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Silicon Valley, Philanthro-capitalism, and Policy Shifts from Teachers to Tech

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Information is the new gold – it's the new oil. It's like diamonds. It's worth trillions of dollars – and if you control that, you control wealth – you control power.¹

We have long known that corporate power and influence shape education spaces^{2 3 4}. We are now learning about new forms of technological power that are engineering policies aimed to privatize, corporatize, and datify nearly all aspects of public education as for-profit investment opportunities. These investments are crafted for a new breed of private sector entrepreneur, the social venture capitalist, who applies investing principles to the social realm of community programs and schools. On the surface, these investments appear to be altruistic gifts from the business and philanthropic sector to ease constrained public budgets. Many of these funds are not gifts, however, but tools of data extraction, the real costs of which will be paid with behavioral and cognitive data harvested from teachers, parents, and students, to serve as measurable

¹ Ali Akbarzadeh, "Killswitch: The Battle to Control the Internet." (2017), <https://www.killswitchthefilm.com/>

² Center for Media and Democracy, "ALEC Education and Workforce Development Task Force," September 24, 2019, https://www.sourcewatch.org/index.php/ALEC_Education_and_Workforce_Development_Task_Force

³ ALEC Exposed, "How are corporations undermining K-12 public education through these ALEC bills?," https://www.alecexposed.org/w/images/7/7b/ALEC_on_Education_2.pdf

⁴ Fang, Lee. "How Online Learning Companies Bought America's Schools," *The Nation*, (2011). <https://www.thenation.com/article/how-online-learning-companies-bought-americas-schools/>

outcomes of “impact” to guarantee “returns on investment” for social venture capital if agreed-upon metrics are met.⁵

At the root of stagnating wages and declining working conditions for teachers is the mantra of “efficiency,” so popular with austerity programs across the globe, and scripted curricula in classrooms. Teachers, through strikes and other actions, have pushed back and demanded accountability for the profiteering enabled by school districts and states as they engage with corporate philanthropists and educational technology companies in endeavors of dubious value to students. As we investigated the roots of Silicon Valley’s policy involvement in education, we found, at the core, a convergence of tech wealth, philanthro-capitalism, and intersecting entities aligned in promoting practices and policies that prioritize technology, big data, and algorithmic decision-making over teachers and the democratic governance of education.⁶

We explore here how key players within the tech and philanthropy sectors are driving policy shifts from human, relational, school-based learning to “anytime, anywhere” digitized content and assessments.⁷ Such shifts involve a strategic confluence of doublespeak messaging in the name of access and equity with learning management systems, software programs, and behavioral data extraction that dehumanize, de-personalize, label, track, and, ultimately, undermine genuine efforts at equity and access.

To connect these technological shifts to the 2018-19 teacher strikes, it is instructive to look at West Virginia, the first state to walk out. There, striking teachers were fighting to uphold fundamental privacy rights as well as to resolve compensation, seniority, and benefits-related

⁵ Kenneth Saltman, *The Swindle of Innovative Educational Finance* (Minneapolis: University of Minnesota Press, 2018). Also available online at <https://manifold.umn.edu/projects/the-swindle-of-innovative-educational-finance>

⁶ Michael Moe, Matthew Hanson, Li Jiang, and Luben Pampoulov, “American Revolution 2.0: How Education Innovation is Going to Revitalize America and Transform the U.S. Economy,” *Global Silicon Valley Asset Management*, 2012, https://www.asugsvsummit.com/files/American_Revolution_2.0.pdf

⁷ Michael Moe et al., “2020 Vision: A History of the Future”, 2015, https://www.asugsvsummit.com/files/GSV_2020-04-Tailwinds.pdf

issues more commonly found in headlines about the strike.⁸ West Virginia teachers were protesting a new healthcare insurance policy, which required the download and use of *Go365*, a biometric physical activity tracking app marketed to promote wellness, with a setup that would punish those who did not “earn” enough health points or who did not download the app.⁹ Penalties for non-compliance or failure to download the app were assessed at \$500 per year. While the strike brought the eventual removal of the requirement to use *Go365*, the fact that such a policy was even introduced as a requirement for participation in employer-sponsored health insurance suggests a need for greater scrutiny of technological tools entering the education space. On the surface, apps like *Go365* may be seen by district leaders as innovative tools intended to incentivize healthy behaviors and reduce health costs. Win-win, as the saying goes. In reality, however, many such apps are used by tech companies to extract sensitive, personal, physical, and behavioral data that can later be bought and sold in lucrative data markets and that can be easily weaponized against individuals whose data are shared.^{10 11}

Like fitness apps, school safety apps are heavily promoted, widely adopted, and poised to be among the newest forms of digital threats to student and teacher privacy. Pitching “real safety in real time,”¹² one such application, named *Gaggle*, has gone so far as to publicly boast about their software’s potential to hinder teacher strikes. As *Quartz* reported:

Not only do SMPs [Safety Management Platforms] let schools monitor students, but the same software can be used to surveil teachers, [Gaggle] suggests. “Think about the recent teacher work stoppage in West Virginia,” a recent blog post reads. “Could the story have

⁸ Emily Stewart, “All of West Virginia’s public school teachers are on strike. West Virginia’s teachers are the 48th-lowest paid in the country.” *Vox*, February 24, 2018,

<https://www.vox.com/policy-and-politics/2018/2/24/17048162/west-virginia-teacher-strike-public-schools>

⁹ Eoin O’Carroll, “Can your boss make you wear a Fitbit?” *The Christian Science Monitor*, 2018.

<https://www.csmonitor.com/Technology/2018/0315/Can-your-boss-make-you-wear-a-Fitbit>

¹⁰ Wolfie Christl, “How companies use personal data against people: Automated disadvantage, personalized persuasion, and the societal ramifications of the commercial use of personal information,” Cracked Labs, 2017,

https://crackedlabs.org/dl/CrackedLabs_Christl_DataAgainstPeople.pdf

¹¹ N. Russell, Joel Reidenberg, Elizabeth Martin, and Thomas Norton, “Transparency and the marketplace for student data.” Fordham Center on Law and Information Policy, 2018; also forthcoming in *Virginia Journal of Law and Technology*,

https://www.fordham.edu/info/23830/research/10517/transparency_and_the_marketplace_for_student_data/

¹² Gaggle, Company Homepage, accessed November, 27, 2019, <https://www.gaggle.net/>

been different if school leaders there requested search results for ‘health insurance’ or ‘strike’ months earlier? Occasional searches for ‘salary’ or ‘layoffs’ could stave off staff concerns that lead to adverse press for your school district.¹³

Gaggle has since taken this post down; its founder and CEO, Jeff Patterson, told *Quartz* that it was not in keeping with Gaggle’s mission, that is, “to ensure the safety and well-being of students and schools.” While social pressures appear to have led to the removal of the Gaggle post suggesting the surveillance of teachers to prevent strikes, nothing stops the company from marketing with the same intent and capacity to district administrators or government officials. We are facing a twenty-first century version of the Wild West, in which educational technologies wielding massive financial power are forcefully pushing and weaponizing digital tools¹⁴ into our public systems in ways designed to exploit those with less power—and they are doing so outside of the purview of any legislative protection.¹⁵

A host of billionaires are responsible for tech initiatives that have ushered in technologies and practices poised to dismantle public education. The Bill and Melinda Gates Foundation, Broad Foundation, Lumina Foundation, Chan Zuckerberg Initiative, Bezos Family Fund, and the William and Flora Hewlett Foundation, among others, have poured millions of dollars into education settings and are the most widely known among philanthrocapitalists in education.^{16 17} Our inquiry, however, looks back in time over the past decade to reveal the workings of two lesser-known but highly influential organizations, Global Silicon Valley and The Philanthropy

¹³ Simone Stolzoff, “Schools are using AI to track what students write on their computers,” 2018, <https://qz.com/1318758/schools-are-using-ai-to-track-what-students-write-on-their-computers/>

¹⁴ Joanna Redden, “Six ways (and counting) that big data systems are harming society,” *The Conversation*, December 7, 2017, <https://theconversation.com/six-ways-and-counting-that-big-data-systems-are-harming-society-88660>

¹⁵ Kate Crawford and Jason Schultz, “Big data and due process: Toward a framework to redress predictive privacy harms,” *Boston College Law Review* 55 (2014): 93, <https://lawdigitalcommons.bc.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=3351&context=bclr>

¹⁶ Wayne Au and Christopher Lubienski, “The role of the Gates Foundation and the philanthropic sector in shaping the emerging education market: Lessons from the US on privatization of schools and education governance,” In *World Yearbook of Education*, pp. 47-63. Routledge, 2016.

¹⁷ Wayne Au and Joseph Ferrare, “Sponsors of policy: A network analysis of wealthy elites, their affiliated philanthropies, and charter school reform in Washington State.” *Teachers College Record* 116, no. 8 (2014): 1-24.

Roundtable, in their push to shift education from public to private, from people to profit, and from teachers to tech.

