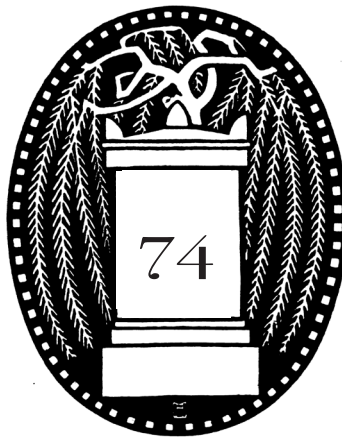


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Unmoored: The Case for and Confounding of Educational Foundations in the Age of Artificial Intelligence

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Vignette: The Unseen Bridge

In the bustling auditorium of the annual Educational Innovations Conference, Dr. Alex Hart, an advocate for integrating Generative AI into educational frameworks, steps onto the stage, his eyes gleaming with anticipation and a dash of rebellion against traditional norms. The room, filled with educators, administrators, and technologists, simmers with a palpable tension between excitement for the future and apprehension of the unknown.

Alex begins his talk, his voice steady and confident, weaving a tale of a future where Generative AI not only assists in creating a dynamic, interactive learning environment but also transforms the conventional paradigms of student assessment and engagement. He speaks of classrooms where technology-enabled feedback and where students, aided by AI, delve deeper into discussions, exploring and creating knowledge in a symbiotic relationship with artificial intelligence.

As the presentation unfolds, the audience is transported into classrooms of the future, where written assignments are no longer the sole measure of a student's understanding and capability. Alex describes a shift towards task-based and performative assessments, where students demonstrate their learning through various mediums, reducing the traditional reliance on written outputs.

Amid the captivated audience, Professor Lynn Carter, a seasoned educator in Social Foundations of Education, feels a twinge of unease. As the Q&A session begins, Lynn's hand rises hesitantly, her voice carrying a mixture of concern and curiosity, "How do we, as educators, navigate through this transition, ensuring that we are not left behind or, worse, rendered obsolete by the very technology we introduce to our students?"

The room falls silent, all eyes shifting between Lynn and Alex, awaiting a bridge between the posited future and present concerns.

Alex pauses to acknowledge the depth of the query. “It’s a journey of adaptation,” he begins. “The role of educators will undoubtedly evolve, but it will not diminish. Instead, it will become one where educators become facilitators and co-creators of knowledge alongside students and their AI.”

Her eyes reflect a storm of thoughts, and Lynn responds, “In teaching Social Foundations of Education, we are already in a constant battle to validate our significance. Suppose foundational subjects are perceived as less-vital in an AI-driven educational model? How do we preserve our role and ensure that the essential principles of education are not lost amidst technological advancements?”

Alex nods, recognizing the valid fears embedded in Lynn’s words. “The preservation of foundational education principles is paramount,” he affirmed. “The integration of AI does not negate the need for understanding the roots and ethics of education. It amplifies the need for educators to guide how technology is implemented and utilized, ensuring it is aligned with ethical and foundational principles.”

The vignette closes with Alex and Lynn, representing two ends of a spectrum, engaging in a dialogue that is a microcosm of the larger conversation within the educational community.

—B. Rodney 70%; ChatGPT 30%

Background

This vignette describes a real conversation at an actual event. In full disclosure, I must state at the outset that the retelling of this episode is highly embellished with ChatGPT. ChatGPT is one of many emergent computer-based text generation programs called Generative Pretrained Transformers (GPTs). GPTs are computing platforms that construct or amalgamate novel information from massive, unlabeled digital datasets scraped from unwitting creators from all corners of the internet. These applications use machine learning and algorithmic computer processing to reconstruct predigested information scraped from across the internet into novel responses to a user’s query or “chat prompt.” The current utility of these systems is to use algorithms and data (a.k.a. “neural networks”) to respond to questions, comments, or musings posed by individuals. Individuals may access these large-language models with a chat box interface on their phones, tablets, computers, or televisions. These models can generate novel, coherent, and fluent texts on various topics and domains. They can also generate images of varying types and styles, each unique and different. These models can

create voice and sound recordings to mimic preexisting voices or sounds or novel voices as yet unheard.

