



The philanthropic LLC: Business influence over/via EdTech[☆]

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ABSTRACT

This paper presents a specific legal vehicle for for-profit philanthropy, the limited liability corporation, and analyzes: to what extent the philanthropic limited liability corporation is blurring the lines between high-net-worth individuals and the corporations they found and lead; how new modes of engagement are shifting dynamics between corporate capitalist business rationales and philanthropic endeavors and, in turn, impact the nature of education technology solutions made available; and how technology and philanthropic sector convergence is affecting power relations, educational inequalities, and global North/South relations. The theoretical framing draws from contemporary comparative education research, where scholars are comprehensively unpacking transnational education transfer processes, and contributes to a growing body of critical EdTech scholarship rethinking the presence of technologies in our lives and schooling. The findings demonstrate how the autonomy of for-profit philanthropy is increasingly linked to the institutional profit rationales of affiliate corporations, with elite philanthropists leveraging philanthropy to advance their own business development and growth impact.

1. Introduction

Pioneered by Silicon Valley high-net-worth individuals¹—and the technology corporations they found and lead—for-profit philanthropic models are blurring lines between corporate business objectives and corporate and individual philanthropy as envisioned by the highly-regulated United States 501(c)3 private foundation. Drawing upon unique institutional or personal agendas and domain expertise, for-profit philanthropic organizations from the technology industry are emerging as a distinct cohort: donors who use mechanisms drawn from business to enact techno-solutionist philanthropic agendas that impact education (Schervish et al., 2001; Patil, 2023a). The result is a shifting dynamic between technology industry capitalist incentives and philanthropic giving that is re-centering toward techno-solutionist worldviews and goals for education. How for-profit philanthropic capitalist models are influencing the development of digital education products and, in turn, how these products are affecting Global North/South dynamics is under-researched, given the outsized impact of private corporate and

philanthropic actors from the technology industry on traditional patterns of global governance for systems of public education (Avelar and Patil, 2020, 2023).

The aim of this paper is to present a specific legal vehicle for for-profit philanthropy, the limited liability corporation (LLC), and analyze how philanthropic LLC business rationales influence the development of digital education products. Using limited liability companies to conduct philanthropy allows one to elude the transparency that traditional foundation law imposes on elite philanthropy, changing the way philanthropy is practiced in ways not contemplated by existing regulations. Many people first became aware that philanthropy can be conducted under the auspices of an LLC, instead of a nonprofit, tax-exempt organization, with the creation of the Chan Zuckerberg Initiative (CZI) in 2015. While CZI didn't invent the philanthropic LLC—the Emerson Collective and Omidyar Network had already been using this approach and predate CZI by over a decade—it certainly popularized it. As no public disclosure of the formation of a philanthropic LLC is required, the full scope of this trend is unknown.

[☆] Parts of this research were previously developed in connection with a background paper for the 2021 UNESCO Global Education Monitoring Report, which supported the project. Segments of Sections 3 and 4 are drawn from this prior work (available at <https://www.unesco.org/gem-report/en/2021-background-papers>) and published with permission.

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¹ The term high-net-worth individual (HNWI) is commonly used within the financial industry, referring to someone who has liquid assets of at least \$1 million after accounting for their liabilities (Capemini, 2024).

Tradeoffs associated with the philanthropic LLC model include the tax costs of using a philanthropic LLC rather than a tax-exempt private foundation. These costs, however, are lower than one might think. If a philanthropic LLC has access to good tax advice and planning, the relative income, gift, and estate tax costs of using a philanthropic LLC can be minimized. The LLC model also offers philanthropists some very valuable advantages. Using an LLC offers donors complete privacy. LLCs do not report their activities or grantmaking publicly, as tax-exempt private foundations are required to do (Internal Revenue Service, 2017). An LLC model offers philanthropists unparalleled control, not only over governing their philanthropic entities, but also over whether and when to exit them. Unlike a nonprofit, tax-exempt entity, to which contributions are irrevocable (Hansmann, 1981), philanthropic LLC founders can change their minds down the line, take out their money, and do with it whatever they choose. Another advantage is flexibility. Using an LLC avoids the considerable regulatory complexity that attends a private foundation (Fremont-Smith, 2004).

Over the past decade, criticism has continuously emerged regarding the influence of unaccountable high-net-worth individuals and corporate donors (e.g., Giridharadas, 2019; Reich, 2018; Callahan, 2017), including stinging critiques of elite philanthropy in the education field (Boninger et al., 2020; Tompkins-Stange, 2016). While private corporate and philanthropic technology actors generally originate in the U.S., there is ubiquitous global demand for their technology products and platforms. It is reasonable to assume that their philanthropic endeavors will achieve the same global reach, especially given the rising role of private corporate and philanthropic actors in global governance. The outsized influence of private corporate and philanthropic actors from the technology ecosystem raises important theoretical questions about the influence of digitization over global governance (Avelar and Patil, 2020, 2023) and the role they should play in achieving the 2030 Agenda for Sustainable Development and Sustainable Development Goal 4 (UNESCO, 2015, 2021; UNGA, 2015). CZI has pointed out the advantages of privacy, control, and flexibility to pursue multiple strategies within one single entity as the rationale for the LLC structure's appeal (CZI, 2019, Our core initiatives), and thus offers a compelling illustration.