Global Silicon Valley describes itself as a “modern merchant bank” that identifies, advises, invests in, and accelerates the “fastest growing, most dynamic companies in the world.”¹⁸ Several organizations fall under the main GSV group, including GSV Labs, a “hub of innovation focused on accelerating the high-growth, high-impact verticals of EdTech, Sustainability, Big Data, and Mobility,”¹⁹ and GSV Asset Management, a “multi-product asset management firm” that according to its website, engages in idea generation, research and analysis, portfolio construction, and risk management.²⁰ GSV Tomorrow is the research and commentary arm of GSV where daily and weekly publications of growth investing trends and stories are disseminated²¹, and all links guiding readers to the main GSV.com website lead to the landing page of the annual ASU+GSV Summit, a yearly conference partnership between Arizona State University and Global Silicon Valley, currently in its tenth year, and marketed as the “most impactful convening of leaders in education and talent tech” with over 5,000 attendees and 1,000 speakers from 45 different participating countries.²² Edtech critic Audrey Watters writes of research disconnects within these convenings and the apparent planning of conference dates to fall precisely at the same time as the annual American Educational Research Association conferences:

It’s hardly an insignificant scheduling gaffe. If nothing else, the dueling conference schedules tap into a powerful cultural trope, one that’s particularly resonant among Silicon Valley and education reform types: that education experts and expertise aren’t to be trusted, that research is less important than politics, that the “peer review” that matters

¹⁸ Global Silicon Valley, “Global Silicon Valley,” <http://gsv.com/company/gsvlabs/>.

¹⁹ Global Silicon Valley “GSV Labs: Accelerating Global Innovation” <http://gsv.com/company/gsvlabs/>.

²⁰ Global Silicon Valley, “GSV Asset Management” <http://gsvam.com/>.

²¹ Global Silicon Valley, “GSV Tomorrow,” <http://gsvam.com/gsv-tomorrow/>.

²² Global Silicon Valley 2020, “2020 ASU GSV: Bending the Arc of Human Potential: World’s leading education and innovation summit,” <https://www.asugsvsummit.com/>.

isn't the academic version, but rather the sort that drives a typical VC [venture capital] roadshow.²³

On July 4th, 2012, Global Silicon Valley published a 332-page manifesto entitled, *American Revolution 2.0: How Education Innovation is Going to Revitalize American and Transform the U.S. Economy*.²⁴ The document is a market analysis, mapping the emergence and rise of educational technologies meant to exploit education markets or, in Silicon Valley lingo, to “disrupt” education as we know it.²⁵ The report details a plan for the technological takeover of education markets, with privatization via charter schools as a key route of entry. Teach For America, K12Inc, KIPP, Rocketship, Facebook and many other corporate entities are prominently featured in the document with language alluding to military power, such as “special forces”; these entities contribute to a fully articulated 15-year “strategic battle plan” for the years 2012 to 2027. The report is heavy with war imagery, including fighter jets, explosions, weapons, and war terminology that pits the tech-based “change agents” who would bring equitable opportunities to the underserved against “unions,” described as “status quo forces.”

Global Silicon Valley is also closely connected to organizations aiming to privatize public education and shift learning from relational-based to screen and software-driven instruction. Michael Moe, its co-founder and CEO, serves as Vice Chairman of the Center for Education Reform (CER)²⁶ and serves as well on the boards of directors of many educational technology firms, including Coursera, Class Dojo, Parchment, SharesPost, StormWind, and OZY Media.²⁷ The Center for Media and Democracy describes the Center for Education Reform

²³ Audrey Watters, “Fables of School Reform: Ed-tech investors keep chasing their own tales,” *The Baffler*, January 2019, No. 43, <https://thebaffler.com/salvos/fables-of-school-reform-watters>

²⁴ Moe et al., “American Revolution 2.0.”

²⁵ For more on the history of disruptive innovation, see Jill Lepore, “The disruption machine: What the gospel of innovation gets wrong,” *The New Yorker*, June 23, 2014 issue, <https://www.newyorker.com/magazine/2014/06/23/the-disruption-machine>.

²⁶ Center for Education Reform, “Michael Moe,” November 27, 2019, <https://edreform.com/people/michael-moe/>

²⁷ Center for Education Reform, <https://edreform.com/people/michael-moe/>

(CER) as “a right-wing 501(c)3 nonprofit and associate member of the [State Policy Network](#) (SPN).”²⁸ It goes on,

CER is a pro-education privatization group on the front lines of the "education reform" movement that seeks to expand charter schools and vouchers. . . . CER is a member of the [American Legislative Exchange Council \(ALEC\) Task Force on Education and Workforce Development](#) and plays a key role in supporting many of ALEC's public school privatization efforts. . . . [and] has presented at ALEC meetings as recently as 2016.”²⁹

With shared ideologies and leadership at the helm of GSV, the Center for Education Reform, and the American Legislative Exchange Council, policy shifts in favor of promoting educational technologies and school privatization may be viewed as two sides of the same coin. The edtech companies promoted by GSV in effect enable the structural hijacking of education through several insidious routes; inching on-the-ground instruction increasingly into software developers’ hands, extracting behavioral data from students and teachers and putting them into data analysts’ hands, and introducing lucrative edtech contracts to pull public tax dollars from both privately-managed and publicly-governed schools into Silicon Valley coffers.