It would be accurate to claim AI tools as a watershed technological development. They represent an advancement in human–computer interaction long described in cybernetic computer philosophy and science-fiction novels. Open AI published the first GPT transformer in 2018. Its most popular progenitor is GPT 3.5, published in November 2022. Within 30 days of its introduction to the public, GPT went from 0 to 57 million active users. The launch of ChatGPT sparked what has been referred to as a new information race. Reactions in all knowledge-generation and knowledge-management fields run the gamut from intrigued to frantic.

Microsoft, the world’s most-widely used desktop and server-computer company immediately made plans to embed GPT into its computer-programming products and into GitHub, the massive computer-programming storehouse used by coders around the world. Today, just 10 months following its broad availability, 41% to 46% of the code published on GitHub is generated by AI.

In the field of education, the rush by many to adopt AI seems unrelenting. Educational institutions, ed-tech firms, and governments are all competing to harness what they perceive to be the transformative powers of AI. In a reversal of an earlier position, New York City Public Schools is now working with Microsoft to build an AI for each student. Online learning-management corporations such as Khan Academy, Grammarly, and Blackboard have already rolled out some GPT-based AI to assist users of their platforms.

Those within the AI education project aiEDU say the project’s aim is to create personalized learning environments, provide individualized student and teacher support, and automate or make administrative tasks more efficient. OpenAI’s GPT series, Google’s BERT, TensorFlow, and IBM’s Watson are all AI products vying for market share in educational settings. Their creators claim the products can facilitate adaptive-learning systems, automate administrative tasks, and enhance student engagement through intelligent interactions with their specific AI product. Amazon’s Alexa technology has also been updated, infused with nuanced AI capabilities, and Amazon claims the new Alexa offers educators and learners new ways to interact, deliver content, and manage tasks.

The COVID-19 pandemic accelerated the adoption of AI across educational institutions and organizations. As U.S. schools and universities shifted *en masse* to online learning platforms, educational technology was rapidly deployed and was branded indispensable to educational access. This shift led to schools’ and universities’ increased reliance on educational technology and led to these institutions advancing a conceptual rationale for deepening technology augmentation in education.

Just this week, Microsoft announced the broad availability of its Copilot AI to billions of users of its Microsoft Office products. At its recent global conference, Google made a similar announcement about its first-generation Bard AI platform. As these corporate AI rollouts suggest, today's AI tools have already given rise to an unsettling feeling among many of AI as a boat that has become unmoored and is drifting far ashore.

In yet another example of this compelling educational shift, I offer a short poem that carries the theme of my talk forward. The poem, a *kwansaba*, is a style of poem invented by Dr. Eugene Redmond, a former poet laureate of East Saint Louis, IL. The poem is composed of seven lines, each with seven words. It describes how many people experience a sense of disconnect from their pasts given the social and technological change that technology oftentimes presents. The poem ends hopefully with a call to consider technology's ethics and for us to remember our humanity. The format of the poem is precise; the words predictably align to convey meaning and even depth, yet this poem is, in large part, generated by a GPT tool.

Unmoored: A Kwansaba

Unmoored, we drift in vast, digital seas,
 Humanities whisper tales of ancient keys.
 Silicon minds, devoid of ancient tales,
 Navigate blindly through life's vast, complex trails.
 We seek wisdom in the coded streams,
 Yet lose ourselves in unbridled digital dreams.
 Anchor in ethics, sail with human beams.