Critical EdTech scholarship has explored technology companies investing billions of dollars in education technology and creating new alternative schools—and new markets—through digital platforms (e.g., Williamson, 2016, 2020). More recent studies also address digital education platforms as connective artefacts constitutive of (and constituted by) socio-technical processes significantly transforming the education sector (Decuyper et al., 2021); how the platformization of education via technology platforms is changing what education is and how it's experienced (Grimaldi and Ball, 2020); digital classroom surveillance (Selwyn and Cumbo, 2024); the shifting technological, legal, and economic relations between individual users and platform owners due to platformization and assetization (Komljenovic, 2021); and rethinking the presence of technologies in our lives and schooling (Selwyn, Forthcoming). CZI has been specifically addressed by scholars who analyzed its role as a disruptive education philanthropy that introduces new market accountabilities into education systems (Williamson, 2021).

To contribute to this growing body of literature, this manuscript presents the Chan Zuckerberg Initiative as an example of the for-profit philanthropic LLC model and analyzes connections between that organization's rationales; digitization and philanthropy dynamics; and wielding power over education platforms, products, and solutions. Our theoretical framing draws from contemporary comparative education research, where scholars are comprehensively unpacking transnational education transfer processes and actors, and local-global dynamics. Steiner-Khamisi (2004) reminds us that When we deal with globalization and transnational transfer processes in education.... There is no such thing as 'agency-free' dissemination or reception, lending or borrowing, export or import (p. 169). Indeed, important theoretical questions have already been raised regarding the role these actors should play in pursuit

of the 2030 Agenda for Sustainable Development, Goal 4 (UNESCO, 2015, 2021; UNGA, 2015), given the underlying expectation and background documents suggesting the private sector will make up much of the direct financing and technology innovation gaps that national governments need to achieve their education goals (Draxler, 2020; Education Commission, 2016).²

Using CZI as a philanthropic LLC example, our analysis is guided by these questions:

- To what extent are philanthropic LLCs blurring the lines between the business and philanthropic objectives of high-net-worth individuals and between their personal goals and those of the corporations they found and lead?
- How are new modes of engagement shifting dynamics between corporate capitalist and philanthropic endeavors and, in turn, impacting the nature of the digital platforms and education technology solutions made available?
- How is technology and philanthropic sector convergence affecting power relations, educational inequalities, and global North/South dynamics?

Utilizing comparative, multi-sited ethnographic methods, this analysis builds upon prior research. Case studies from Brazil, China, India, and the U.S. were systematically analyzed to identify global trends and regional differences in contemporary strategies of for-profit philanthropic enactment in education (Patil and Brakman Reiser, 2021, under review). This manuscript presents an illustration of contemporary philanthropic enactment in the U.S. context.

This article proceeds as follows. Section two sets the context regarding shifting dynamics between technology business models and philanthropy. Section three introduces the for-profit philanthropic LLC and addresses question one. Section four uses the example of CZI to illustrate the philanthropic LLC legal structure and addresses question two. Section five discusses shifting dynamics between digitization, philanthropy, and education products, and implications for power relations, inequalities, and Global North/South relations. The final section offers conclusions.

2. Shifting dynamics between technology business models and philanthropy

Similar to high-tech business models, philanthropic LLCs must be market conscious and knowledge based to succeed. Over two decades ago, a definitive report used the term agent-animated philanthropy to denote the extent to which technology donors strive to be productive of outcomes in the same way they have been, or continue to be, formative of outcomes in their business ventures in the knowledge economy (Schervish et al., 2001, p. 43). Agent-animated philanthropy is undergirded by donors' underlying material and dispositional capacity of effectiveness, their hyperagency (Schervish et al., 2001, p. 75).

These are often leaders who expect to establish, or substantially control, the conditions under which they and others live, situating themselves as *producers* rather than supporters of philanthropy; underwriters rather than just contributors (Schervish et al., 2001, p. 78). Hyperagents thus act in intercessory ways in their philanthropic activities, running the gamut from overtly domineering leaders to leaders providing critical care and support for institutional and societal change. It's from these technological, cultural, and contextual origins that capitalist-oriented for-profit philanthropic vehicles emerged, including

² Development assistance and national spending for education have both declined, and Global Education Monitoring Report data show the 79 low- and lower-middle-income countries with an annual average national financing gap of USD 97 billion—several times greater than the external resources currently being offered (UNESCO, 2023).

the philanthropic LLC.

