor

BLOC

GENERAL ASSEMBLY

CodeHS

One Month CODE COMBAT

Curriculum Production

Apex Learning

CENGAGE Learning

ACHIEVE3000

CAREER FOUNDRY

Online to Offline

GaoShi EDUCATION 高思教育

WyzAnt 轻轻家教

跟谁学 genshixue.com

Yup

Curriculum Production

GA GENERAL ASSEMBLY

One Month CODE COMBAT

CAREER FOUNDRY

Test Prep

BYJU'S

toppr

BenchPrep

小站教育 zhan.com

Test Prep

BYJU'S

Venture Capital Investment Sources for EdTech Start-Ups

Investment Source	Examples
GAFAM Venture Capital Arms	Google Ventures, Microsoft Ventures (M12)
Philanthropic Foundations of GAFAM CEOs-Owners	Chan Zuckerberg Initiative, Bill & Melinda Gates Foundation, Emerson Collective, Bezos Family Foundation
Venture Capital Firms	Reach Capital, Learn Capital, GSV Ventures, Owl Ventures, Rethink Education, New Markets Venture Partners
Angel Investors	Reid Hoffman (Co-founder of LinkedIn), Peter Thiel (Co-founder of PayPal), Mark Cuban (investor and Shark Tank star), Ashton Kutcher (head of Sound Ventures)



Global Venture Capital Investment in Ed-Tech Soared in 2021, Hitting \$20B

REPORT

AI in Education Global Market

175 pages

2024

SMART CLASSROOM MARKET

Size, Share Global Analysis Report, 2023 – 2030

USD 61.71 Billion
IN 2022

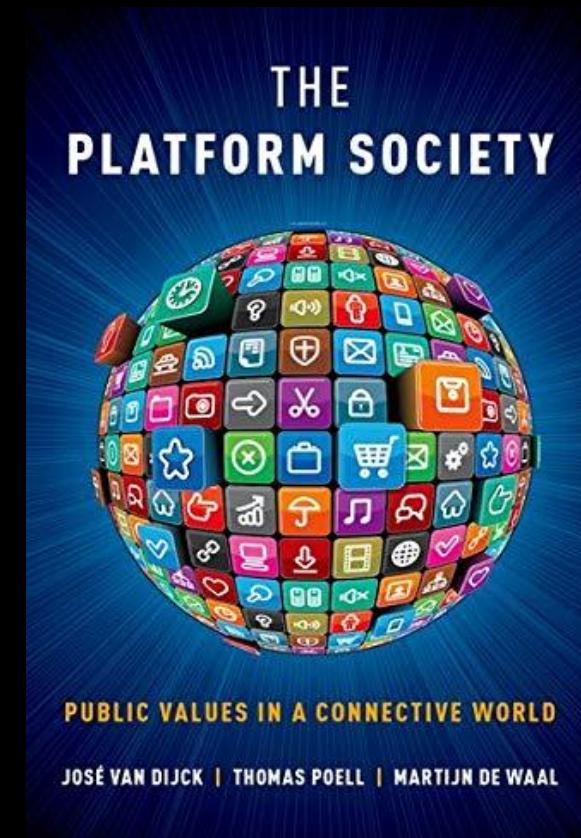
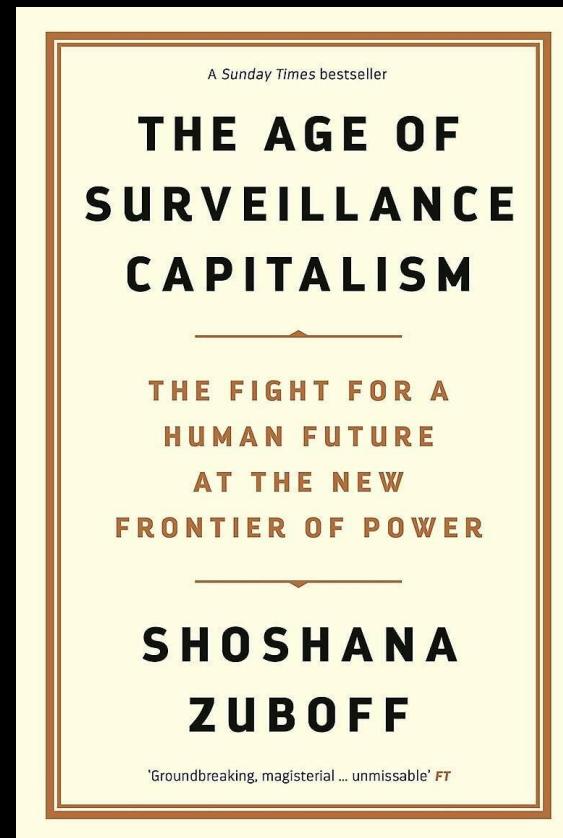
USD 132 Billion
BY 2030

CAGR of 9.99%
2023-2030



Business Models & Controversies

EdTech industry business model #1: “platform” or “surveillance” capitalism.”



