Algorithmic oppression in our education system: Refuse. Retract. Resist.

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With a contribution from Will Perry, barrister at Monckton Chambers

October 31, 2023
AI and Society Forum Unconference, Wellcome Collection

Networked communities for turbulent times

Today's Session

- **What do we hope you will take away?**
  Empowerment to take action on technology in practice in education: **Knowledge. Case studies. Actions.**
- What do we hope to achieve? **Share your experience and your wider knowledge and ideas with us** and everyone here.

Today's Session: Scope And Aims

- **What** is **EdTech** and **where** and **why** does it involve AI?
- What are the implications and why we should **refuse, retract & resist** emerging trends.
- **Discuss**: Are there red lines on 'acceptable' AI in education? Where is there **consensus on objection**?
- What **forms of resistance** can we take?
  - Community action: is EdTech really improving outcomes for Black children?
  - Student action: challenging exam proctoring
  - Legal action: to underpin community action
- **Discuss: tools and strategies** to ensure all who are affected by the technologies are included and involved.
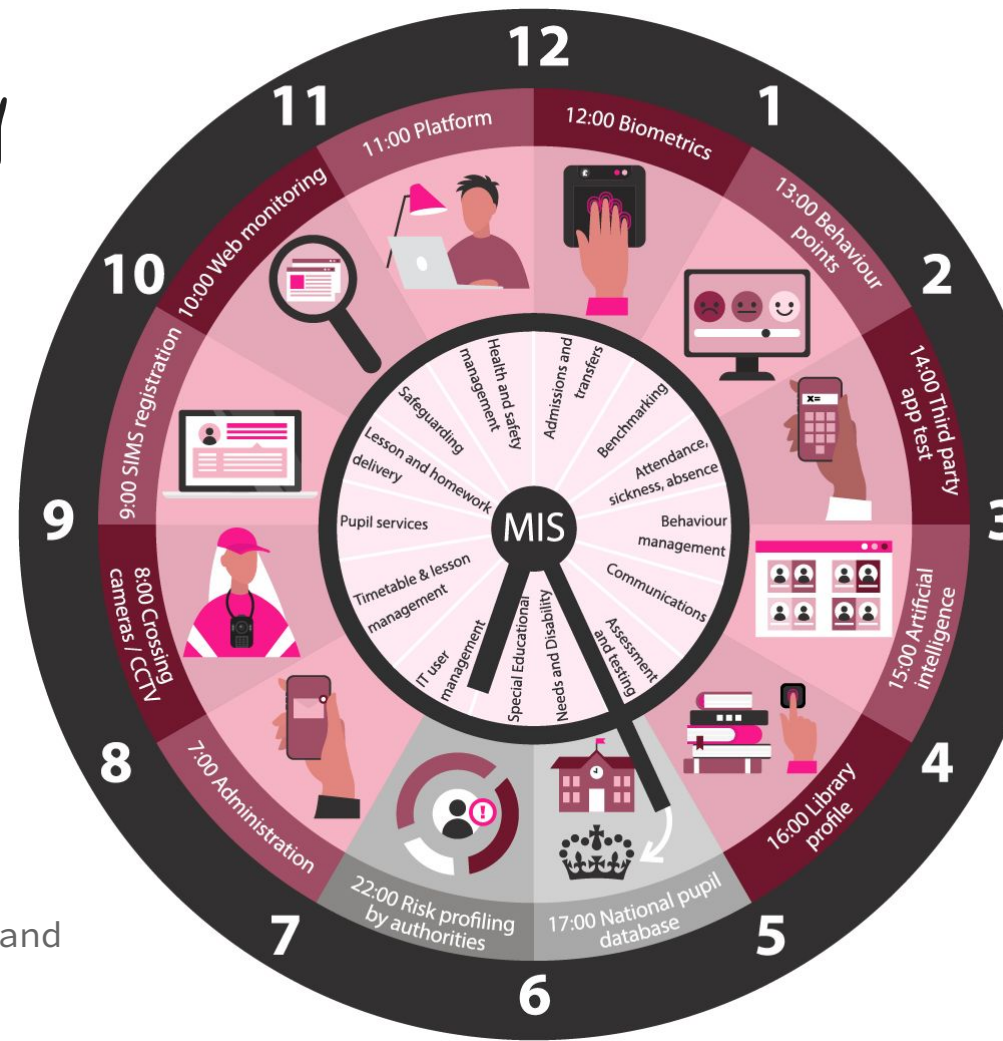
EdTech and AI in a school day