— ChatGPT 90%; B. Rodney 10%

The Programmed Human and AI in Education

Ivan Illich (1926–2002), a critic of institutionalized education and technological society, relied on the Greek myth of Prometheus to analogize modern humans in relationship to technological development. In his “Promethean man” concept (Illich, 1995), Illich recognized something beyond human beings’ reliance upon ingenuity, mastery over primal elements, and exploration of forbidden knowledge. He foresaw, too, that technologies served to shape human agency and interactions. He writes, “Man the helmsman has turned the rudder over to the cybernetic machine” (Illich, 1995/1976, p. 115). Such interactions often have unintended consequences, he argued. Other thinkers, such as Günther Anders (1902–1992) drew upon the Greek myth of Prometheus to explore the advent of technology and reveal the unintended consequence of atomic development and its potential to destroy (Babich, 2022). A third consequence of

technological advancement to which Illich alludes is his concern over technology's remaking of human beings and the eventual obsolescence of disciplines once considered to hold epistemological value. Technology holds real potential to embed the seed of humanity's destruction at its worst or to reshape humanity—dare I posit mere reprogramming as the least harmful outcome.

A conversation between Seymour Papert and Paulo Freire (Friesen, 2012) often inspires my work in educational technology. One of these thinkers, Papert, sees the use of technology as a cognitive amplification tool that can extend and expand human learning potential, even to the point of making traditional schools obsolete (Friesen, 2012). The other, Freire, sees technology as a tool that can inform new types of pedagogy, but ultimately Freire maintains that emancipatory pedagogy can occur without digital technology. These scholars' contrasting viewpoints highlight the complexities educators face today. AI has ushered in an era where educators must grapple with the **pedagogy of the prompt**. How do we guide learners to interact with AI in ways that foster critical thinking, creativity, and a deep understanding of the subject matter? How do we ensure that AI serves as a tool for empowerment, rather than a crutch that hinders intellectual growth?

Papert's vision of technology (Friesen, 2012), which enables learners to bypass traditional schooling and engage directly with knowledge, resonates, I believe, with the possibilities AI offers. But Freire's emphasis on the human element in education (Friesen, 2012), the importance of dialogue and critical consciousness, reminds us that technology alone cannot be used by humanity to achieve true liberation. In my view, the pedagogy of the AI prompt is about finding that balance. It's about crafting prompts that spark curiosity, challenge assumptions, and encourage learners to explore the vast landscape of knowledge AI opens up to them. It's about guiding them to use AI not just as an information retrieval tool, but as a partner in the learning process, a collaborator in the creation of new knowledge.

AI tools like Microsoft's ChatGPT-based AI, "co-pilot," and Google's Bard or Anthropic's Arthur all include a personal assistant element. This assistant is designed with a cognitive amplification feature (Jonassen, Carr, & Hsiu-Ping, 1998) which carries the potential (or risk) to "reprogram human beings." In his "Homo Programmundus," Illich (2013) advances a critique of how society becomes shaped by its technologies. As per Illich, the Promethean man is a metaphor for a community driven towards creating tools that eventually reshape it, often in ways that counter the original intent. He states, "Promethean man, Homo Faber, man the toolmaker, has become a slave to his tools" (Illich, 1995, p. 87).

Considering the burgeoning transhumanistic perspectives, whereby "the human being can, in and of itself, become more than what it was" (Bostrom, 2005, p. 202), the dialogue around AI in education necessitates

scrutiny that transcends the mere technical or pedagogical. It invites the question, what does it mean to be human? Moreover, the tension between social and techno-corporate educational foundations frames a poignant exploration arena. The potential polarization between “education as a social equalizer” and “education as a market-driven entity” (Spring, 2015, p. 11) accentuates the complexities and threats of integrating AI technologies often driven by corporate interests, yet embedded within systems that serve diverse, and often socially driven, educational landscapes.