Google Workspace for Education



31



Information we collect as you use core services

As described fully in Google's [Cloud Privacy Notice](#), we also collect service data through the core services, including:

- **Your account information**, which includes things like name and email address.
- **Your activity while using the core services**, which includes things like viewing and interacting with content, people with whom you communicate or share content, and other details about your usage of the services.
- **Your settings, apps, browsers & devices**. We collect info about your settings and the apps, browsers, and devices you use to access our services. This information includes browser and device type, settings configuration, unique identifiers, operating system, mobile network information, and application version number. We also collect information about the interaction of your apps, browsers, and devices with our services, including IP address, crash reports, system activity, and the date and time of your request.
- **Your location information**. We collect info about your location as determined by various technologies such as IP address.
- **Your direct communications**. We keep records of communications when you or your admin provide feedback, ask questions, or seek technical support.
- And for admins, we collect data about payments and transactions.

Service data is primarily used to deliver the services that schools and students use, but it's also used to maintain and improve the services; make recommendations to optimize the use of the services; provide and improve other services you request; provide support; protect our users, customers, the public, and Google; and comply with legal obligations. See the Google Cloud Privacy Notice for more information.

NEW FEATURES

Google Workspace for Education Fundamentals¹

(Formerly known as G Suite for Education)

Bring your school community together with a suite of tools that enables better communication and collaboration.

No cost for qualifying institutions¹

[Get started](#)

NEW FEATURES

Google Workspace for Education Standard

Level up with advanced security, analytics, and controls to safeguard against evolving digital threats.

C\$4.00 / student / year

Get one staff license for every four student licenses

[Contact sales](#)

NEW FEATURES

Teaching and Learning Upgrade

Enhance instructional impact with advanced video communication, enriched class experiences, and tools to drive academic integrity.

C\$6.30 / license / month

Choose how many of your staff need licenses. These licenses can also be paid annually at C\$63.00 / license / year.

[Contact sales](#)

NEW FEATURES

Google Workspace for Education Plus

(Formerly known as G Suite Enterprise for Education)

Transform your school with a comprehensive solution incorporating advanced security and analytics, enhanced teaching and learning tools, and more.

C\$6.50 / student / year

Get one staff license for every four student licenses

[Contact sales](#)



ACLU RESEARCH REPORT

Digital Dystopia

The Danger in Buying What the
EdTech Surveillance Industry is Selling

ACLU



New study confirms that many
EdTech companies exploit
children's data and there is nothing
to stop them

Education data breaches hit record high in 2021

EdTech industry business model #2: public-private partnerships – Online Program Management (OPM)

Corporation	Revenue in 2023 (Million \$)
2U	946.0
Coursera	635.8
Academic Partnerships	208.7

Report Calls Online Program Managers 'Wolves in Sheep's Clothing'

TCF Analysis of 70+ University-OPM Contracts
Reveals Increasing Risks to Students, Public Education

EdTech industry business model #3 copyrighted educational content is “king”



Start Learning with Subject Today

[Back to SVS Homepage](#)



SUBJECT VIRTUAL SCHOOL

Pricing Plans.

Part-Time Student

\$241.67 /MONTHLY

Two or fewer course enrollments per semester
Asynchronous & synchronous instruction
Multi-tiered support
Phone, email & live chat support
Credit and transcript provided
\$2,900 Annual Cost

[Get Started](#)

or click here [contact us](#).

Full-Time Student

\$408.33 /MONTHLY

Unlimited course enrollments per semester
Asynchronous & synchronous instruction
Multi-tiered support
Phone, email & live chat support
Credit and transcript provided
\$4,900 Annual Cost

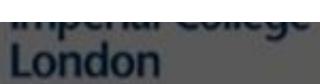
[Get Started](#)

or click here [contact us](#).



Purchase a single course

Coursera offers a wide range of standalone courses that you can purchase to get a Course Certificate. You can take any single course for a Certificate, even if that course is part of a Specialization. It isn't possible to subscribe to an individual course.



Our Service Offerings

Noodle's range of services comprehensively caters to the needs of modern universities.



STRATEGY

Strategic Visioning

Innovative approaches to elevate university experiences through strategic vision and tailored problem-solving methods.



PROGRAM & LEARNING DESIGN

Curriculum Crafting

Dynamic, engaging educational programs that enhance learning outcomes and adapt to evolving academic needs.



TECHNOLOGY

Tech Solutions

Cutting-edge technology solutions to streamline university operations and enrich the educational landscape.



MARKETING

Brand & Program Promotion

Compelling marketing strategies that amplify university presence and attract a diverse academic community.



ENROLLMENT

Student Recruitment

Enrollment processes with data-driven tactics to connect universities with their ideal students.



SUPPORT & PLACEMENT

Student Engagement

Comprehensive support services and placement opportunities to ensure student success and institutional growth.