With technological innovation as the primary factor that created the wealth driving most for-profit philanthropy, it's no surprise that disruption, technological innovation, and impact are at the center of a new philanthropic giving code (Cortes Culwell and McLeod Grant, 2016). The new technology philanthropists contributing to this emerging giving code include recently successful technology corporations, the founders and executive teams of those corporations, as well as early employees that made millions, compared to billions, and are now making philanthropic contributions through donor-advised funds or community giving circles. The latter group also includes the employees of smaller start-ups that have been quietly acquired by the emerging technology giants, receiving similar financial windfalls in the range of millions of dollars. Actors emerging from the financial sector, primarily through venture capital, have also generated immense wealth from the technology industry in Silicon Valley and are contributors to the emerging giving code (Patil, 2019, 2021).

The legal and operational structures that for-profit philanthropists tend to use for philanthropic giving include in-house for-profit philanthropic divisions of existing corporations, such as Google.org; and for-profit philanthropic LLCs, such as the Omidyar Network, Emmerson Collective, and Chan Zuckerberg Initiative. These vehicles are often used in combination, with in-house corporate giving divisions and LLC affordances providing increased freedom of investment and direct access to the human resources, technology, and products of an affiliated corporation. They offer greater flexibility to engage directly in policy advocacy and, as noted earlier, greater privacy and greater control. In contrast, a US 501(c)(3) tax-exempt foundation would offer none of these advantages and be far more heavily regulated. Though the downside of the LLC model is taxation, creative accounting practices can be and are used to minimize taxes paid (Brakman Reiser, 2018) and charitable giving by corporations receive the same tax treatment for the donor, whether originated by the corporation directly or through a corporate foundation (Brakman Reiser and Dean, 2023). Donor-advised funds, housed within commercially affiliated sponsoring organizations, such as Fidelity Charitable, are also often part of the mix. While they are subject to most of the limitations on investment, political activity, and collaboration with donor companies as traditional foundations, they preserve optimal tax treatment and offer privacy for giving (Brakman Reiser and Dean, 2023).

Referred to as virtuous capitalism (Letts et al., 1997), philanthrocapitalism (Bishop and Green, 2008), shared value (Porter and Kramer, 2011), strategic philanthropy (Arrillaga-Andreessen, 2012, 2015; Brest, 2016; Brest and Harvey, 2008) and for-profit philanthropy (Brakman Reiser, 2009, 2018), for-profit approaches are highly contested. This shift, largely pioneered and driven by the technology sector (Schervish et al., 2001; Brakman Reiser et al., 2017; Cortes Culwell and McLeod Grant, 2016; Patil, 2019, 2021), is characterized by a dual set of social and business objectives. With common but evolving patterns of motive and style of giving that reflect theories of change that differ markedly from the more traditional styles of social sector engagement, these new actors tend to: be active and hands-on; utilize new and somewhat unconventional funding vehicles with underlying mechanisms that enable strategies of increased incorporation of business logic and blurring of boundaries between profit and social purposes; emphasize metrics, data-driven policy development, and assessment of results and policy; and focus on technology as the solution (Patil, 2019).

Proponents argue that these philanthropic strategies unleash a vast amount of capital and in-kind contributions for social causes, and are a model of market efficiency (Acs, 2013; Bishop, 2006a, 2006b; Bishop and Green, 2008; Porter and Kramer, 2011). Critics argue that these strategies are intertwined with winners take all tactics, rely on win-win mentalities rooted in fallacy that the world can/will be changed by those profiting from the status quo (Edwards, 2008a, 2008b; Giridharadas, 2019; McGoey, 2015), and are symbolic of a deeply dysfunctional world order that promises salvation while legitimizing the continued existence

of extreme inequalities, potentially fostering dependency (Maclean et al., 2021). Critics also point to troubling, inherent tensions between corporate engagement and profitability in the social sphere (Brest, 2016; Patil, 2023b) and the assumptions of these emerging actors and their role in the achievement of internationally agreed-upon development objectives (Draxler, 2020).

3. The philanthropic LLC in the U.S. landscape

Charitable organizations have been noted as a ubiquitous and important presence in the culture of the United States since the 1830s (De Tocqueville, 1835). With the great expansion of individual and corporate wealth at the turn of the 20th century, business magnates Andrew Carnegie and John D. Rockefeller became elite philanthropists and founded two of the first U.S. foundations. For roughly the next hundred years, makers and inheritors of vast fortunes adopted this model.

