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The commodification of education and the (generative) AI-induced scam-like culture

Dagmar Monett[1] and Gilbert Paquet[2]
[1] Computer Science Dept., Berlin School of Economics and Law, Germany
[2] Independent IT researcher and writer, Montreal, Canada
dagmar.monett-diaz@hwr-berlin.de
gilbert@gilbertpaquet.com

Abstract: Learning is hard, mastery takes time, and time ripens all things. This may seem appalling in an age where instant gratification offers quick ways to write a thesis and get a degree without bothering to master a topic. If so, what about intellectual and academic integrity? What about the evaluation of learning? What about the quality of information provided by (generative) AI systems? Like all sectors, education is experiencing a crisis of legitimacy amplified by the ultra-fast and widespread adoption of (generative) AI. What's the point of spending several years on a school bench if we can pretend to know in seconds? This scam-like culture did not pop up out of nowhere. Its origins can be traced back to Silicon Valley where "fake it till you make it" has become a globalised motto nurtured by the gospel of tech solutionism. In this paper, we argue that there still is no sign of a revolution of AI in education, only in the media and corporate outlets. We are witnessing a corporate-AI coup, a digital stratagem to reclaim triumph in an already devastated sector, an attempt to appropriate leadership, taking over educational institutions' decision-making by promising solutions to systemic problems that are not solvable with them. We demonstrate it with varied examples. To maintain its appeal, the gospel of techno-solutionism, now supercharged by generative AI, enjoys the unpaid support of educational elites: educators and students using, beta-testing, and training AI technologies, thereby promoting the use of those technologies despite their flaws and negative implications. We analyse the origins and factors conditioning such an AI-dependent situation, demystifying its influence with factual analysis that educators outside the AI field may not possess, and suggest different narratives to facilitate understanding the AI bubble. If there is an AI revolution in education, it is the accelerated commodification of education at any cost. This paper shows a different, much-needed path forward.

Keywords: AI, AI hype, artificial intelligence, education, tech solutionism

1. Introduction[1]

Why do we teach and why do we go to school? Colonized by the language of economics which takes its idioms and arguments from the discourse of management, business, and finance, education is centred on the acquisition of information and standardized assessments that validate the "mastery" of data and the "execution" of skills in response to the needs of organizations looking for "top talents" on the job market. Promoted as a "training facility for the workforce," the school is no longer a place to learn how to learn, and how to think, but an educational supermarket where customers select among an assortment of degrees leading to a job. When education is nothing other than a sector of the economy producing knowledge (Karpov, 2013), the commodification of cognitive activity, which turned knowledge into an item that can be traded, bought, or sold in a market, radically alters educational practices and what it means *to know*. The shockwave caused by the intrusion of Artificial Intelligence (AI), especially generative AI, into schools is the culmination of this commodification of education. However, a salutary look back at history teaches us that it wasn't always so—we've forgotten.[2]

According to a long philosophical tradition going back to Plato, three conditions must be met before we can say we *know*. First, we have to believe a certain idea to be true; second, we have to believe it to be true; third, we have to believe it for the right reasons. Knowledge, then, is *justified true opinion*. In such a scenario, if a student knows something, he must think it, it must be true, and he must have good reasons to think it (Baillargeon,

[1] This paper was 100% written by two humans, the authors, for reasons we discuss throughout it, especially in Section 4. Furthermore, we chose not to refer to supposed or eventual advantages of AI on purpose, nor to boost or hype AI unnecessarily.
[2] This paper is not a literature review, although we reviewed the literature on the concerning topics very carefully and cite related work we build upon. This paper is not an opinion paper either; our main goal is to raise awareness and shake out the flawed and overpromising narratives about AI, together with other issues normally hidden—behind actual corporate interests—to learners and educators alike.

2023). Simply repeating what generative AI powered chatbots regurgitate is insufficient. The student must be able to argue, and by doing so, to reason, to draw conclusion from premises.

