



Mapping the political economy of digital technology  
in Higher Education during Covid-19

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# Ontological assumptions

- Technology is not a neutral entity that simply does good when people have access to it – it is complex and social cultural artefact
- Technologies exist in a social, political and economic **context**

## Technological Determinism

- Technology is neutral
- Technological developments determine social change – pure causality
- Technology purely instrumental
- Both dystopian and utopian - Jacques Ellul; Ted Kaczynski

VS

## Social Construction of Technology

- Technology is intertwined with social life, existing in complex social field
  - Technology is embedded and contextual
  - Technology is a vehicle for power relationships - Never neutral
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- Online learning and educational technologies are situated, relational, and embedded in a wide range of social, political and economic contexts.
  - This means that discussions about technology in HE and during the pandemic should not be reduced to technical issues – what platform, device, app etc.
  - Rather it is a socio-technical issue relating to social, economic cultural and political aspects of people and tertiary education systems alongside the technical aspects of organisational structure and processes

# A political economy of EdTech

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- Aim to highlight the complex and interdependent nature of different structures and systems across the following key dimensions:
  - commercialisation and the flows money, power and politics;
  - data and digital surveillance;
  - inequalities and the processes of inclusion and exclusion that take place;
  - geopolitics.
- Aim to contribute to the growing body of literature that takes a critical and socio-technical approach to edtech in HE and to the growing discussions around technology use during Covid-19 and in post-pandemic universities from people like Ben Williamson, Rebecca Eynon, Neil Selwyn, Mark Carrigan and Janja Komljenovic



# Dimension 1: Commercialisation

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flows of money, power and politics



# Commercialisation

- Profits and marketisation have long been a central concern of the global edtech industry, but the pandemic has presented it with remarkable business opportunities for profit-making, as well as enhanced influence over the practices of education.
- In March 2020, Investment Bank BMO Capital predicted a huge spike in edtech stocks, stating: *‘While we are uncomfortable citing “winners” in the coronavirus situation, some companies may be positioned better than others... specifically those that specialize in online education could see increased interest should the situation worsen’.*
- HolonIQ estimated in July 2020 that the edtech market would be worth more than \$400 billion by 2025.
- New global financial instruments designed to capitalize on this growth in the sector: Global X Education Exchange Traded Fund (ETF); Education Tech and Digital Learning ETF

# Disaster Capitalism and Narrative Economics

- Disaster capitalism is the way in which private industries spring up to directly profit from a large scale crises (Klein, 2007)
- The growth in Edtech is arguably the newest form of disaster capitalism manifested in the digital education space
- Profit has consistently been the motivating force. As such claims relating to particularly technologies made by interested stakeholders should be treated with caution
- Links with Narrative Economics: major economic events are driven by narratives that become contagious and go viral (Shiller, 2019)



# Key EdTech Pandemic Narratives

- Digital technologies are driving the **transformation** of higher education
- Digital technologies can **democratise** higher education,.
- The affordances of digital technologies make education more **personal** and overtly tailored to individuals' needs and learning journeys.
- Technology will enhance the **efficiency** of a variety of operations or provide **solutions** to a raft of perceived issues in teaching and learning.
- Different forms of online or digitally mediated education are becoming critical for helping students to develop the **skills** required for an increasingly digitalised workplace or as a mechanism for reskilling or upskilling in an increasingly febrile labour market.



# Narratives in Action

- ‘The adoption of technology in HE is **changing** the way universities engage with students inside and outside the lecture hall. AI is expected to **drive the change** even further by enabling **deeper personalisation** for students and more **streamlined operations** at higher education institutions’
- ‘AI is making it easier to offer **personalised learning** experiences that **adapt to individual student needs**. Learning platforms such as Cerego and Cogbooks assess each students strengths and gaps in knowledge, and help them achieve class goals’
- ‘the greatest opportunity lies in the possibility of using AI tools together seamlessly to develop a holistic picture of each **individual student’s journey** – rather than *‘the student journey’*. It enables **greater personalisation and better planned interventions** to adapt teaching and learning and support wellbeing’
- ‘NexusEdge and Steppingblocks also create **personalised pathways** from college to career, enriched with **industry relevant skills** for students’
- <https://www.hepi.ac.uk/2022/02/22/ai-for-he-a-student-journey-market-map/>