Charitable and philanthropic organizations in the U.S. are legally organized under state law, which regulates their internal governance and the obligations of their leaders and managers. They can also qualify for income tax exemption and receive tax-deductible contributions under federal law (I.R.C. §§ 170(c), 501(c)(3), 2522, 2055). When secured, organizational income tax exemption applies to all income related to an entity's charitable purposes, including investment income, and requires publicly available annual reporting. Individual and corporate taxpayers may deduct the value of their contributions to qualifying charitable organizations from their income, though deductions are limited by percentage ceilings to ensure taxpayers may not fully substitute charitable giving for paying taxes. For example, corporate donors may deduct contributions only up to 10 % of their overall income (I.R.C. § 170(b)(2)(A)). Charitable bequests are entitled to unlimited deductibility under the estate tax, a regime that taxes only the very wealthiest estates.

Federal law imposes especially strict requirements on private foundations (I.R.C. § 509), a category encompassing nearly all U.S.-based individual, corporate, and family foundations. Private foundations must pay a 2 % tax on their investment income, distribute 5 % of their assets annually, and make even more detailed disclosures to tax authorities and the public than other tax-exempt charities (I.R.C. §§4940, 4942). Private foundations are also subject to a cap on the investment stake they may hold in individual business entities, and they and their managers can be fined for making foundation investments that might jeopardize the carrying out of their foundations' charitable functions (I.R.C. §§4943, 4944). Steep penalties rein in most potential transactions with donors and insiders, grants to non-tax-exempt entities or other foundations, and virtually all political expenditures (I.R.C. §§4941, 4945).

A philanthropic LLC operates in the social sector but is formed as an ordinary limited liability company. As discussed in the introduction, using an LLC to organize a donor's philanthropic activities offers more flexibility, control, and privacy than a private foundation. As a non-tax-exempt entity, none of the federal tax regulations limiting philanthropic activities or requiring public disclosure apply to LLCs. Founders of philanthropic LLCs can use a combination of traditional grantmaking, strategic investing, and political advocacy under a single organizational umbrella. This is impossible under the regulatory strictures governing private foundations. An LLC also offers philanthropists complete control. Whereas donations to tax-exempt nonprofit corporations, charitable trusts, and even donor-advised funds are irrevocably dedicated to charitable activities, philanthropic LLCs preserve donors' power to change their minds and reclaim their assets for non-charitable uses. While philanthropic LLCs do not qualify for tax exemption, and direct contributions to LLCs are not tax deductible, tax disadvantages can be diminished through careful planning (Brakman Reiser, 2018), making the LLC an appealing choice for high-net-worth individuals and their families. Though public notice is not required when a philanthropic LLC

is formed, some technology industry leaders have publicized their choice (Thomas, 2020; Gose, 2019).

Here, we offer analysis of the Chan Zuckerberg Initiative to illustrate how new modes of engagement are shifting dynamics between corporate capitalist and philanthropic endeavors, blurring lines between the business and philanthropic objectives of high-net-worth individuals and between their personal goals and those of the corporations they found and lead, and, in turn, impacting the nature of the digital platforms and education technology solutions made available.

4. CZI: business influence over/via EdTech

With the birth of their first child in 2015, Facebook founder Mark Zuckerberg and his wife, pediatrician Dr. Priscilla Chan, pledged 99 % of their Facebook shares (then worth USD 45 billion) during their lives, via the CZI philanthropic LLC, to advance human potential and promote equality for all children in the next generation (Zuckerberg, 2015). The specifics outlined CZI's envisioned focus areas and undertakings to ensure that the billionaires' children, and all children, would grow up in a better world. Nearly a decade later, CZI remains one of the best-known U.S. philanthropic entities organized as an LLC. CZI pursues its mission to build a more inclusive, just, and healthy future for everyone (CZI, 2019, Our approach) with core initiatives that span education, justice and opportunity, and science.

CZI acts as a coordinating entity for Chan and Zuckerberg's philanthropic activities conducted in other tax-exempt and more heavily regulated vehicles. CZI may make disbursements of donated funds directly. Its voluntary disclosures, however, report contributions flowing through an associated donor-advised fund and through the Chan Zuckerberg Foundation. Both these traditional vehicles may make contributions to charitable recipients only and are subject to mandatory disclosure regimes of various types, as well as additional regulation. CZI developed a voluntary reporting model in response to concerns about its lack of transparency, and includes online data on the dates, amounts, and award recipients of CZI grants (CZI, 2019, Grants). Many CZI education sector grants focus on personalized learning assisted by technology, in an overall portfolio of wide-ranging grant amounts for K-12 education, student development, learning science, public policy, and communications initiatives.

The institutional rationale of this for-profit philanthropic LLC becomes clear through analysis of two of CZI's education tools, created for educators, with educators: Summit Learning, a personalized learning platform that provides educators with customizable curriculum, professional development, coaching and tech tools; and Along, a digital application described as a first-of-its-kind teacher-student connection builder that facilitates meaningful, one-on-one conversations foundational for student engagement and academic success (CZI, 2022).

Here, we analyze how shifting dynamics between corporate capitalist business models and philanthropic endeavors are impacting education solutions, as META and CZI leverage extreme advocacy influence and the power and profits of data aggregation.