Knowing that arguing is no longer taught and debating has become a free-for-all on social media, is it any wonder that reason has become an "endangered faculty"? Fortunately for some, chatbots like ChatGPT come to the rescue even though they do not reason, they do not understand language (language models are nothing but probabilistic models of languages made of strings of symbols), they are indifferent to the truth of their outputs (Frankfurt, 2005), and they carry all kinds of biases inherent in the training data. But, who cares since their purpose is not to be true, but to provide convincing lines of text in response to a prompt? It is not surprising that more and more learners see generative AI as a silver bullet to their inability to reason and argue. They can pretend and fake it till they make it in accordance with the globalized motto nurtured by the Silicon Valley's gospel of tech solutionism.

If writing is fundamental to learning, academic research, and creativity, that doesn't mean that the solution to not writing well is using chatbots. It might mean the solution is figuring out why students, for instance, are so poorly trained in expressing their ideas in written form, an essential skill in any educational setting, especially higher education, and in finding ways to counter that. If someone thinks ChatGPT can or will ever solve their writing problems or those of their students, then they actually don't understand how ChatGPT works nor their writing problems or those of their students. Any chatbot will do some "writing" for them (e.g. autocomplete sentences depending on a given question), but they still will not know how to write themselves or how to develop their ideas in written form. Worse, what the chatbot produces will always need revision. Studies show, for instance, that people rely more and more on those generative AI-produced answers than learn from them (Darvishi et al., 2024), don't develop necessary literacy skills (Anson, 2024), or even might "develop tendencies for procrastination and memory loss and dampen [their] academic performance" (Abbas et al., 2024). But never mind, since academic success means success tailored to the needs of the job market, providing convincing lines of text might be all it takes for sounding knowledgeable without having to know. From writing to prompting and from understanding to regurgitating information, the so-called revolution of AI in education is nothing more than the loss of what it means to teach and what it means to learn.

How did we get here? First off, let's never forget that AI is essentially a form of automation, and automation is the substitution of capital for labour. In such a scenario, what does history teach us?

- The goal of automation has always been efficiency.
- Efficiency means reducing "bandwidth costs" (e.g. workforce) by any means.
- This vision "embraced the top-down design of digital technologies aimed at eliminating people from the production process" (Acemoglu & Johnson, 2024).

Turning education into a "knowledge business" stems from a vision of technology as a powerful tool to cut labour costs. The goal is not to make education better, but cost-efficient. Whether you want to automate an assembly line, a weaving loom, or teaching, the logic is the same, and AI pitchmen are explicit about it: "The purpose of AI, the source of its value, is its capacity to increase productivity, which is to say, it should allow workers to do more, which will allow their bosses to fire some of them, or get each one to do more work in the same time, or both" (Doctorow, 2023). Given the precarious situation in many educational institutions worldwide, big tech companies and top consulting firms are strongly advocating the "digital transformation" of education as a solution to solve its chronic "bandwidth costs" problem by bringing automation into education. As systems that automatically respond to human prompts and "can easily provide a focused, personalized, and result-oriented online learning environment, which is exactly what today's educational institutions need" (Okonkwo & Ade-Ibijola, 2021), generative AI-powered chatbots are promoted as the solution to this recurring issue.

By integrating AI in education, it becomes not only possible to automate teaching by breaking it down into a set of tasks that can be programmed from start to finish, but also to eliminate workers (i.e. teachers, support staff, special educators, etc.) from the production process of knowledge. Once automated, the entire "education value chain," from admission to graduation, can be accessed via a classroom platform or through an online software-as-a-service platform where students can learn using chatbot-based technology or "intelligent" tutors. Such a "fix" is what we call an *AI revolú*, a short-lived, illusion-based, dreamt-of gullible wish to have technology "finally" solving the many systemic problems in education worldwide.

Actually, there has not been, there is no, and there probably never will be a true revolution of AI in education. There is no sign of a revolution of AI in education, only in the media and corporate outlets. What we have is a corporate-AI coup, a digital stratagem to reclaim triumph in an already devastated sector, an attempt to appropriate leadership, taking over decision making in educational institutions and making the educational sector even more dependent on brittle technology by promising a solution to problems that are not solvable with technology, especially regarding the latest developments with generative AI (Watermeyer et al., 2023). What develops is an *exogenous technological autocracy* with corporate *kratos*[3] that moves the threads of technological developments related to education and diversifies them at its will. Yet, the ability of these coup-makers to make the already-in-need sector believe in their "dreams" is disguised as digital skills opportunities for all, transforming digital progress into more space for human deskilling and regress.