GSV has the funds to promote the edtech companies it invests in; it is up to the public, however, to discover how and in what ways the edtech programs are either working, or, in many cases, doing harm to the very communities they purport to help. For example, BrainHoney/Agilix Labs, developer of Buzz software, is featured as among the “special forces” in the GSV report.³⁰ Buzz was at the center of an investigative exposé published by the ACLU of Michigan in 2014, documenting the exploitation of Detroit’s most vulnerable youth by the

²⁸ Center for Media and Democracy Sourcewatch, “Center for Education Reform,” October 11, 2017, https://www.sourcewatch.org/index.php/Center_for_Education_Reform#cite_note-1

²⁹ Center for Media and Democracy Sourcewatch. https://www.sourcewatch.org/index.php/Center_for_Education_Reform

³⁰ Moe et al., “American Revolution 2.0,” 228.

software company through the Education Achievement Authority (EAA). The EAA was a highly controversial statewide district, created through an interlocal agreement between Eastern Michigan University and the school district for the City of Detroit at the behest of Governor Rick Snyder.³¹ With an appointed rather than elected board, EAA partnered with Teach For America, and enacted heavy privatizing practices and software-based reforms with aims to “turnaround” low performing schools.³² Chris Savage, of *Eclectablog*, reported extensively about issues with both the EAA and the Agilix/Buzz software:

The EAA was the field testing operation for BUZZ which is a product of Agilix. In other words, it had never been used anywhere else; it was unproven, untested software and the students & teachers of the EAA were the beta testers.³³

A year after Guyette’s ACLU exposé on the problems with the Buzz software, Savage documents evidence of vast inaccuracies in the claims made about the software’s effect on test scores and notes, “now that the bugs have been worked out of the software which never worked properly for the Detroit students who were forced to use it, Agilix is marketing BUZZ nationally and they are using Detroit and the EAA as their ‘case study.’” The Buzz website, by contrast, includes glowing testimonials, including one from Tom Vander Ark, CEO of Getting Smart and former executive director of the Bill and Melinda Gates Foundation, who claims the Buzz software to be “[one of] the best examples of platforms that support an individualized course of study, combining digital content and projects.”³⁴

³¹ Allie Gross, “The EAA: How a policy package created Michigan’s statewide district,” *Education Dive*, April 2 2014, <https://www.educationdive.com/news/the-eaa-how-a-policy-package-created-michigans-statewide-district/246066/>

³² Curt Guyette, “Buzzkill: How the EAA Exploited Detroit’s Most Vulnerable Kids,” *ACLU Michigan*, September 24, 2014, <https://www.aclumich.org/en/news/guyette-how-eaas-buzz-program-exploited-detroits-most-vulnerable-kids>

³³ Chris Savage, “Now that Agilix’s BUZZ software has been fully beta-tested by Detroit student guinea pigs, it’s time to cash in!” *Eclectablog*, March 20, 2015, <https://www.eclectablog.com/2015/03/now-that-agilixs-buzz-was-fully-tested-with-detroit-student-guinea-pigs-its-time-to-cash-in.html>; See also Chris Savage, “UPDATED: In-depth analysis of MEAP data for the EAA shows a striking lack of “achievement” & significant declines in proficiency,” *Eclectablog*, March 4, 2014, <https://www.eclectablog.com/2014/03/in-depth-analysis-of-meap-data-for-the-eaa-shows-a-striking-lack-of-achievement-significant-declines-in-proficiency.html>

³⁴ Tom Vander Ark [Testimonial], “Proven Partnerships,” *Agilix*, 2015, <https://agilix.com/partners>

There are many such examples of contrasting narratives, where promotional websites for edtech products boast lofty claims while failing to provide full disclosure about software glitches, ineffective designs, or problematic outcomes revealed during the implementation of the programs.³⁵ We agree with Yong Zhao³⁶ who draws from the medical research model and calls for full disclosure of “side effects” that follow the adoption of substantive education reforms. It is important to ensure that the select success stories resulting from reforms also be contextualized amidst known failures or harms that have unfolded throughout the process. These trends are especially critical to include in policy briefs when evaluating large scale shifts that involve rapid proliferation of so called “solutions” such as privatization and screen-based software programs.