The “enhancement” of human capabilities using AI invites questions about education as a process of transmitting knowledge vs. education as an experience in human augmentation. The following fundamental question and three sub-questions might guide one’s exploration of this intricate interplay:

1. How can education maintain human-centered approaches, avoid acceding to technological determinism, and resist the worst impulses of neoliberal techno-corporate objectives in the face of rapid, corporatized AI-based technological change?
 - a. How can Artificial Intelligence in educational contexts effectively balance with humanism over trans-human cybernetic impulses?
 - b. How could AI make students better learners and not simply better cheaters?
 - c. How does Artificial Intelligence support new “assistive” pedagogies that can bolster personalized learning along with democratic engagement?

AI and Education

The roots of AI can be traced back to the mid-20th century when cybernetics emerged as a field of study. The Macy Conferences, held between 1946 and 1953, brought together leading thinkers from various disciplines to explore the potential of machines to mimic human intelligence (Bostrom, 2005; Von Foerster et al., 1953). These early pioneer computer scientists analyzed the constructs of cryptography, language models, and machine learning, laying the groundwork for the AI revolution we now witness.

The current push toward AI use is undeniably transforming the educational landscape, and its effects are already palpable. In Mustafa Suleyman’s book, “The Coming Wave,” (2023) he describes the ways in which computing power, cloud-based data storage, and algorithmic coding capacity have led to a massive development of AI technology. Suleyman argues that we are only at the beginning of this wave, a time perhaps analogous to the advent of the first smartphone, the iPhone, circa 2006. His bullish Silicon Valley-favoring analysis illustrates the urgency assigned

to AI transformation, highlighting how universities across the nation are grappling with the challenge of preparing students for a future where institutions believe AI will play an increasingly significant role.

In an economic context where university closures seem routinely to occur due to financial exigency and while many institutions are making what Brian Alexander (2013) calls the “queen sacrifice,”—shuttering humanities programs at the expense of prioritizing STEM—the risk grows of institutions mass-deploying AI out of efficiency and exigency. Such a scenario raises vital questions about the future of democratic approaches to higher education and the role of humanism in the learning experience.

One of “wicked” problem educators face is found amidst the dialectic between human autonomy and technology-augmented human learning. As AI tools become more sophisticated, there is a growing concern that our students will become overly reliant on them to complete the bulk of academic tasks. Typical student papers, essays, math exercises, and how we “do school” are easy to automate with GPT tools. Educators now carry a palpable and justified fear that these technologies will lead to a decline in critical-thinking and problem-solving skills among learners. Furthermore, the ever-present fear of students engaging in academic misconduct like cheating is even more apparent. Educators struggle with AI to find ways to strike a balance between leveraging the power of technology-based aiEDU as a cognitive and task assistant vs. an information processing cut-and-paste machine.

Looking beyond educators’ justifiable fears, students’ reliance on AI raises many problems: (1) AI tools co-opt ideas and feed them back to students in a perpetual “echo chamber.” This invariably leads to a decline in critical thinking and problem-solving, both necessary for creative expression. (2) AI tools normalize a “copy-paste” culture and thus make plagiarism and cheating potentially routine. (3) GPT tools “hallucinate,” in that since these tools are programmed to construct responses, their nature is to sound authoritative and be verbose; novice learners are at risk of taking AI’s strength of voice as accurate information. In most cases, the constructed material is incorrect.

As educators grapple with the disruptive nature of AI, three critical problems in the context of teaching and learning loom large. These problems are not novel, though, indeed these problems and questions are fundamental and have been since the first communication and information technologies entered the classroom. They are: The problem of teacher replacement; (2) the problem of learner agency; and (3) the problem of cheating or academic dishonesty.

