



Their Fight Is Our Fight: Why Computing Education Advocates Must Be in Solidarity with Public Schools

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Those working toward equitable K-12 computing education in the United States have always had their work cut out for them: understanding how best to teach, developing robust curricula, designing novel tools, building teacher capacity, and supporting systemic change in schools to bring equitable computing education to young people. Collectively, these areas represent an ambitious and complex set of problems to solve. But current changes to the educational landscape in the United States—where teaching basic ideas about how to critically engage with the world has become deeply politicized, and where forces working toward privatization of education are on the rise—require us to broaden the scope of our work. Our efforts must shift to not just include the aforementioned problems but also include ones that are more explicitly political: engaging in solidarity with the larger project of public education and supporting teachers to have the freedom to teach what students will need to contribute to our society.

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solidarity with the larger project of public education and supporting teachers to have the freedom to teach what students will need to contribute to our society.

Take the case of Bridgett,¹ a middle school social studies teacher whose attempts to integrate data science into her teaching were stymied and censored by a reactionary parent group, ultimately leading her to strongly consider leaving the teaching profession. Bridgett participated in a 6-month teacher fellowship focused on bringing **computational thinking (CT)** practices into humanities classrooms. Our research team worked with her over a summer to explore the powerful possibilities for interdisciplinary learning that can come from bridging CT with social studies teaching and learning, and she brimmed with energy and excitement as she developed plans for her classroom in the new school year. In a unit she developed, students would learn about how data could inform their understanding of historical events, as well as how it could play a role in being civically engaged members of their school community.

Bridgett's woes started with her lesson on misleading data visualizations. Drawing on work from leading scholars focused on bringing data science into social studies [Shreiner and Dykes 2021], she planned to adapt an approach where students examined two graphs comparing COVID-19 cases in the United States—one that came from a Fox News segment and one produced by Johns Hopkins University. The students would look at both graphs to compare and contrast them to determine which was more reliable as a data source. The lesson aimed to encourage students to explore the political dimensions of data, highlighting ways that data representations could be technically accurate but still mislead in various ways.

At the same time that Bridgett was exploring and developing this work, her school had been dealing with a reactionary parent group that had initially formed around COVID-19 school closures and masking requirements. As with many groups like it, it had recently pivoted toward broader questions of curricular content in the school, citing concerns about student “indoctrination” around **Critical Race Theory (CRT)** and LGBTQ+ issues. The school, bowing to their pressure, had put in place an ad hoc parent advisory committee and granted it a substantial amount of power: all curricular materials that were not part of district-approved textbooks and curricula were subject to its review and approval before classroom use.

While Bridgett's first couple of lessons integrating data science hadn't raised any concerns from the parent committee, upon submitting the misleading data visualization lesson 1 week in advance—per the process the school had put in place with the group—she got immediate pushback. Ultimately, she was told by the school administrator who liaised with the group not to use the lesson, as well as further lessons she had planned that incorporated data related to the slave trade. The official rationale the administrator shared was that the committee wasn't able to see how the lessons aligned with state standards, but Bridgett knew better. In her view, the inclusion of the misleading graph from Fox News led to her lesson being censored by politically motivated parents. She shared with us that, based on what she knew about the parents involved, if she had just blurred out the Fox News logo, the lesson would likely have passed through the committee unnoticed. To her, this was about political tribalism, pure and simple. Dejected in having her lesson censored, Bridgett then did what many teachers across the country are currently doing to avoid having to deal with this kind of situation [Davies 2023; Woo et al. 2023]: she censored herself, canceling larger parts of the planned unit that would have had her students use their data skills to survey the student body about their perspectives on various issues in the school, analyze the data collected, and bring the results to the administration.