Corporate AI aims to maintain an invisible control, its *kratos*, over learners, educators, policymakers, and the whole education system through indoctrination and propaganda, mostly accompanied by AI hype, the (still non-seen) future potential of AI in education, and promises of democratizing education and access to digital empowerment for all. To maintain their *kratos*, AI autocrats enjoy the unpaid support of educational elites (e.g. educators using and beta-testing AI technologies) that hold influence in their educational institutions and promote the use of those AI technologies at all costs (Bender, 2024; Watermeyer et al., 2023). The sole fact of "democratizing" AI for education is a masquerade, an insult to what democratization or democracy mean. In democracies, any society member can decide, at least with their vote, what society they want to live in and how to govern it. However, "democratizing AI" and any reference to it give only the illusion of choice, of a power position that is nowhere possible (Sætra et al., 2022).

It looks more like *AI Slavery*. For instance, when it is engrossing the group of people who work as testing servants in the role of annotators (Hao, 2023; Hao & Seetharaman, 2023)[4] under deplorable conditions with serious negative implications for their mental health. Crawford (2021) makes the point that artificial intelligence has nothing from artificial but that it is very human behind its curtains, maintained by probably millions of such underpaid annotators and content moderators. Furthermore, corporate AI is outsourcing testing to non-paid (slave) labour, e.g. when students have to work on ChatGPTed projects in classroom at the expense of getting a bad grade if they don't want to. A double sword, forcing the use of combinatorial (let us call it *degenerative*) AI on the one side, with the real damage, biases, and ecological dysfunction of such technologies as an afterthought on the other.

And it looks like *AI Feudalism*, too, structuring the educational sector's needs around products and tools derived from the holding of licenses and promised digital developments in exchange for service or labour. For example, when educators and learners beta-test those products even without payment, learners carry a heavy, invisible yoke for the duration of their studies and beyond that will accelerate their dismissal in the future for the lack of those same skills they are not learning now or for convenience of those for whom they do the unpaid service.

2. Reading, writing, thinking: bots must not apply

What are the consequences of students not reading (books, articles, reports, etc.) by themselves and delegating such activities to others, mechanistic chatbots included? Reading between the lines, i.e. discovering a message or meaning implicitly rather than explicitly stated entirely disappears; the interpretation of ideas and phrases with apparently less or subtle importance vanishes. Statistics-driven algorithms do not (and never will because that is their technological nature) extract, summarize, or consider such pieces of implicit information unless explicitly programmed, instructed, or trained with it. They lack social and real-world experiences completely and are unable to interpret or recall such experiences concerning the limited text they process, whatever the billions of "tokens" they are sold with in corporate narratives. Mainly because only-digitally-performing algorithms do not have such experiences despite the tons of words they tokenize and are pattern-detecting trained with. Human interpretation of written text is not machinably tokenizable; it depends on the ever constantly updated experiences and behaviours of the readers, their lived and social experiences, and even their emotional ones. Humans do not consume written or spoken language the same way at two different moments in their lives. Human interpretation, deep thinking, understanding, consumption of text, citations, quotations of occasional sentences and passages change with time, experience, relationships, education, news, successes, drawbacks,

[3] Greek: κράτος; "power."

[4] See also thread with other cited works at https://twitter.com/_KarenHao/status/1769006784273101074.

and even mood, weather, and an uncountable amount of other factors—in short, life—and are not mere on-stone-set random highlighting of tokenized language, no matter what reality-reductionist utilitarian theories and algorithms are in place.

Carchidi (2024) illustrates the importance of having a "voice" in writing to reflect the author's "considered opinions and speculations [in telling the readers] that they are engaging with the thoughts of a mindful human being," something which chatbots nor any software or hardware-based machines are or can by far (Hicks et al., 2024). Carchidi (2024) also asserts that "[h]aving a voice means knowing what one is about—knowing who they are, what they believe, and where they want to position themselves in a broader community of individuals who have similarly carved out their niche." Such a niche or community is paramount to academic (e.g. scientific, scholarly) writing disregarding the discipline, as also creative writing is. A database or a corpus is not such a niche nor software programs that operate on them.