System infrastructure

- Volume of actors
- Proprietary systems
- Accessibility and design
- Absence of quality, health and safety standards
- Home/school/time-limited boundaries are removed

Behavioural surveillance

- Privacy and confidentiality
- Outcomes for the datafied child
- The right to and aims of education

Emerging tech, automated decisions, AI and biometrics
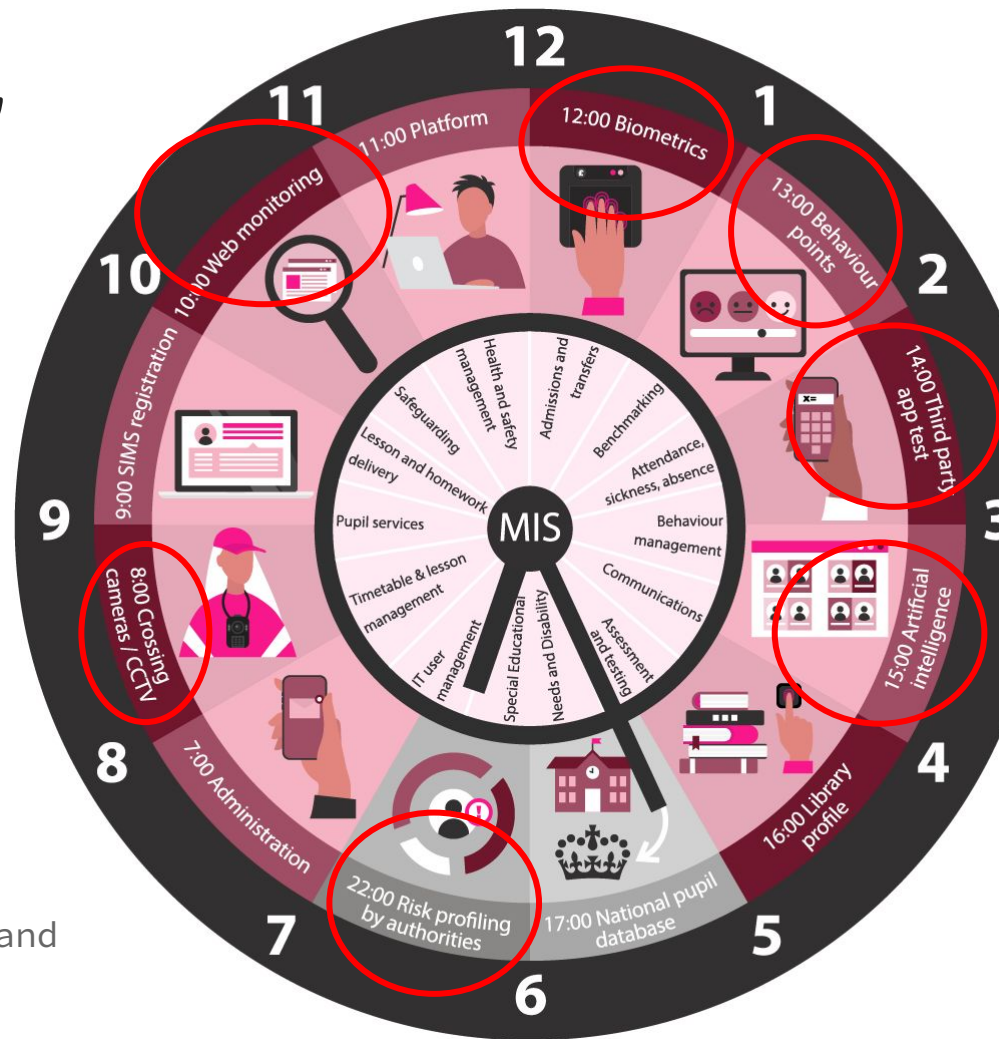
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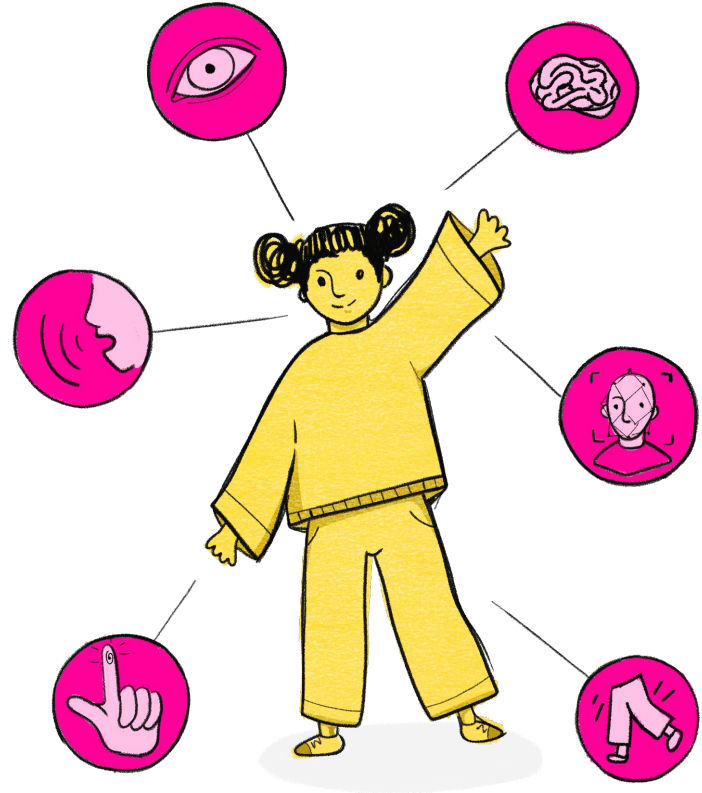- Home/school/time-limited boundaries are removed