Many common promotional pitches, to be “future ready,” to “personalize” learning, to re-imagine, and/or to re-invent education, can be traced back to themes promoted in GSV’s *American Revolution 2.0* and to its marketing playbook, designed to sell “innovation” in education. According to Global Silicon Valley in 2012, the Global Education Market was estimated to be worth a staggering \$6.4 trillion by 2017.³⁷ In its analysis of the proportional market increase based on various sectors, the U.S. PreK market, estimated at \$70 billion, was projected to have the most rapid growth. The K-12 Market, described as a \$712 billion investment opportunity,³⁸ was proposed to be monetized through various strategies, including but not limited to eLearning, Test Preparation, Tutoring, Social Learning, Language Learning and EduGaming. The US Post-Secondary market was projected to have a value of \$575 billion³⁹ with the adoption of Mobile Apps, Online Book Rentals, Digital Textbooks, Online Learning,

³⁵ Arianna Prothero, “Cyber Charters Continue to Struggle: A State-by-State Look at Reports of Trouble,” December 14, 2017, http://blogs.edweek.org/edweek/charterschoice/2017/12/cyber_charters_continue_to_struggle_state_by_state_look.html; Alicia Federico, “iReady, Are You?” *The College at Brockport, State University of New York Digital Commons @Brockport, Education and Human Development*, 2016, https://digitalcommons.brockport.edu/cgi/viewcontent.cgi?article=1677&context=ehd_theses; Common Sense Media, “Parent Reviews for iXL”, <https://www.common Sense Media.org/website-reviews/ixl/user-reviews/adult>;

³⁶ Yong Zhao, “What works may hurt: Side effects in education.” *Journal of Educational Change* 18 (2017): 1-19.

³⁷ Moe et al., “American Revolution 2.0,” 150.

³⁸ Moe et al., “American Revolution 2.0,” 191.

³⁹ Moe et al., “American Revolution 2.0,” 235.

eLearning, and School System Technologies, among others. GSV's *American Revolution 2.0* pitches dozens of educational technologies across every developmental level of education.

Currently, most students and educators are unaware that their behavioral data are being extracted, shared with, and/or sold to outside organizations. Furthermore, they may not realize that much of their data are not used for pedagogical purposes, rather are combined with other datasets and spread across platforms, with “interoperability,” or data sharing, as a selling point. Such sharing can be harmful when in the hands of law enforcement or when connected to foster care, juvenile justice, or health-related data systems without data sharing protections. Only recently, a St. Paul, Minnesota data-sharing agreement that would have involved school district, city, and county data was canceled after community protests about its potential harms. The *Star Tribune* explained that the goal of the “joint powers agreement” was “to prevent young people from entering the criminal justice system by identifying problems early on and intervening, but critics argued that data could be used to racially profile and mark them as “future criminals” from an early age.⁴⁰

Most data collected in K-12 environments involve children under the age of 18, generally regarded as vulnerable populations in need of extra protection as human subjects in research. Edtech companies and educational institutions adopting learning management system (LMS) platforms and software products are likely to be using exemptions granted for “common educational practices” to gather such data, even though the data may not necessarily be used for educational purposes. To claim educational exemptions, however, would be inappropriate and egregiously inadequate for ensuring participant confidentiality, anonymity, and rights of refusal that should be afforded with the widescale experimentation that is happening now in the name of

⁴⁰ Emma Nelson, “St. Paul area leaders nix data-sharing agreement,” *Star Tribune*, January 28, 2019, <http://www.startribune.com/st-paul-ramsey-county-school-district-nix-data-sharing-agreement/504977992/>

educational innovation. Many requests for deletion of data may not be able to be granted for a variety of reasons; widespread data sharing practices may already be in place, a company may refuse to delete, or data archiving may be structured on a regular basis without procedures that would allow for specific deletion. With massive cloud-based storage systems constantly gathering many forms of data, even “deleted data” are never really deleted. Increased awareness of the harms done by predictive data and of privacy policies that allow for widespread sharing of data with affiliates and partners have led researchers to call for greater legislative data protections.⁴¹ While US data protection laws appear to lag behind the General Data Protection Regulation (GDPR) protections enacted in the European Union, even the protections within the GDPR have been criticized by privacy experts as fraught with loopholes that render the provisions insufficient to fully protect user data from abuse.⁴² Activists in the US must attend to new and emerging ways that companies are planning to exploit personal data with “legitimate use” clauses and either enact the strongest of protections, especially for data gathered on youth, or prohibit the collection of such data at all.

Many researchers have documented numerous ways that emerging technologies are exacerbating existing inequities while claiming to do the opposite.⁴³ Once we achieve a critical mass of awareness of the extent to which cognitive and behavioral data are being extracted and used through online-based educational tools, we anticipate seeing new waves of strikes to resist the use of predatory data extraction in education. Already, the Parent Coalition for Student Privacy has worked with dozens of parent and student groups that have mobilized across the

⁴¹ Kate Crawford and Jason Schultz, “Big Data and Due Process: Toward a Framework to Redress Predictive Privacy Harms”, *Boston College Law Review* 55, no. 1 (2014), <https://lawdigitalcommons.bc.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=3351&context=bclr>

⁴² Johnny Ryan, “Why the GDPR ‘legitimate interest’ provision will not save you,” *PageFair*, 2017, <https://pagefair.com/blog/2017/gdpr-legitimate-interest/>

⁴³ Joanna Redden, Co-Director of the Data Justice Lab at Cardiff University has described six key data harms that result from use and misuse of big data and predictive analytics, including but not limited to targeting based on vulnerability, misuse of personal information, discrimination, data breaches, political manipulation and social harm, and data and system errors. For more, see Joanna Redden, “Six ways (and counting) that big data systems are harming society,” *The Conversation*, December 7, 2017, <https://theconversation.com/six-ways-and-counting-that-big-data-systems-are-harming-society-88660>

United States in protest of the Summit Learning Platform; the coalition is working to increase awareness of the need to protect privacy for all members of public education communities.

