Is data-driven technological solutionism the answer to the future of education?

Keynote

Prof. Dr. Dagmar Monett
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AI hype

Misleading news

5 terrifying stories that warn of an AI apocalypse

AI to bring ‘mankind to edge of APOCALYPSE’ — with robots a bigger ... THE quest to create artificial intelligence will have apocalyptic consequences, an expert has warned.

dailystar.co.uk

Robot writes op-ed promising to destroy mankind

Google AI built ‘AI child’ more advanced than anything humans have ever made

McKinsey: One-third of US workers could be jobless by 2030 due to ... The consulting firm estimates that between 400 million and 800 million people globally could be displaced by automation.
cnbc.com

Prof. Dr. Dagmar Monett, HWR Berlin
Artifictional intelligence, the one “available through the newspapers, books and films.”

AI momentum

Why now?

- Big Data (training and test data)
- Improved algorithms (models, parameters, techniques)
- Open access (publications, pre peer review)
- Open source (algorithms, experiments)
- Computer power (hardware, GPUs)
- Cloud computing (development platforms and storage)
The increasingly popular belief that, given enough data, machine learning algorithms can solve all of humanity’s problems. **There is no AI solution for everything.** All solutions come at a cost and **not everything that can be automated should be.**


Prof. Dr. Dagmar Monett, HWR Berlin
The long-term dream of AI is to build machines that have the **full range of capabilities for intelligent actions** that people have—to build machines that are self-aware, conscious and autonomous in the same way that people like you and me are.

Sometimes, however, the grand dream of AI in education looks very different from the reality of AI in education.
“[The] use of [online proctoring] has faced objections from student-representative bodies who deem OP to infringe privacy and autonomy of students by exposing them to extensive surveillance.”

https://allai.nl/portfolio-item/online-proctoring/
Online proctoring, one among many!

1. Highly intrusive surveillance machinery; Corporations’ interests-driven.

2. Lack of AI literacy; educational institutions buy what is lobbied, what they are told.

3. Psychology, Sociology, Education experts are not involved.

4. Zero transparency; blurry or no accountability; no explainability.

5. “Identifies suspicious behaviors”, “detects fraud” ⇒ Inaccurate; no extensive research comparing to human experience.

6. Privacy: data use and sharing without students or parents’ consent;

7. No opt-out; no alternative examination mechanisms

8. Discrimination (e.g. students with special conditions)
Philosophy & Technology
https://doi.org/10.1007/s13347-021-00476-1

RESEARCH ARTICLE

Good Proctor or “Big Brother”? Ethics of Online Exam Supervision Technologies

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UK ditches exam results generated by biased algorithm after student protests

Protesters chanted ‘Fuck the algorithm’ outside the country’s Department for Education

By JON PORTER / @jonporty
Aug 17, 2020, 6:16 PM GMT+2

Cheating allegations engulf Dartmouth medical school

By Laura Krantz  Globe Staff, Updated April 15, 2021, 6:52 p.m.

Administration, faculty! Typical case of anthropomorphism, a window to lack of accountability

The e-mail accused her — and, she later learned, more than a dozen other students — of cheating by accessing online course materials while taking a test on a different software platform. The school said that it had electronic evidence of misconduct, and that she was invited to make a brief statement defending herself at a tribunal to be held over Zoom in a week.

School surveillance: Is Big Brother spying on students?

Some pupils are monitored by CCTV cameras as frequently prison inmates

https://www.irishtimes.com/news/education/school-surveillance-is-big-brother-spying-on-students-1.4744905
“The new system, “e-hallpass,” is completely digital and [...] allows students to state the specific bathroom they plan to enter, and puts a timer on the trip to ensure they are not outside of the classroom for an extended period of time. To leave the classroom, the student and teacher must both enter a code via their device, thus allowing teachers to be certain of which students are not in the classroom.”
The future of AI in education could be bright if we pay careful attention to how, for what, by whom and for whom AI is used.
AI to support students and educators or to collect their data?

- How the user data was processed
- How ethical aspects were considered
- How much AI there is inside
- What the company thinks about regulation

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“[M]any underpaid workers are required to help build, maintain, and test AI systems. [...] The technical AI research community relies on cheap, crowd-sourced labor for many tasks that can’t be done by machines.”

The more our children depend on technology for solving all problems around them, the less they will be prepared to deal with life and technology in the future.
Thousands at Meta, Twitter, Salesforce lost jobs this week—the shock could ripple through the economy for months

Published Thu, Nov 10 2022 • 4:39 PM EST

Digital literacy. AI literacy.
Start early.
Learn more about products, tools, frameworks available. E.g. How do they work? What happens with the data?
Prioritize human rights, values, ethical aspects

Prof. Dr. Dagmar Monett, HWR Berlin
Teach.
Build early.
“[N]ot everything that can be automated should be.”

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