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Clock diagram labels:
- 11:00 Platform
- 12:00 Biometrics
- 13:00 Behaviour points
- 14:00 Third party app test
- 15:00 Artificial intelligence
- 16:00 Library profile
- 17:00 National pupil database
- 22:00 Risk profiling by authorities
- 7:00 Administration
- 8:00 Crossing cameras / CCTV
- 9:00 SIMS registration
- 10:00 Web monitoring

MIS segments: Health and safety management, Admissions and transfers, Benchmarking, Attendance, sickness, absence, Behaviour management, Communications, Assessment and testing, Special Educational Needs and Disability, IT user management, Timetable & lesson management, Pupil services, Lesson and homework delivery, Safeguarding

Biometrics in schools

- Fingerprints
- Voice recording
- Eye tracking on screen
- Brainwaves and neuroTech
- Facial detection and recognition
- Mood, mental health, and emotion detection and "prediction"
- Gait, location, footfall, attendance tracking using biometric "sign in" tools

Who does the system Serve and where?

The Mobilisation of AI in Education

"This threat exists because, with its definitive and quantifiable outcomes, AI is attuned to this economic logic of practice, which increasingly is about providing a productive workforce that has been 'upskilled' in science, technology, engineering and mathematics (STEM) subjects to meet the calculated and urgent needs of the economy: 'a pipeline to prosperity'."

(Davies and Eynon, 2018).

DTBC: Our EdTech Concerns

- Minimal scrutiny of & transparency around what data about our children is collected & how it is used
  - Will it be sold? Will it be shared with Police, the Home Office, or future employers?
- No robust evidence about how well most EdTech tools work and the value they deliver to all children
- Potential for existing inequalities to be made worse
- Digital exclusion/digital poverty means that even if EdTech worked perfectly across the board not all children can

Monetising The Education: Who Benefits?

Children's data

Educational inequalities in England barely improve in two decades, study finds

Institute for Fiscal Studies research shows family background still a main driver in performance at school and later life

'Woeful' DfE blamed as betting firms gain access to children's data

The department has been found responsible for an 'unacceptable' breach of data protection laws

Parents, Pupils and Schools: Take Action to Retract Data! #BoycottSchoolCensus

A Cyberattack Illuminates the Shaky State of Student Privacy

At a moment when education technology firms are stockpiling sensitive information on millions of school children, safeguards for student data have broken down.