The concluding segment of the 2012 Global Silicon Valley Asset Management manifesto describes a 15-year “Strategic Battle Plan.” Among its twenty-seven key priorities for 2012 to 2027, the Plan proposes to promote both the “Common Core” and “Charters and School Choice,” “Turbocharge Teach For America,” “Eliminate locally elected school boards,” enact “100% merit pay for teachers,” and create an “Open online campus.”⁴⁴ p. 292. In 2015, Global Silicon Valley published a follow-up document, *2020 Vision: A History of the Future*. This report, while reiterating many of the same arguments as the original one, expands GSV’s vision of the future of education and finds a new analogy. Among other things, it draws a likeness between healthcare in the 1970’s and 80’s and education today. Before private sector investment, healthcare represented 8% of the Gross Domestic Product (GDP) and less than 3% of capital investment markets; medicine was regarded as an inefficient “cottage industry,” composed of “non-profits” and “for-profits,” with a decentralized structure, offering uneven care, and making limited use of technology. According to GSV, the infusion of private-investor capital was the catalyst for doubling the healthcare share of GDP to 18% in 2015, increasing by 700% investment market share, and shifting the focus to “cost” and “outcomes.”

The story needs only to be rewritten and re-branded to apply to education; education is, as GSV frames it in 2015, similarly inefficient, “tech-lite,” and composed of “non-profits,” that is, public schools, and “for-profits.” Representing nine percent of GDP in 2015 and 0.4% of capital markets, education, GSV projects, will grow to be 12% of GDP and 4% of capital markets by 2025--a trillion dollar investment opportunity between 2015-2025. GSV-AM predicts these changes in education’s proportion of GDP and its increased capital market share will occur

⁴⁴ Moe et al., “American Revolution, 2.0,” 292.

in less than a quarter of the time it took healthcare, as education shifts its focus to “cost” and “outcomes” and technology becomes ubiquitous. Big Data analytics will, they argue, build transparency in educational processes, increase efficiency, determine “good/bad” schools, and improve leadership through data-driven decision-making. Based on its charter school experiments, GSV insists that:

Big Data applied to education unlocked real-time analytics that distilled relevant, quantifiable insights to improve effectiveness. Assessment of actual skills and abilities [became] a "currency" that replaced less objective measurements. In this model, schools, programs, and content would be hired and fired based on demonstrable impact on student outcomes.⁴⁵

Clinging to its analogy between healthcare and education, GSV’s 2015 document maps out an “anatomy of adaptive learning” where “diagnostic assessment” is used to determine a “personalized prescription,” which is then provided to a school in order for it to reach “perfect health”.⁴⁶ They see Big Data as Smart Data and the use of behavioral, social-emotional, and biometric data, analyzed through artificial intelligence (AI), as the most profitable way to provide predictive “prescriptions.” Such projections are both premature and irresponsible; in healthcare, they have led to harmful outcomes, as evidenced by IBM Watson’s supercomputer using AI recommended “unsafe” and “incorrect” cancer treatments.⁴⁷ Indeed, in health care, the proliferation of profitable technology has also been fraught with problems as an American Medical Association president pointed out, stating: “from ineffective electronic health records, to an explosion of direct-to-consumer digital health products, to apps of mixed quality,” he

⁴⁵ Moe et al., “2020 Vision: A History of the Future,” 48.

⁴⁶ Moe et al., “2020 Vision: A History of the Future,” 62.

⁴⁷ Casey Ross, “IBM Watson supercomputer recommended ‘unsafe and incorrect’ cancer treatments, internal documents show,” *STAT*, July 25, 2018, <https://www.statnews.com/2018/07/25/ibm-watson-recommended-unsafe-incorrect-treatments/>

named health technology “the digital snake oil of the early 21st century.”⁴⁸ Likewise, edtech includes parallel outcomes, where much of what is sold is marketed with false promises.⁴⁹