Something also Rosenzweig (2023) warns about: we are becoming assistants of those (wrongly named) AI "assistants" during the process of writing and, thereby, also watering or even losing our thinking capabilities and related skills. She states, for example, "If we turn to AI to do the writing, we're not going to be doing the thinking either. […] if we no longer value doing our own writing […] we may get to the point when we don't know how to think for ourselves anymore."

Now learners can pretend they read the articles because chatbots summarize or extract some yet-to-be-validated information that is extracted without consent from sources not "findable" anymore. Uninformed people end up gravitating towards unrealistic expectations, accepting all is told those tools "could" do, manipulated by those who "know better" than them how to make money with selling brittle technology. The more the public, in general, and those most affected by AI, in particular, know about the power structures behind and the true intentions of the tools they use or that are used against them, the better. On the contrary, the more learners use ChatGPT or any other similar tool for learning, writing, etc. instead of them learning or writing themselves, the poorer their skills at the time of doing it alone, the more mediocre behaviour they will master (Hicks et al., 2024), the less prepared they might be in the future (Lin et al., 2023).

Why would we like to outsource writing about our very own experiences, concerns, invented fiction or even scientific thoughts related to our lives and most recent research work, to a soulless thing that has not lived a single millisecond of any of our entire existences? For someone who does not know how a chatbot is programmed or how the programming language, software-based techniques, or hardware circuitry behind that piece of code works, or for those who prefer to be impressed by the promises of corporate AI and venture tabloids around it, it might sound like magic or a human-like entity. Yet, it is none of that. Chatbots are just software programmed to pick up already existing candidates of dialogue pieces from extensive piles of available text. Such "picked-up" text strings together possible combinations of words entailed in the data that was extracted from some tiny part of what others have already written, experienced, and lived. Not only from humans, mostly without asking the actual originators for consent, i.e., by appropriating their thoughts and work, but also from including artificially generated data (aka synthetic data) depending on how often such stitched-together words appear in a specific context. Forget particularly appealing mastering of any language in a form non-seen before. A words-stitchery software program will not suggest that; singular language beauty would be irrelevant to a statistics-based search.

3. Which factors contribute to the illusory *AI revolú*?

We are approaching a point of no return in *outsourced learning*; sadly, with the likes of some educators. Some of the factors that might contribute to this silent, submissive adherence of the education sector to the corporate-AI coup are:

- Silicolonisation of the university and banalisation of the basic functionality of the algorithmic black box, mainly due to AI illiteracy.
- Downgrading of academic competencies and deprioritisation of much more important ones. If learning can be outsourced, why caring for doing the heavy lifting?
- Deskilling of learners and declassification of important research-related competencies which learners should rather master. It costs much more effort and time to teach them how to do it themselves!

- FOMO of the university and FOMO of the educators (fear of missing out, feeling ashamed if their command of technology is not relevant or cool enough). Also, imposed distress for not dominating or knowing the mathematics or related terminology.
- Trusting a technology that promises more than it can actually do. At the same time, neglecting or underestimating the technological limitations and actual harms of those technologies.
- Lack of expertise in areas learners, and even educators, cannot easily contest but trust their results, together with ignorance, digital illiteracy, AI illiteracy: the spectre of the AI myth is still too powerful.
- Unnecessary anthropomorphism and anthropomorfisation: ascribing chatbots (and algorithms, computers, machines, technology, etc.) capabilities they do not or cannot have.
- Still no solution to the many precarious systemic issues in the education sector, aggravated in countries with much fewer resources to counter them.
- Increasing number of learners whilst the time and human resources to support them is plummeting.
- Imposing rapid adoption of exogenous skill sets (e.g. digital ones) even in situations where they are not needed.

Yet, serious limitations of the technology are considered as an afterthought, if at all, and include:

- Massive ethical problems with training data and intellectual property; ongoing and upcoming legal procedures regarding the use of that data.
- Massive waste of natural resources for training such technologies, as well as massive ecological and energy problems and unsustainable systemic issues.
- Unnecessary support (with taxpayers' money!) and excessive attention such technologies do not deserve, without considering the negative implications for learners, societies, and the planet.
- Exploitation of people who annotate the data or moderate algorithms' results or content in general.
- Massive limitations of the available content in the form of training data.
- Extreme reduction and simplification of life, social behaviour, and interactions through limited mathematical formulae.
- Excessive reliance on only one AI subfield (machine learning) and dismissal of other AI subfields or even other Computer Science subfields and careers, equally or even more important for the future of the discipline.