Facial recognition cameras arrive in UK school canteens

Advocates say they speed up queues, but privacy campaigners query whether they are necessary

School CCTV Streams End Up on US Website

Phil Muncaster
UK / EMEA News Reporter, Infosecurity Magazine
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The ICO has launched an investigation after it emerged that CCTV camera feeds from several Blackpool schools ended up on a US website.

Call to shut down Bristol schools' use of app to 'monitor' pupils and families

Exclusive: Think Family Education app gives safeguarding leads easy access to pupils' and relatives' contacts with police and child protection

Resisting Algorithmic Oppression: New and emerging trends

NEW YORK POST

Brooklyn students hold walkout in protest of Facebook-designed online program

By Susan Edelman
Published Nov. 10, 2018 | Updated Nov. 11, 2018, 7:48 p.m. ET

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sale during ext
Day sales

"Personalised learning"

Students from the Secondary School for Journalism during the protest.

Brooklyn teens are protesting their high school's adoption of an online program spawned by Facebook, saying it forces them to stare at computers for hours and "teach ourselves."

Nearly 100 students walked out of classes at the Secondary School for Journalism in Park Slope last week in revolt against "Summit Learning," a web-based curriculum designed by Facebook engineers, and bankrolled by CEO Mark Zuckerberg and his wife Priscilla Chan.

"It's annoying to just sit there staring at one screen for so long," said freshman Mitchel Storman, 14, who spends close to five hours a day on Summit classes in algebra, biology, English, world history, and physics. "You have to teach yourself."
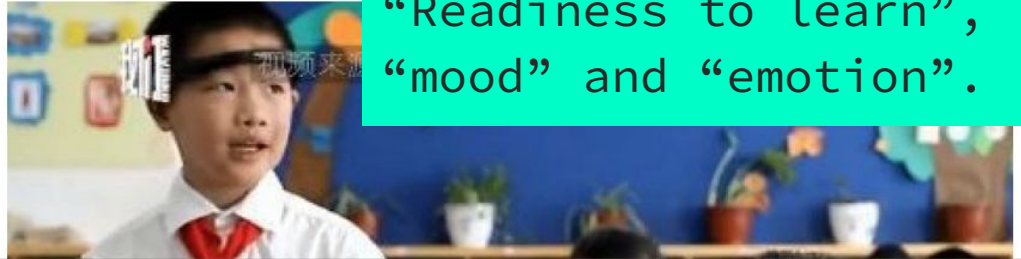
Summit stresses "personalized learning" and "self-

Chinese primary school stops using headbands to study pupils' concentration levels after public outcry

- Maker BrainCo defends use of devices on pupils in Zhejiang and insists they were not designed to monitor children's brains

Zhuang Pinghui in Beijing + FOLLOW
Published: 9:15pm, 1 Nov, 2019

Biometrics to predict "Readiness to learn", "mood" and "emotion".

Forms Of Resistance: DTBC-What we believe

We believe that it is the **power of a network of engaged individuals,** informed by their **expertise** and **lived experience** that can most **effectively push** for new terms of engagement with the powers behind data and tech.

Those affected by harmful consequences of data and tech along with those engaged in working with impacted communities, **should have a key role in decision making.**

Forms Of Resistance: DTBC EdTech Project

Project objectives:

- **build community** with people interested in understanding how Edtech is being used in our primary & secondary schools;
- **help develop community research skills** in both quantitative and qualitative data collection and analysis in order to better understand what is going on;
- **shed light on what sort of Edtech is being used in our schools**
  - which tech companies are supplying to schools;
  - understand what they are doing with our children's data;
- **understand the extent and impact of digital exclusion** on children living in economically deprived areas.

Where do we draw the line?

Discussion

- Are there red lines on "acceptable AI" in education?
- Where is there consensus on objection in schools?