Problem 1: The Replacement Dilemma

In higher education, faculty like Lynn in our opening vignette wonder if AI will take their jobs and destroy their disciplines. Indeed, some fields

appear more vulnerable in this regard than others. Faculty in the Social Foundations of Education and the related humanities disciplines and subdisciplines seem somewhat adrift in a broader educational context already obsessed with prioritizing STEM-based knowledge. Again, this phenomenon is not new; it occurred at the beginning of the Cybernetic age at the end of World War II. Heims, in his history “The Cybernetic Group” (1991), describes educators grappling with technological change as an ongoing phenomenon in the Western intellectual tradition:

It was a time when human sciences rather than humanistic studies were in the ascendancy, solving problems rather than reflecting on meanings. Normally the humanistic and scientific modes of understanding coexist, overlap, and are seen by the generalist as complementing each other. Yet the two modes also compete, and at certain times and places in Western intellectual history, one mode has been strongly favored over the other. In the period following the Second World War in the United States, universities increasingly emphasized the social and behavioral sciences at the expense of humanistic scholarship. (p. 4)

We are going through one such period again. Universities nationwide are making what Bryan Alexander, a self-described educational futurist, calls the “queen sacrifice,” (Alexander, 2013), in that colleges and universities, particularly those facing financial challenges, eliminate seemingly vital programs and faculties—often in the humanities and social sciences—to cut costs and redirect resources towards STEM and business programs. These two areas are often perceived as more lucrative career paths and so immediately relevant to students coming through school during a technologically advancing age.

While it can offer advantages, integrating AI into educational settings also inadvertently casts a shadow over disciplines like the humanities and “in-between” fields like education and our field, Social Foundations of Education, fields often touted as less valuable to a university’s bottom line. In my opening vignette, Lynn’s apprehensions mirror educators’ concerns who try to navigate the tightrope between embracing innovation and foregrounding tools that are subtly or openly being cast for faculty efficiency or curriculum streamlining.

Problem 2: The Augmentation Dilemma

Developments in machine learning, robotics, and digital computing are rapidly fusing human agency with technological augmentation in some ways to the point of co-dependency. The intertwining of technological advancements and human activities accentuates the vital role of critique, dialogue, and constructivist exploration in education. The philosophical and critical nature of Social Foundations of Education, rooted in philosophy, history, anthropology, and sociology, are necessary to explore these interactions.

The humanities, which delve into the meaning and value of human experience, provide a pivotal perspective for critically examining our relationship with technology. Sherry Turkle (2011), an expert on technology and society, poignantly notes, “Technology doesn’t just do things for us. It does things to us, changing not just what we do but who we are” (p. 1). Her concern is founded in the public’s profound reliance on digital devices and platforms, from mobile phones to learning applications, which have permeated every facet of our lives. Despite this dilemma, the rise of GPT use as educational and organizational “co-pilots” appears at present as a foregone conclusion.

Problem 3: The Integrity Impasse (Navigating the Ethical Ambiguity of AI Assistance)

AI-powered tools like ChatGPT have ushered in an era of unprecedented “academic assistance,” blurring the line between legitimate educational support and outright cheating. The ease with which students can access AI-generated essays, code, and solutions presents a moral quandary for both learners and educators. While these tools can enhance research and streamline learning, misuse and over-reliance can undermine academic integrity and devalue the educational process. The challenge lies in distinguishing between the ethical utilization of AI as a learning aid and its exploitation as a shortcut for assignments and end-run around student thinking. The temptation to outsource one’s cognitive efforts to machines also raises questions about the authenticity of student work and the accurate measurement and appraisal of academic accomplishment.

The dilemma introduced by the proliferation of AI therefore demands a reevaluation of traditional notions of authorship, originality, and the very purpose of education. This is especially important since educators are tasked with fostering a culture of academic integrity in an environment where the boundaries of permissible assistance are now constantly shifting. This dilemma is even more poignant since we in Social Foundations of Education are tasked with educating future educators.

Purpose and Significance

In my talk I’ve attempted to highlight the importance of strengthening Social Foundations of Education amidst the advancements in AI technology. Additionally, I have suggested we delve into how metaphors can aid in comprehending the effects of AI on education. Lastly, I aim to showcase how collaborating with AI to create narratives can foster innovative participation and analysis supporting Social Foundations of Education.

In an era where AI is being tightly intertwined with education, crafting one’s educational philosophy becomes critical. Focusing on educational questions rooted in educational philosophy, history, anthropology, and sociology is work best understood through employing the dialogic.