It is unbelievable how despite those and other limitations, such technologies are widely accepted and introduced in classroom and other contexts. Where did personal responsibility, pillar of modern societies and democracies go? Sadly, those that point to the many existing problems are mocked online, absurdly called pessimists or anti-technologists, and ridiculed for their criticism.

Consequently, an AI monoculture is promoted *ad absurdum*, a disaster for any field if developing in only one direction. News, books, courses, and even entire careers are almost completely developed in only one Computer Science field (i.e. AI) and in only one of its subsubfields (i.e. one type of machine learning). Furthermore, the promotion of everybody-can-be-an-AI-expert courses in a few weeks distorts the true complexity and richness of the field. Moreover, important terminology is misappropriated (Floridi & Nobre, 2024) and even rebranded (e.g., prompt engineering has nothing to do with engineering!). As if it were not enough, a big army of educators, now converted AI soldiers or preachers of technology who only know its surface, prevent development of the AI field in a very needed breadth, all of which contribute to the unnecessary, blind support of the AI hype (Bender, 2024; Williamson, 2024).

4. The trust-nothing era is already here

If there existed one Cervantes, one Shakespeare, one Goethe, one Mary Shelley, one Virginia Woolf, or one Toni Morrison in the past, forget about the Cervantes, Shakespeares, Goethes, Shelleys, Woolfs, or Morrisons of the future if we are to depend on chatbots' mockery of human language for writing, thinking, arguing. What hurts is not only excellence bleaching, but also humans recklessly coding those chatbots and eagerly selling them as if human creation had reached a ceiling. The current world's picture regarding AI's use (not only when writing) points to a collective massification of digital stupidity, to the trust-nothing era (see also (Inie et al., 2024)), and to the acceleration of the lack of talent to still not seen levels. Some fraudsters do not even "write" using chatbots for entertaining readers anymore, but use them to scam users and make a profit from it (Knibbs, 2024).

Chatbots are transitioning to a digital opium for the masses, e.g. in the education sector, with educators and learners alike blindly accepting the illusion of empowerment through technology, in the back now scammed themselves in ways that were not imaginable before. Worse, the education sector hopes to overcome its systemic problems by depending even more from corporate greed with taxpayers' money. Exhausted reviewers and underpaid academics are overwhelmed with botshit-enhanced homework and essays, botshit-brushstroked final-grade theses, botshit-generated research papers (Day, 2023; Hicks et al., 2024),[5] all of that inevitably jeopardizing education, scientific research, and an already anaemic peer-review and publication system (McKie, 2024). Educators and educational institutions are becoming increasingly and helplessly dependent on a constantly SOTA-chased technology (SOTA: state-of-the-art) which results cannot be trusted anymore, thereby changing bedrock pedagogical and didactic skills and practices for quicksand digital stress and ineptitude in a field they probably neither chose to study (AI) nor will completely dominate because they will remain hostage victims of corporate AI and its acolytes.

Why would we like to hide our voices and accommodate and subordinate them to a statistically limited combination of what others said before? Why would we like to copy-paste any-size-varying kitschy texts, some of them entirely verbatim-repeated from passages and texts taken out of context from other now openly plagiarized texts that were tastelessly stolen, rudely kidnapped without consent, colourlessly modified without permission, indifferently mixed according to *mathy math*[6] with machinistic and mechanistic outcomes and sophisticated variable names, sometimes stochastically varied for the sake of a scientific underserved halo that ascribes the program the illusion of being intelligent, the program's producer the illusion of producing something creative, and the end user the illusion of writing themselves? What a retrograde way of thinking and of being we are heading! At least the authors of this paper wouldn't. It feels like a greasy, long-tailed fetid tongue sneaking under the bed sheets or clothes whilst sleeping, to blatantly plunder bodies, dreams, and intimacy, for later selling the robbed property in stochastically manipulated pieces as a kitschy, mediocre, and illusory artefact to the highest bidders, incredulous folks, and laziest humans. No, we wouldn't promote the use of such programs whatever their marketing label and rebranded name. It is a matter of decency, moral choice, and personal responsibility. Those shouldn't be selective.