# Narratives in Action

- ‘Different types of providers and forms of provision will proliferate. Physically, we will see a mix of actual campuses, augmented campuses (where mixed reality and the analogue world fuse) and virtual learning environments. Educationally, we will see much more experimentation with content and delivery. And of all the forces impelling this diversity, the most powerful will be the search to meet **the needs of individual students**. The quality of **personalized** student learning will be key to institutional success’
- ‘Post-secondary systems around the world will need to be **reimagined**... The good news is that leading, **transformed** member institutions of those systems will have the most influence on the **redesign**.’
- ‘Universities are at or approaching a crossroads: Do they **transform? Optimize?** Do nothing and hope there is time to react? Or simply do nothing because they are invulnerable?’
- ‘There are other, more-**disruptive** forces in play... The digital revolution...’
- <https://assets.kpmg/content/dam/kpmg/xx/pdf/2020/10/future-of-higher-education.pdf>

# Technology meets classroom: classroom wins

- Technology has been positioned as a disruptive power in society since the invention of the printing press and the industrial revolution
- From the filmstrips of the 1910s through to the 'educational radio' of the 1930s and instructional TV of the 1960s, Cuban details **cycles of hype** around the transformational potential of each new offering.
- 'Education is on the brink of being transformed through learning technologies; however, it has been on that brink for some decades now' (Laurillard, 2008: 1)
- History suggests the reality rarely lives up to the hype and that the narratives associated with different technological advancements for education and the claims embedded in them serve economic and commercial rather than educational functions



The background is a vibrant green digital space. It features several 3D wireframe structures that resemble buildings or data centers, constructed from a grid of lines. These structures are interconnected by glowing green lines and small, bright points of light, some of which are blue or purple. The overall effect is one of a complex, interconnected digital network. The text is centered in the middle of the image.

# Dimension 2: Datafication and digital surveillance

# Data

- Those who will profit most from the post-covid edtech goldrush will not be the ones working directly with specific technologies or even technological services. It will be those who understand that most profits lie in secondary, associated areas – mainly **data**, specifically behavioural data.
- Data has long been the lifeblood of the tech industry and for several years critical commentators have raised concerns over the ‘datafication of education’
- raises longrunning concerns over data privacy and the use of data for student profiling and control
- Surveillance Capitalism (Zuboff, 2019)
- The pandemic has casually normalised a multitude of datapoints on both students and staff in HE and opened the door, even wider than it already was, to a much more complex process profit making within the sector



# Dimension 3: Entrenching inequalities



# Digital Matthew Effect

- With an increasing normalisation of online teaching, there are inevitably concerns about who might be 'left behind'
- *'Growing evidence suggests people's experiences of digital education are patterned distinctly in terms of social class, race and disability' (Selwyn 2016: 45).*
- Evidence suggests that rather than removing inequalities, the growing use of technology in HE entrenches them.
- Split realities: students experience online teaching and learning very differently depending on their physical environments, the cognitive load they are experiencing (from caring responsibilities, for example), the hardware they use to access class and resources, the internet connection they have, and their own digital skills
- Digital structural violence (Winters et al., 2019)





## Dimension 4: Geopolitics

# Ongoing global shocks

- Global capitalism, data driven and surveillance capitalism, financial markets all shape and are shaped by the narratives around edtech.
- The events in Ukraine are a stark reminder of the potential for geopolitics to fundamentally disrupt higher education.
- EdTech likely to be a key focus of discussions related to geopolitical tensions, particularly in relation to student mobility.
- Technology as a site of conflict: digitally mediated misinformation; target of cyber warfare.

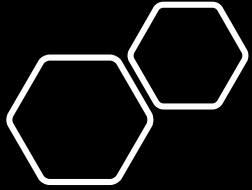






Final  
thoughts





# Thank you!

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