Critical Perspectives on AI in Education: Neither Utopia nor Dystopia

Anne Drew Hu (they/them) PhD Candidate Ed Psych & Ed Tech (EPET)

How can I make this presentation helpful for you?

- What questions/wonderings/hypotheses do you have?
- Bonus points for "To what extent" questions

Topics

- Al is neither utopia nor dystopia for education
- Critical theory
- Applying this to new tech (AI)

Utopia or Dystopia?

Utopia

- Personalized intelligent tutors
 - Free, universal access to education
- Labor saving ushers in a new age of wealth and leisure

Dystopia

- Abolishing student-teacher interaction
 - Irreparable harm to socio-emotional learning
 - Explosion of academic dishonesty destroys moral fabric of society

What other predictions have we heard? Both utopian and dystopian...

To what extent do you agree with these predictions?

My Argument: Technorealism

- Generative AI will be neither utopian nor dystopian
- In fact, it will fail to fundamentally change education at all
- It *will* make an impact on the daily lives of teachers and students, <u>maybe even a large impact</u>
- However, these changes will not be transformational in nature
- Rather, they will only <u>exacerbate or alleviate</u> <u>existing conditions</u>

Failure to Disrupt

Ed tech has failed to live up to its promises

Useful tools? Yes, in some cases.

Decentralization of knowledge? Nope Personalized intelligent tutors? Nope Global access to education? Nope



Permanence of Racism

Derrick Bell, one of the creators of Critical Race Theory argues...

Racism is **permanent**, not just endemic

As we create policies to mitigate racism, racism shape-shifts to <u>renew its power</u>

How does this apply to AI in education?



AI Fails to Disrupt Injustice

- Ed tech has never disrupted education
- Al claims to not only disrupt education, but make it more equitable!
 - See, claims from <u>Khan Academy</u> and <u>Duolingo</u>
- If we aren't careful, AI may exacerbate inequities
 - Diverting valuable funding to imaginary tech
 - Disrupting student-teacher relationships
 - Solitary learning harms socio-emotional learning

Stuck in the Shallow End

- Jane Margolis argues in this book that access to computing is inequitably distributed:
- Students in districts with more students of color and lower SES have...
 - Less access to computing resources
 - Shallower types of engagement
- Inequity in computing mirrors overall inequity in education

"Students of color may be stuck on the educational 'shallow end' now [the authors write], but it is possible to end their segregation through systemic reform."—Education Week

STUCK IN THE SHALLOW END

Education, Race, and Computing



JANE MARGOLIS

Rachel Estrella Joanna Goode Jennifer Jellison Holme Kimberly Nao



The "Shallow End" of AI in Education

- I predict that access to AI tools will be similarly inequitably distributed
- The "shallow end" of AI usage
 - Using AI to offload cognitive labor instead of engaging in high cognitive demand tasks
 - Using AI in ways resembling existing technologies (e.g. search engines) instead of transformative new tools
- Low SES, schools of color will continue to be stuck in the shallow end with AI

AI Rollout Failures

<u>California's Two Biggest</u> <u>School Districts</u> <u>Botched AI deals. Here</u> <u>Are Lessons From Their</u> <u>Mistakes</u>

(Johnson, 2024)



Group Discussion

What questions do we have for each other?