4.1. Summit learning: extreme advocacy influence

Summit Learning is marketed as a free, off-the-shelf, personalized learning program, legitimized by the alleged success of Summit Public Schools, an 11-school charter network in California and Washington. CZI makes broad, largely unsubstantiated claims to have developed a 'science-based' personalized learning model of teaching and learning that results in all...students being academically prepared for college and that its students succeed in college and are prepared to lead successful, fulfilled lives (Boninger et al., 2020, p. 7). The program automatically obtains, in partner schools, school attendance information, state assessment data, and bus pickup and drop-off locations. When data is voluntarily entered, or the platform auto-updates, Summit Learning also captures students' project grades, goals, mentoring notes, and uploaded

work, as well as time and locations of various activities and IP addresses. While CZI purports that data are used to improve and market programmatic offerings, Boninger and colleagues (2020) caution:

Our review of Summit partner school contracts suggests that student data collected by the Summit Learning Platform under the terms of those contract presents a potentially significant risk to student privacy and opens the door to the exploitation of those data by the Chan Zuckerberg Initiative and possible by unknown third parties—for purposes that have nothing to do with improving the quality of those students' educations. (p. 17)

The creation story of Summit Learning platform is a clear example of money, engineering skills, and business know-how from the digital technology sector and technology foundations supercharging a platform's development.³ Advocacy and funding from major tech sector actors, including Facebook and Google, as well as by venture capitalists anxious to access the school market, made Summit Learning one of the most prominent digital personalized learning programs in the United States (Boninger et al., 2020, p. 7).

The goal of scale for nationwide adoption through an extensive, sophisticated, and aggressive marketing and advocacy campaign was outlined in a 2015 agreement between Summit and META (then Facebook). A key goal of the campaign was widespread adoption of personalized learning, via one consistent narrative promoting a positive answer to the question, Does Summit Learning work? *The Science of Summit*, a 2017 publication intended to show that the pedagogical approach of the platform is research based, was central to the campaign strategy (Summit Public Schools, n. d.). To build trust and advocacy among our audiences by engaging with key influencers who they report and turn to for insights and opinions, the report was promoted through an in-depth blog series, a podcast series, a Facebook Live series, brochures, presentation slides, infographics, and slideshows (Boninger et al., 2020, p. 14).

Marketing and advocacy campaigns from major technology philanthropies and corporations aggressively promote(d) personalized learning platforms as a cost-free, off-the-shelf system of whole-school reform that will help cash-strapped and struggling districts transform into successful schools. The promise is that students will be equipped with the skills that modern workplaces demand...teachers will be freed from mundane tasks so they can mentor students; and...student achievement and life competence will improve (Boninger et al., 2020, p. 15).

4.2. Along: advancing a data aggregator business model

Introduced in 2021 by Gradient Learning and its investment partner, CZI, Along is a free digital application designed to foster social-emotional learning and student-teacher relationships. Children can use it to record brief videos or audio responses to teachers' questions on a range of topics. While the application states that it collects data only for educational purposes...never for sale, the user agreement raises serious questions about who, exactly will have access to this student data and for what purposes (Boninger and Molnar, 2022). When the teachers to whom Along is directly marketed register their classes to use it, the

³ Summit Learning funding—reported to be \$177.6 + million USD—comes from CZI, the Bill and Melinda Gates Foundation, the Silicon Schools Fund, the Silicon Valley Community Fund, and the XQ Institute (founded by Laurene Powell Jobs). CZI alone is reported to have committed \$142.1 million to the broader Summit Public Schools initiative since 2016 (Boninger et al., 2020). In addition, CZI reports providing \$48.8 million to Summit Public Schools between 2016 and 2020, and \$40 million to the associated T.L.P. Education program between 2018 and 2020, financial contributions that do not include significant in-kind contributions...by Facebook (and possibly CZI as well) to develop the Summit Learning Platform and [its] marketing strategy (p. 15).

Family Education Rights and Privacy Act defines the application as a school official—a designation meaning that student data can be collected and maintained without parental consent (Boninger and Molnar, 2022). The same school official designation exists with Summit Learning. In both cases, the data collection supports an explicit business model of data aggregation, highlighting a commercial side of these digital education platforms.

Information aggregators collect information from a wide range of sources, with or without prior arrangements, and add value by profiting from post-aggregation services, including target advertising (Madnick and Siegel, 2001). The information is collected from the Internet, databases, and search engines, using technologies that are relatively low cost. User/information access expansion often enhances data collection, creating incredible gains in terms of potential for profit. Summit Learning and Along are educational platforms where the school official designation can be leveraged by a seemingly virtuous philanthropic venture to pursue strategies closely aligned with market development and financial gain of/by its founders' firm. Boninger and Molnar (2022) emphasize:

Although Summit Public Schools and Gradient Learning are nonprofit organizations, the data their digital platforms collect can be monetized, and their primary engineering partner, CZI, is a limited liability corporation that can and does make investments and earn profits. (CZI is often mistaken for a nonprofit, and its webpage says that its mission is to build a more inclusive, just, and healthy future for everyone, but it is, in fact, not a philanthropy.) Further, as the founder and controlling shareholder of Facebook (and its new parent company, Meta), Mark Zuckerberg has a reputation for concealing aggressive profit-seeking — based on the marketing of personal data — behind a veil of altruistic rhetoric (Eisinger, 2015).