Human Rights in a world of automated decisions

- **Privacy is not necessarily protected by Data Protection law.**

- **The Universal Declaration of Human Rights Article 12** –

  *"No one shall be subjected to **arbitrary <u>interference</u> with his** **privacy, family, home or correspondence, nor to attacks upon his** **honour and reputation.** Everyone has the right to the protection of the law against such interference or attacks."*

- Dunja Mijatović, Commissioner for Human Rights at the launch of the new Council of Europe Strategy for the Rights of the Child 2022–2027, **"We must always remember that children are full human rights holders, and on top of that, they enjoy special protections and rights as children."**

Forms Of Resistance: Student Proctoring

Amsterdam (preliminary) June 2020. The Amsterdam University student council tried to stop the use of Proctorio Inc. monitoring software. The council lost. C/13/684665 / KG ZA 20-481
https://gdprhub.eu/index.php?title=Rb._Amsterdam_-_C/13/684665_/_KG_ZA_20-481

In December 2022 a French administrative court suspended a university's use of the proctoring platform TestWe. The court in Montreuil, France, ruled that such "permanent surveillance of bodies and sounds" is unreasonable and excessive and not proportionate for the purpose preventing cheating.
https://www.laquadrature.net/en/2022/12/22/algorithmic-e-proctoring-of-exams-testwe-will-not-survive-the-winter/

Cleveland U.S. Ogletree vs Cleveland State University Case No. 1:21-cv-00500/ Student objected to room-scanning policy after seeing it mentioned in his spring 2021 syllabus. He sued the university and won. It created other wins.

Resistance and the aims of education

BUSINESS INSIDER
INDIA

Tech companies promised schools an easy way to detect cheaters during the pandemic. Students responded by demanding schools stop policing them like criminals in the first place.

TYLER SONNEMAKER | NOV 1, 2020, 19:23 IST

The Washington Post
Democracy Dies in Darkness

Cheating-detection companies made millions during the pandemic. Now students are fighting back.

With remote proctors watching them take tests, some worry that even leaving for the bathroom will brand them as cheats.

By Drew Harwell
November 12, 2020 at 9:18 a.m. EST

(Dion MBD for The Washington Post)

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When North Carolina A&T State University junior Arielle G. Brown took her International Marketing exam in September, a cheating-detection program analyzed her behavior through a computer webcam the entire time. After the test, her associate professor fired off a furious email ripping into her class for some "negative behavior" the software had

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Exam anxiety: how remote test-proctoring is creeping students out

As schools go remote, so do tests and so does surveillance

By Monica Chin, a senior reviewer covering laptops and other gadgets. Monica was a writer for Tom's Guide and Business Insider before joining The Verge in 2020.

Illustration by William Joel / The Verge

The stranger on the Zoom call appeared to be

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Australian universities
This article is more than 3 years old

Students alarmed at Australian universities' plan to use exam-monitoring software

Privacy experts criticise plan to use Proctorio and ProctorU software to monitor students at home amid coronavirus

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ELECTRONIC FRONTIER FOUNDATION

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Proctoring Apps Subject Students to Unnecessary Surveillance

BY JASON KELLEY AND LINDSAY OLIVER | AUGUST 20, 2020

Resistance and Rights: Legal Tools

- **Article 22(1) UK GDPR** – *'The data subject shall have the right not to be subject to a decision based solely on automated processing, including profiling, which produces legal effects concerning him or her or similarly affects him or her'*.
- Does the education provider have a ***'lawful basis'*** for processing (Article 6(1) UK GDPR)?
- Has the provider complied with the **Public Sector Equality Duty** (section 149 Equality Act 2010)?
- Does the software produce **discriminatory** or **irrational** outcomes (Article 5(1)(a) UK GDPR, Article 14 ECHR)?

Refuse, Retract, Resist: Tools & Strategies

Discussion

- Share tools and strategies you have seen and/ or used to resist public / private power that include and involve those who are affected by the technologies.
- What can we learn from one sector to apply in another?

The Right to education

- **UNCRC Article 29 "**development of the child's personality, talents and mental and physical abilities **to their fullest potential"**;
- **Article 26(2) Universal Declaration of Human Rights (1948)** *"Education shall be directed to the **full development of the human** personality and to the **strengthening of respect for human rights and fundamental freedoms. It shall promote understanding, tolerance and friendship among all nations, racial or religious groups, and shall further the activities of the United Nations for the maintenance of peace."***

Thank You & Please Stay In Touch

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Defend Digital Me
- Jen Persson @TheABB @defenddigitalme
- **Website** https://defenddigitalme.org/resources/
- **Incl. a link in 'Research' tab to report**: Artificial intelligence and education: A critical view through the lens of human rights, democracy and the rule of law (2022). CoE. ISBN 978-92-871-9236-3

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