In the last ten years, through a variety of media and communications strategies, the tech-philanthropic sector has been exceedingly effective in creating demand for edtech products that are otherwise not needed in educational settings. The question, of course, is what conditions have allowed for these parallel shifts toward privatization and the burgeoning use of edtech in schools. One beginning point in answering this question is to look at the rise of philanthro-capitalism and, in particular, at Silicon Valley’s Philanthropy Roundtable, formerly chaired by billionaire and now-U.S Secretary of Education, Betsy DeVos. The Philanthropy Roundtable’s 2013 150-page report on Blended Learning echoes GSV’s 2012 *American Revolution 2.0*, urging the importance of charter schools to create conditions for change by citing the United States’ low international test scores, by pushing the urgency of innovation, and by insisting on a need for boldness in pushing technology forward, despite the lack of evidence for its efficacy.⁵⁰ Tech-funded entities are widely cited (and revered) in this report, while teachers and, by implication, their unions are denigrated as opposed to change:

The question is which schools will be bold enough to grab hold of the new technology. “Innovation will not come from a rank-and-file district, rank-and-file school, rank-and-file teacher,” predicts Brian Greenberg, CEO of the Silicon Schools Fund. “I think we need some sort of beacon schools to go first and show the way.”⁵¹

⁴⁸ ICT&health, “AMA head Madera: Most ehealth apps are digital snake oil,” *ICT&health: The official platform for health innovations*, June 20, 2016, <https://www.ictandhealth.com/news/ama-head-madera-most-ehealth-apps-are-digital-snake-oil/>

⁴⁹ Jessica Calefati, “K12 Inc.: California virtual academies’ operator exploits charter, charity laws for money, records show,” *The Mercury News*, April 17, 2016, updated January 11, 2017, <https://www.mercurynews.com/2016/04/17/k12-inc-california-virtual-academies-operator-exploits-charter-charity-laws-for-money-records-show/>

⁵⁰ Laura Vanderkam, “Blended Learning: A Wise Giver’s Guide to Supporting Tech-assisted Teaching,” Karl Zinmeister, series editor, *The Philanthropy Roundtable*, Washington D.C., 2013, https://www.philanthropyroundtable.org/docs/default-source/guidebook-files/blended_learning_guidebook.pdf?sfvrsn=afaba740_0

⁵¹ Vanderkam, “Blended Learning,” 103.

Among the sections of the Philanthropy Roundtable document, several highlight the key role that charter schools will have in fostering “*the essential preconditions for change*.”⁵² In one, the report imagines the complete destruction of the public system as a necessary prelude to building the privatized system it envisions:

Sometimes it takes a literal act of God—as happened when much of New Orleans was wiped off the map during Hurricane Katrina in 2005—to up-end the status quo. With many schools under water, reformers came in and started opening new programs within days.⁵³

Such narratives of market opportunists stand in stark contrast with the realities of communities who note how charter reform in New Orleans, leading to a nearly all charter district, was “[not] about the needs of racially oppressed communities [but] . . . about the production of an urban space economy in which white entrepreneurs capitalize on black children and neighborhoods.”⁵⁴

Charter schools highlighted within the Philanthropy Roundtable report include the well-known and controversial corporate chains of Rocketship, KIPP, and Summit, each of which has historically marketed to and recruited students from communities of color. Despite claiming non-profit status, many such charter management organizations are able to structure their operations in ways that yield formidable profits with structural shortcuts baked into their educational models.⁵⁵ The pedagogical push found in both the Philanthropy Roundtable and the GSV-AM documents is to promote “blended” learning methods which combine in-person and software-

⁵² Vanderkam, “Blended Learning,” 6.

⁵³ Vanderkam, “Blended Learning,” 98.

⁵⁴ Ciro Viamontes and Miriam Ezzani, 2017, “A Book Review: Charter Schools, Race, and Urban Space Where the Market Meets Grassroots Resistance By Kristen L. Buras,” *Teachers College Record*, August 14, 2017, p. 3. Also available online at <https://digital.library.unt.edu/ark:/67531/metadc1042609/>. See also Kristen Buras, *Charter Schools, Race, and Urban Space Where the Market Meets Grassroots Resistance*, (New York: Routledge). <https://doi.org/10.4324/9780203067000>; Valerie Strauss, “Ed school dean: Urban school reform is really about land development (not kids),” *The Washington Post*, May 28, 2013, <https://www.washingtonpost.com/news/answer-sheet/wp/2013/05/28/ed-school-dean-urban-school-reform-is-really-about-land-development-not-kids/>; Andrea Gabor, “The K-12 takeover: Big philanthropy’s bid to privatize education,” *Harper Magazine*, November 2019, <https://harpers.org/archive/2019/11/the-k-12-takeover-charter-schools-new-orleans/>; and Bruce Baker, “What should we really learn from New Orleans after the storm?” *Network for Public Education*, 2019, <https://networkforpubliceducation.org/wp-content/uploads/2019/01/BBBakerDoc.pdf>