As advocates of equitable computing education, we must not dismiss Bridgett's experience or accept it in stride. However, implicit assumptions regarding what is considered part of our roles

¹The teacher's name has been pseudonymized.

and what isn't can hinder our ability to address it directly. Most of the committed and thoughtful advocates of equitable computing education came of age in their careers at a time when political fights about schooling were focused on issues of structure, not curriculum. As Dr. Mark Hlavacik, a scholar whose work has examined the rhetoric of education reform, has noted [Berkshire and Schneider 2022], the broad reform movement of standards-based accountability, high-stakes tests, and charter schools has taken up the political oxygen in the room for the past four decades. This has meant that most scholars and practitioners focused on the "content" of instructional improvement—whether in subjects like science, literacy, social studies, or, more recently, computing—have been able to largely (though not entirely) silo their work off from the thorny issues of political contestation in schools that focused on "structure." That work was the job of others—policy leaders, grassroots advocates, think tanks, reform scholars, and so forth—but for most actors focused on instruction and pedagogy, this was not their fight.

But we find ourselves in a new political moment. As Jack Schneider and Jennifer Berkshire outline in their book *A Wolf at the Schoolhouse Door* [2020], the "treaty" around national education policy that has existed between Democrats and Republicans for the last two decades has clearly ended. Under that treaty, left-of-center technocrats aligned with the Democratic Party were able to prioritize their vision for equitable schools; one focused on standards, high-stakes testing, and accountability as mechanisms for closing the achievement gap. Free-market-oriented Republicans, less bought into the elements of this vision focused on equitable student outcomes, managed to achieve half-measures around numerous long-standing priorities. They were able to advance goals around school privatization and weakening teachers' unions through the introduction of publicly funded but privately run charter schools, along with other policies unfriendly to teachers such as "value-added measures," which aimed to tie teacher pay to student achievement. And within this treaty, the career-readiness orientation of efforts like the Common Core aligned with more narrow views about the purposes of education that both the right and center-left could agree on. But as Schneider and Berkshire note, with the tenure of Betsy DeVos as US education secretary, that historical treaty unraveled—Devos represented a pure libertarian vision for education, namely, the dismantling of the public education system. This vision was long held by the far right through its advocacy around school vouchers, and advocates of free-market-oriented privatization have now found new allies—reactionary groups that are not so much concerned with privatization but with rolling back progressive advances in schools that focus on both student civil rights, specifically for LGBTQ+ students [Goldberg and Abreu 2023], and curricular content that aims to reckon with, among other things, the unjust racial history, and present, of the United States [Natanson 2023].

This brings us full circle to Bridgette and her efforts to bring data science into her social studies classroom. The incident is of course legible as part of our current school culture wars, with its apparent pendulum swing of political contestation from the structure to content of schooling. But make no mistake—the politicization of school curriculum is part of a larger agenda, a mechanism to create disaffection with "government schools" and build support for the elimination of free public education. For advocates of computing education who have perhaps never seen their work as "political" in nature, Bridgette's experience should disabuse them of this notion. Even just on the grounds of caring about computing education in various forms, we can see now that teachers working toward these goals are getting caught in the larger net of the school culture wars. And for those who have long been invested in broadening participation in computing and achieving universal access to computational literacies, both near-term censorship of teachers and the broader agenda of privatization that's aligned with them present a clear and present threat to our goals, not to mention an affront to our values.

If we care about equitable computing education, we must take a broader view of the educational landscape, one that is historically minded and maintains what Lilia Bartolomé [1994] calls political

clarity—actively understanding education as not merely technical in nature but rather explicitly part of the process of either upholding an inequitable status quo or transforming it. We must stand with teachers and administrators who have a responsibility to think broadly about what it means to educate students to participate in a democratic society—which includes being able to understand and participate in computational practices. We must trust them to make choices about what students need to learn, not in isolation but in broader dialogue, deliberation, and partnership with others that take place in good faith. Critically, we must support them to be free from censorship and intimidation from bad-faith actors who seek to undermine their very institutions. Computing education advocates must take a stance of solidarity with our public schools, understanding their presence as the collective social infrastructure necessary not just for our goals around equitable learning about computing, but for an equitable and informed society.

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