“We know there is financial benefit to companies...but the educational benefit is unclear because we have so little evidence regarding the impact on learning” - Sam Sellar, Dean of Research in Education Futures and Policy at the University of South Australia, 2023



PLANNED
OBSCOLESCENCE

GOOGLE IT



EdTech industry business model #4: crowdsourced prosumer labor

BY JEFF HOWE BACKCHANNEL JUN 1, 2006 12:00 PM

The Rise of Crowdsourcing

Remember outsourcing? Sending jobs to India and China is so 2003. The new pool of cheap labor: everyday people using their spare cycles to create content, solve problems, even do corporate R&D.



Course Hero

“Tap into the brainpower of your brightest peers and professors. Discover the exact content you need, in a few clicks.”

Mirrlees.pdf - Global Entertainment Media Between Cultural...

[DOC PREVIEW](#)

Pages 22

Total views 100+

Simon Fraser University • CMNS • CMNS 130 • sicilyjin • 11/27/2017 • 50% (2) [View full document](#)

Students also studied



Question 1
Question 2
Question 3
Question 4

glst 290 quiz 8.docx Solutions AvailableLiberty University
GLST 290

W1 - What is Political Communication - What is...

[DOC PREVIEW](#)Pages 35  Identified Q&As 4  Solutions available  Total views 1

University of Ontario Institute of Technology • COMM • COMM 4420 • DeanAntelopeMaster2219 • 7/16/2023

[View full document](#)

Students also studied



Week 2
What is Representative Democracy?



Week 5
What role should the media play?



Week 11



W11 - What is social media...
 Solutions Available

Week 1

What is Political Communication? What is Democracy

COMM 4420
DIGITAL MEDIA, POLITICS, AND DEMOCRACY
DR. TANNER MIRRLEES

Choose your plan

Hero Trio

Premier

On your way to accessing
"Taylorizing_Academia_Des..."
The University of Nairobi • POLITIC...

Billing cycle



Save \$216/yr

Annual

\$11.95 USD/mo

\$143.40 USD charged yearly



Save \$18/qtr

Quarterly

\$23.95 USD/mo

\$71.85 USD charged quarterly



Monthly

\$29.95 USD/mo

\$29.95 USD charged monthly

Course Hero

- Course-specific resources 
- Ask an expert tutor 
- AI homework help 
- Textbook solutions 

 QuillBot PREMIUMAI Writing  SymbolabMath Solver Discount Code 

Pause or cancel anytime

[Money Back Guarantee](#) ([terms](#))Secured by 

Payment method

 Credit or debit card  PayPal



Capitalism: 8 Logics



Research

EdTech and work and labor

EdTech and the digital divide

EdTech, climate change and environmental sustainability

EdTech and the state, policy and regulation

EdTech and Work and Labour

Edtech in 2023: A Year Of Layoffs and Funding Crunch

Edtech unicorn Byju's was engulfed with multiple problems this year, which led to skepticism about the entire sector

BY S SHANTHI • DEC 28, 2023

Share

'Unethical, illegal': Wage theft scandal hits Markham-based online teaching company

Online tutor service Paper Education faces growing pains as layoffs follow questions about efficacy

SEAN SILCOFF >
ANA PEREIRA

TECHNOLOGY REPORTER

EdTech and the digital divide



In 2023, approx. 2.6 billion people worldwide did not have Internet access (33 percent of the global population)

EdTech, climate change and environmental sustainability

A large pile of electronic waste (e-waste) against a blue sky. The waste consists of discarded computer parts, including circuit boards, monitors, keyboards, and other electronic components, all piled together in a sprawling, chaotic manner.

**Educational Technology and its
Environmental Impacts**

**Ed-Tech Within Limits: anticipating
educational technology in times of
environmental crisis**

**EdTech is killing us all: facing up to the environmental
consequences of digital education**

EdTech and the state, policy and regulation



EdTech



EdTech Inc. Revisited

Tanner Mirrlees

Communication and Digital Media Studies

Faculty of Social Science and Humanities



TANNER MIRREES
AND SHAHID ALVI



EDTECH INC.

Selling, Automating
and Globalizing Higher
Education in the
Digital Age



EdTech Inc., Revisited



Join Dr. Tanner Mirrlees
for a talk on the rise of the
EdTech industry.

Using a political economy of communication framework, Mirrlees presents an overview of the EdTech industry and probes the forces and relations underpinning the digitization, commercialization, platformization, automation, and globalization of higher education.

Offering a counterpoint to techno-deterministic and techno-optimistic narratives about EdTech, Mirrlees considers the ethical and social dimensions of the EdTech industry's impact on teacher labour, student learning, and the public education sector as a whole.

*To subscribe to the
edutech mailing list,
send an email to: [d-edutech-l-
join@mcmaster.ca](mailto:d-edutech-l-join@mcmaster.ca)*

- Sponsored by:
- Leeds and Ruth Sherman Centre for Digital Scholarship
- Communications Governance Observatory
- Consortium Research Chairs program
- Faculty of Humanities
- Department of Communication Studies and Media Arts