Creative for-profit philanthropic business models at the intersection of corporate capitalist and philanthropic agendas are wielding influence over EdTech. As a philanthropic LLC, CZI can leverage its founder's firms' platforms, employee expertise, corporate intelligence, and data analytics, as well as its personalized learning and communications platforms (Brakman Reiser, 2019). In circular fashion, these platforms that are supported by philanthropic investments via the LLC vehicle can, in turn, have return on investment benefits for the founder's firms' business objectives. Private foundation regulations would render such overlaps difficult or impossible (Brakman Reiser, 2018). While CZI is not legally connected to META (formerly Facebook), according to National Education Policy Center, CZI is deeply intertwined with Summit Public Schools, Gradient Learning, and the development and marketing of the Summit Learning Program and Along (Boninger et al., 2019; CZI, 2022). For example, CZI technologists lead the work on the education platforms and CZI provides the funding that enables the platforms to scale across schools in the US without charge (CZI, 2022).

Here, we briefly situate this critical analysis of EdTech within longstanding narratives and offer reflections of how business models, enabled by the philanthropic limited liability company, are shifting dynamics between digitization, philanthropy, EdTech products, and education governance.

5. Discussion

Critical analysis of EdTech is embedded within longstanding narratives of the connection between digitization, education transformation, and the private sector. In November 2001, then United Nations Secretary-General Kofi Annan announced the formation of United Nations Information and Communication Technologies Task Force, a multi-stakeholder initiative to lend a truly global dimension to the multitude of efforts to bridge the global digital divide, foster digital opportunity and thus firmly put ICT at the service of development for all. The coordinating body was assisted by a small secretariat at UN headquarters in New York, a home that legitimized—as positive—connections

between technology education development and the private sector. The prominent role of private sector transnational technology corporations in the task force also affirmed an embrace of (and collaboration with) private sector actors who have technological expertise. These connections continue to be relevant in present day educational governance, as articulated in the UNESCO Global Education Monitoring Report, *Non-state actors in education: Who chooses, who loses?* (UNESCO, 2021).

Digital shifts are often portrayed as capable of reshaping education, bringing innovation, promoting inclusion, and solving persistent educational issues. Whereas grand narratives of educational transformation through technology claim to be apolitical, digital systems are, of course, created and operationalized by powerful actors with world views, sensibilities, and goals of reforming education according to agendas that include self-interest. As Winner (2009) reminds us, very often, new educational technologies are promoted not because there is any well-conceived idea about their value in teaching and learning, but because they offer an attractive market for vendors and because educators want to appear fully up to date (p. 589).

Given the extent to which governance processes and permissions are altered by the technologies introduced to systems of schooling, educational governance increasingly needs to be understood and approached as digital educational governance. Governance here is understood to include the structural organization of education that connects actors, groups, and institutions in uneven networks, and the techniques, concepts, and practical tools used to shape human action, decision making, and conduct to achieve focal outcomes (Williamson, 2017). The dynamics of governance take place not in abstract scenarios, but in specific historical, sociopolitical, economic, and cultural contexts, as individuals and groups worldwide frame, reframe, translate, and adapt into local settings (Avelar and Patil, 2023). Here, we analyze how technology and philanthropic sector convergences are affecting power relations, educational inequalities, and Global North/South dynamics.

5.1. Exerting power over education platforms, products, and solutions

The deep presence and reliance on technology among CZI's funding recipients reflects the broader philosophy that innovation and technology are key drivers of change. Viewing its technology expertise as key to achieving its philanthropic goals, CZI deploys a team of engineers, product managers, designers, and data scientists who focus on evaluating impact across three areas of focus. In its work with Summit Learning, for example, CZI engineers helped develop tools to customize individualized instruction, track student progress, and offer professional development for teachers to support them in the transition away from an approach largely centered on whole-classroom lectures (CZI, 2019, Technology: Education). This deep level of in-kind technical assistance and opportunity for learning product co-creation is a unique attribute of the CZI model.

Mapping the scale of CZI's technology transfer, investment, and advocacy activities is challenging, as website disclosures on these topics are more limited. Data that CZI has disclosed to date suggest that advocacy expenditures/activities have been confined to the justice and opportunity initiative, because even education grants that list public policy as a key program area support research and convening costs but not direct advocacy (CZI, 2019, Grants). Grants from the Chan Zuckerberg Advocacy vehicle, presumably too expressly political to be permissible from a tax-exempt private foundation or donor-advised fund, all involve criminal justice reform, immigration, or housing. All the same, CZI is under no obligation to be comprehensive in its disclosures, and is well poised to utilize advocacy tactics to spark change in the education sector, as it does in other sectors.