Consequently, acknowledging and critiquing the dichotomy between technological progress and the nature of what it means to be human shapes the questions of our time. Moreover, examining this dichotomy becomes particularly challenging when most technological tools are rooted in structural arrangements directed by a small, elite number of billionaire, deterministic, technology entrepreneurs who often are rooted in narrow cultural and geographic contexts like Silicon Valley, a group whose framework is defined by walled-garden approaches to data management, and whose inventions largely rely on mass aggregating individual user data and digitizing collective knowledge from the global information commons.

Conclusion

Although educators grapple with the real risk AI poses, that of becoming unmoored from the educational humanities and traditional ways of learning and thinking, I argue we will have purposefully to become unmoored from an overreliance on technologies made, accessed, and utilized without thoughtfulness or humility. As education stands on the precipice of a potential new era, one where AI's influence seems inescapable, I call upon educators to grapple with necessary, profound questions. Will humanity become the “homo programmundus” (Illich, 2013) that of which Illich warns, shaped and potentially limited by the very tools we create? Or can we harness the power of AI to amplify our human potential while remaining mindful of the social, ethical, and even existential implications of our humanity?

In order to engage in dialogue around AI that moves democratic education forward, educators must delve into examining the very essence of what it means to be human, to learn, and to exist in a world increasingly intertwined with so-called intelligent machines. Such a dialogue requires educators to question, critique, and envision a future where technology is only accepted which serves our collective well-being and enriches, rather than diminishes, our humanity. In a nod to the phenomenon of technological disconnection, I leave you with a ChatGPT-created Haiku that centers on this question.

Unmoored: A Haiku on Education

Unmoored from the past,
Tech waves shape learning's new mast,
Seek balance; hold fast.

—*ChatGPT 90%; B. Rodney 10%*

References

- Alexander, B. (2023). *Queen sacrifice*. Academia next. <https://bryanalexander.org/uncategorized/colleges-prepare-to-sacrifice-the-queen/>
- Babich, B. E. (2022). *Günther Anders' philosophy of technology: From phenomenology to critical theory*. New York, NY: Bloomsbury Academic, Bloomsbury Publishing.
- Bostrom, N. (2005). A history of transhumanist thought. *Journal of Evolution and Technology*, 14(1), 200–267.
- Friesen, N. (2012, May 17). *Seymour Papert and Paulo Freire debate technology and the future of schools* [video]. YouTube. <https://www.youtube.com/watch?v=4V-0KfBdWao>
- Heims, S. J. (1991). *Constructing a social science for postwar America: The Cybernetics Group, 1946–1953*. Cambridge, MA: MIT Press. https://monoskop.org/images/2/26/Heims_Steve_Joshua_The_Cybernetics_Group_1991.pdf
- Illich, I. (1995/1976). *Deschooling society*. London, UK: Marion Boyars Publishers Limited [Kindle scribe edition].
- Illich, I. (2013). *Beyond economics and ecology*. London, UK: Marion Boyars Publishers Limited.
- Jonassen, D. H., Carr, C., & Hsiu-Ping, Y. (1998). Computers as mindtools for engaging learners in critical thinking. *Tech Trends*, 43, 24–32.
- Spring, J. (2015). *Economization of education: Human capital, global corporations, skills-based schooling*. New York, NY & London, UK: Routledge.
- Suleyman, M. (2023). *The coming wave: Technology, power, and the twenty-first century's greatest dilemma*. New York, NY: Crown.
- Turkle, S. (2011). *Alone together: Why we expect more from technology and less from each other*. New York, NY: Basic Books.
- Von Foerster, H., Mead, M., & Teuber, H. L. (Eds.). (1953). Cybernetics: Circular causal and feedback mechanisms in biological and social systems. *Transactions of the Tenth Conference of the Josiah Macy, Jr. Foundation*. New York, NY: The Josiah Macy, Jr. Foundation.