What a career disappointment for some in the AI field. They saw it coming but not in this magnitude, ever extracting our humanness. What a disrespect for civility. What an erosion of trust. What a cheap and pyrrhic "advancement" in the name of machined statistics. It feels like repeating purposefully created slogans and chants arhythmically vociferated by crowds that are taken hostage by dictators and manipulators, and that vary only slightly depending on usage and dictators' and manipulators' will and decay. That is how any sign of individuality and humanness is wiped off the world, especially the case in dictatorships and societies where the ones subjugating the masses end up remaining in power, the latter being the actual majorities. The eyes hurt from reading "apparently" well-written texts or images-"generated" content. It compares to polluted air triggering respiratory infections, invisible fine airborne particulates that slide into the subconscious and are later effortlessly repeated anew, texts that are forgotten easier because they were not self-produced nor researched nor created by the copying authors.

5. Conclusions: Is there any hope at all?

The revolution of AI in education is not such as marketers and corporate AI want us to believe. It is more of a fragile and faked kite that flights in revolting air and has no robust anchors. Its threads proliferate from time to time in the tech industry, but make it fall free shortly after being confronted with education and educators' adversities. It is not an AI revolution but a *kite-type AI revolú* ready to seem stronger than it really is. We don't need *clicky-learners*, the ones formed in and used to clicking apps and chatbots for shortcutting their learning paths. They are slowly losing their agency and voices and will be easier to manipulate, faster to lay off, and to recycle in the future. This is not what the ultimate goal of education should be. In the end, educators will have to decide whether they will review, read, give feedback about, and spend time with texts written either by human beings or algorithms; and learners will have to learn the hard way that AI tools doing the writing and thinking for them still means they cannot write and think by themselves.

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[5] See some examples at https://twitter.com/simonthenorth/status/1768355339697541185 and https://garymarcus.substack.com/p/the-exponential-enshittification.

[6] See where the term is coined at https://twitter.com/alexhanna/status/1576786561915461634.

Is it time to surrender, obey, and follow the techno-siren songs that lure techno-blind hordes and wishful-thinking clans to believing in utopic futures behind interests-driven technological manipulation? No, it is not and it never should be! These clearly are times of something opposite: these are times of pushing back, contempt, disobedience, and rebellion. These are *times of dissent*. Submission is not the answer (Collins, 2018; McQuillan, 2022; Sadin, 2020, 2023). The banalization of *GPTying* life one prompt at a time must be stopped urgently. Producing clicky-learners must not be the answer. Paraphrasing Xalavier Nelson Jr.,[7] the more AI clicky-learners graduate, the more positions for juniors will be eliminated, i.e. they won't become mid-level knowledgeable in their work when they lack the skills to do so. Which means, they won't even become seniors. Which means, they most probably won't become the much-needed experts and creatives of tomorrow.

The blurring of the limits of what is true or false, of what is factual or AI token-mixed, of what is valid or misleading, is worrisome. Educators are simply not prepared to fill the gap when the majority of them conflate the former with the latter, arguably because of their AI or technology illiteracy. On the other side, no amount of AI literacy can prevent big and small tech from singing students their siren songs and them from continuing using tech for short-cutting their learning paths if educator do not care. Educators using whatever-AI tools in class are accelerating such trends, extending the space and time they are used in the classroom, thereby reducing the space and time learners would had to learn to debate, communicate, exchange ideas, now agency-lost, lobotomized into more clicks, more copy-pasted information, and more dependency of such tools. If we (educators foremost) do not awake from the greedy corporate-serving nightmare, then we will soon be witnesses of the *uberization* (Asher-Schapiro, 2023; Sadin, 2023) of our professions. No amount of books or conference papers like this one, nor campus debates or personal experiences will suffice if each and every single educator is not intrinsically motivated to remove the veil before their eyes. Outsourcing learning, commodifying education, and deskilling humanness is not progress! The answer is easy and short: we must say NO and truly mean it.

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