The algorithms that guide curriculum delivery, data collection, and data analysis on Summit Learning, CZI's personalized learning platform, came from the subjective decisions of engineering teams at META (formerly Facebook), Chan Zuckerberg Initiative staff, and/or Summit Schools staff (Boninger et al., 2020):

Although...commonly thought of as purely mathematical and objective, [algorithms] are in fact theories that reflect which pieces of information their authors consider valuable and how these authors believe those pieces of information should fit together and used to draw conclusions. (pp. 18–19)

Algorithms always reflect the values, assumptions, social positions, and interests of their authors. Transparency around the algorithms used in the Summit Learning Platform is essential to dialogue and determinations of whether the inferences those algorithms draw about students are valid and influence members of the school community to act in relation to students. These scenarios raise concerns, especially given that Facebook has been scrutinized for manipulative and divisive tactics (Center for Humane Technology, 2021; The Guardian, 2021; Wired, 2020). Yet, the Summit Learning platform and Along app are being placed at the heart of schools, education systems, and teacher–student relationships around the world, a patterned shift with implications for North/South power relations and inequalities, given the economic logics of the philanthropic LLC.

5.2. Governance implications

As articulated elsewhere, transnational technology corporations have increased their engagement in educational development along various institutional logics and rationales (Patil, 2023a). The COVID-19 pandemic both intensified and accelerated this trend, as Big Tech—typically considered U.S.-based multinational corporations Apple, Amazon, Microsoft, Alphabet/Google, and Facebook/META—capitalized on the educational emergency to expand commercial digital platform use, in response to massive school closures. North American technology corporations are playing a critical role in the provision of digital infrastructures to a significant segment of the world's education systems.

Recent research on the Chilean school system analyzes the network of actors in the digitization of the school system today, specifically addressing the role of private EdTech corporations, reveals:

...a poorly coordinated network of actors, which has allowed the inorganic and heterogeneous growth of EdTech corporations, whose role encompasses not only the production of technology, but also its articulation and management. To this form, EdTech companies play a central role not only as producers of technology, but also as articulators and administrators, illustrating a displacement of the State from some of its historic functions. (Villaobos et al., 2024, p. 4)

Villaobos and colleagues observe two primary sets of actors enabling this new ecosystem: Big Tech and multilateral organizations, especially UNESCO and UNICEF. Regarding the former, Microsoft, Google, and more recently Amazon and Huawei, grew in influence within the school system through the massive delivery of software to establishments and the support of data management of the educational system (p. 4). With respect to the latter, multilateral organizations focused on influencing public policy, seeking public-private partnerships for the implementation of technological policies, constructing legislation on educational technologies or promoting discussion on the role of technologies and platforms in the educational system (p. 4). These international players, inserted into the educational technology network, interact with multiple national players, both public and private.

Villaobos and colleagues (2024) argue that these commercial digital platforms are not innocuous tools, but represent spaces that delegate organizational choices, administrative functions, and educational decisions to private entities, on national and global scales. Further, the adoption of digital technologies and platforms can consolidate or even increase class inequalities through the acquisition of cognitive, social, and cultural skills, especially in rural areas of the Global South that were unrepresented when the technologies/algorithms were created.

5.3. Data colonialism

The rapid growth of EdTech solutions, fueled during and after the educational crisis caused by the COVID-19 pandemic, mean that private actors from the technology industry are shaping education solutions based on their own institutional and profit rationales, often becoming default arbiters of education (Patil, 2021). The uncritical assimilation of technologies is especially problematic because personal data serves as a fundamental element that supports many of the advancements and most nuanced uses of these digital technologies (Tuomi et al., 2023, p. 12)—which means the rights to privacy and the protection of children's personal data merit urgent and critical attention (Fernandes, 2025).

Recent scholarship analyzes present day EdTech legal decisions on data protection issues through a data colonialism lens. The appropriation of human life through data is termed data colonialism (Couldry and Mejias, 2019, p. 5). Historical colonialism and data colonialism share four key aspects: the appropriation of resources; the unequal social and economic relations that secure resource appropriation; the massively unequal global distribution of the benefits of resource appropriation; and the spread of ideologies that help make sense of the new order. In the aforementioned research, Elora Fernandes (2025) portrays the digital environment as a seemingly ever-expanding realm, with no restrictions on the extent to which human life can be exploited as/for data and profit. The author argues that the Cloud Empire is a totalizing vision and a way of organizing businesses which drives data colonialism's expansion across social domains (Couldry and Mejias, 2019, xiii) (Fernandes, 2025, p. 2). Such approaches would enable the reshaping of education policy to align with corporate business models.