⁵⁵ Gordon Lafer, “Do poor kids deserve lower-quality education than rich kids? Evaluating school privatization proposals in Milwaukee, Wisconsin,” *Economic Policy Institute*, 2014. <https://www.epi.org/publication/school-privatization-milwaukee/>
<https://www.epi.org/publication/school-privatization-milwaukee/>

based, gamified instruction. In Chapter 5 of the Roundtable report, under “Barriers to the Growth of Blended Learning,” “Bottleneck 1” is “A Lack of Research”:

While blended-learning proponents can point to some initially good test scores, there is little solid data published in peer-reviewed journals. “Honestly, it’s so early on, no one knows what works and what doesn’t work,” says Diane Tavenner, leader of Summit [Charter] Schools. “Indeed,” notes Scott Benson, who directs blended learning grants at the Bill & Melinda Gates Foundation, “part of me is really nervous-- that the dialogue and enthusiasm is outpacing the results.”⁵⁶

Despite this clear acknowledgement that research has not provided adequate support for their strategies, the closing chapter of the Philanthropy Roundtable document details over sixty strategies for rapidly disseminating blended learning software programs into primarily low income schools. Nowhere in the document is there mention of the growing health or developmental concerns related to extensive screen use among young children, who are, nevertheless, one of the key targeted populations in the proposed initiatives. The only mention of health issues at all in the Philanthropy Roundtable report is when they note the “slow uptake of technology in healthcare and in education.”⁵⁷

Prior to her appointment as US Secretary of Education, Betsy DeVos both chaired the Philanthropy Roundtable and founded and led the American Federation for Children, a partner of the ALEC Education Task Force working to promote legislation that would benefit both charter growth and virtual online schools, such as K12Inc.^{58 59} --a notable part of DeVos’ investment portfolio.⁶⁰ In DeVos’s home state of Michigan, the fallout from years of billionaire-funded

⁵⁶ Vanderkam, “Blended Learning,” 87.

⁵⁷ Vanderkam, “Blended Learning,” 31.

⁵⁸ Roxana Marachi, “Will Devos disclose ALEC lobbying prior to Senate vote?” *EduResearcher*, January 17, 2017, <https://eduresearcher.com/2017/01/17/devos/>

⁵⁹ Roxana Marachi, “DeVos’ ALEC Roots Revealed in Response to Senator Murray’s Question,” *EduResearcher*, February 5, 2017, https://eduresearcher.com/2017/02/05/alec_devos/

⁶⁰ John Truscott, “DeVos releases unprecedented amount of personal financial information,” *DeVosForGovernor.com*, March 31, 2006 (press release) <https://www.gongwer.com/public/devosdisclosure.pdf>

school privatization prompted the NAACP to call for a moratorium on charter expansion⁶¹ and continues to be a reminder of the urgent need to protect public education.

This is a time for critical consciousness, for educators, parents, students, and community members to reclaim governance of our public institutions, to take collective action to fight for truly public schools, and to pass legislation and practices that protect the education community from exploitative data practices. The introduction of online-testing with cut scores set for mass failure, the ushering in of software pitched to prepare students for the high stakes tests, the labeling of schools as “failing,” the opening and closing of charter schools, land heists resulting from school closures, attempts to quantify social and emotional learning, to screen electronically for adverse childhood experiences or forms of early childhood trauma, to blindly rely on algorithmic decision-making in the name of student success and equity—all these are part of much larger economic trends that will privatize education in ways that will fundamentally disempower youth and exploit the very communities that the solutions purport to help.

We need to understand the influential role that organizations like Global Silicon Valley Asset Management and The Philanthropy Roundtable have played in the privatization and corporatization of education and in declaring war on teachers’ unions and publicly-elected school boards. This is not hyperbole nor hypothesis: GSV-AM’s published manifesto explicitly names unions as the enemy to fight in order to liberate edtech companies to profit from a \$6.4 trillion global education market. Further, we need to understand the role that charter schools, rapidly expanding with the support of edtech venture capital, have had as “early adopters of technology”⁶² and to see clearly the different priorities of private sector investors and of public communities.

⁶¹ Roxana Marachi, “National NAACP Board Approves Resolution Calling For a Moratorium on Charter School Expansion,” *EduResearcher*, October 21, 2016, <https://eduresearcher.com/2016/10/21/naACP/>

⁶² Moe et al., “American Revolution 2.0,” 62.

In short, we need to be aware that the intentional dismantling of public education is designed to ‘free up’ market forces to take over and extract public resources in a variety of forms, from labor, to data, to land, to public governance. Unions are addressing these challenges as they take action, from West Virginia to Chicago, Indiana, and Los Angeles, insisting that these trends do real, tangible harm and work against the common good. We need to recognize the rich value inherent in the diverse, connected communities and public schools we already have and protect public education from being bought and sold to the highest bidder. Finally, we need to know that data will be at the root of Silicon Valley’s efforts to dismantle public education. We can either be bystanders and watch these trends unfold, or call them out for what they are and fight back to reclaim public education.