As noted in the introduction, while private corporate technology actors generally originate in the U.S. and their technology hubs elsewhere, global demand for and use of technology products and platforms is ubiquitous. It is reasonable to assume that these actors' philanthropic endeavors will pursue the same reach, especially given the rising role of private corporate and philanthropic actors in global governance. When considering education governance, digitization and the Global South, the asymmetrical extraction of value through datafication is one illustration of data colonialism that empowers technologies and, especially, technology companies, while undermining human autonomy to determine their own path and destiny" (Fernandes, 2025, p.3). The outsized influence of these private corporate and philanthropic actors from the technology ecosystem raises important theoretical questions about the influence of digitization over global governance (Avelar and Patil, 2020, 2023) and the role they should play in achieving Sustainable Development Goal 4 (UNESCO, 2015; UNGA, 2015).

The power and influence of for-profit philanthropy is inextricably bound up with billionaire technology philanthropists, their companies' technology products and platforms, and challenged governments responsible for equitably educating their populations. These trends have been enabling corporations, individual philanthropists, and pioneering edupreneurs to push innovative, but often untested, technology product and platform solutions. The distinct institutional agendas of technology firm founders' LLCs can limit transparency and undermine action and outcome accountability (Patil and Brakman Reiser, 2021). Even when initiatives supported by education philanthropies have been shown to have detrimental impacts for children (Malin and Lubinski, 2022), philanthropic LLC funders can be shielded from robust scrutiny. Furthermore, the increasing prevalence of business practices and rationales in social sector engagement involves legitimacy risks. For example, non-financial resource contributions (e.g., products, employee time, know-how) will inherently align with corporate priorities and preferences, though not necessarily public priorities and needs identified under Sustainable Development Goal 4 (Patil and Brakman Reiser, 2021).

6. Conclusion

The for-profit philanthropic LLC model eludes the transparency that traditional U.S. foundation law imposes on elite philanthropy, which has implications for digital governance and Global North/South relations. Risks lie wherever the economic incentives of technology corporations intersect with any for-profit philanthropy vehicle and technology platforms for personalized learning.

The blurring of lines between high-net-worth individuals and the corporations they lead reflects a broader economic system being exacerbated in the digital revolution.

The digitization of education is deepening the crisis of public education, because national governments need to rely on the expertise, products, services of the private sector to implement the digital revolution. They hire companies that, in the name of innovation, constantly generate new datafication and digitization needs, reach out to new clienteles, and create an ever-expanding market. By default, the private sector thinks global, because thinking big enables them to transfer, and sell, one and the same products across the globe. (Steiner-Khamsi, 2020, pp. xx–xxi)

This creates inherent tension between global and local forces, as technology corporations are presently the main actors guiding the integration of technology into the education sector (Steiner-Khamsi, 2020; Patil, 2021). These underlying for-profit habits have detrimental effects for systems of public education and need robust and critical theorizing (Patil, 2023b).

The example of CZI's personalized learning and communications platforms demonstrates how the autonomy of for-profit philanthropists can be linked to the institutional profit rationales of their affiliate corporations, with elite philanthropists leveraging philanthropy to advance their own business development and profit growth. Mark Zuckerberg co-leads CZI and remains CEO of META, layering that allows for the outsized impact of a single actor. Ethical questions abound because CZI products and pathways to change center on the values and incentives of capitalist, commercial objectives (Patil, 2023a).

Our analysis of two CZI education platforms supports the call to understand how EdTech manifests and is enacted across different spaces as part of a broader expansion of the digital economy (Komljenovic, 2021). The shifting dynamics of technology industry capitalist incentives and philanthropic giving include notable overlaps of techno-solutionist worldview and goals for education tied to broader perspectives and concepts drawn from the political economy of digital capitalism (Birch, 2020; Birch and Muniesa, 2020; Srnicek, 2016). Future research addressing political conditions, in addition to the economic logics of EdTech, will complement existing studies that provide critical perspectives of EdTech and its implications for educational governance in comparative and international education (Cone et al., 2025).

Donors drawing on business lessons to inform their philanthropy command huge wealth and transformative technologies—and risk conflating corporate and donor priorities with development objectives and obscuring education choices and outcomes. Philanthropic donors can choose to use their platforms to model transparency commitments and seed accountability. Governments and education sector organizations should encourage them to do so. How well these tools do, in fact, address the priorities and learning potential of learners, their families, and Sustainable Development Goal 4 is also of crucial importance for the field of critical educational research.

CRediT authorship contribution statement

Patil Lara: Writing – review & editing, Writing – original draft, Investigation, Formal analysis, Data curation, Conceptualization.
Brakman Reiser Dana: Writing – review & editing, Writing – original draft, Investigation, Formal analysis, Data curation, Conceptualization.

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