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Leaving Surveillance Tech Behind in Higher Education: Towards Trust and Abolition

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"I failed an exam last semester for having a seizure while using this. It's extremely ableist and cruel." This tweet[1] from Murphy Singh described their experience taking an online test using Proctorio, a common test-proctoring software designed to prevent and catch online cheating. Midway through their physics exam they had a seizure. The software classified their movements as suspicious, and their professor gave them a failing grade. Singh, a 4.0 student and intern at NASA, is now forced to go through the arduous process of appealing their grade. Unfortunately, their experience just scratches the surface of indignities this relatively new technology subjects students to on a daily basis, all in the name of protecting academic integrity.

Just a few years ago, using software for remote test proctoring was rare, but since COVID-19 forced most schools to move online, remote test-proctoring software is now used by millions of students every month. Proctorio administered upwards of 30 million tests in 2020,[2] a more than 900% increase from the year before. When Proctorio and companies like it abuse a public health crisis for profit, it can rightly be called disaster capitalism,[3] what Naomi Klein describes[4] as "free market 'solutions' to crises that exploit and exacerbate existing inequalities," but that does not explain how remote test proctoring got so ubiquitous so quickly.

Two major factors contributed to its seemingly miraculous adoption rate: a steady investment in carceral pedagogy and a sustained disinvestment in higher education. COVID-19 is merely an accelerant that multiplied a fire lit years ago. In essence, the market that sold technology to prisons and police departments realized it could sell very similar technology to schools. It started off selling predictive analytics, machine learning, and facial recognition software, but recently these newly branded education

technology companies combined them into remote test-proctoring software. Schools were told this was a good idea because it might save them money and could catch cheating, but it fails to do either and just ends up hurting a lot of the same people that prisons and policing do. That's a lot to unpack, so some definitions and background are helpful.

Carceral pedagogy is when educators borrow practices from policing or prisons and use them on students, and it's more common than you might think.[5] This approach to teaching has less to do with learning and more to do with control, and it always perpetuates some form of racism, sexism, transphobia, ableism, classism, or Islamophobia. In some cases, companies will sell products to both prisons and schools with similar features. For example, Microsoft sells technology to prison and police[6] that functions eerily similar to its education technology.[7] Remote test proctoring is just one example of carceral pedagogy used in higher education, and technology is becoming a common way to enforce it. While remote test proctoring is incredibly harmful to students,[8] three technologies laid the foundation on which it was built: predictive analytics, machine learning, and facial recognition. All of them were first developed for policing and then repackaged for education, but the core technology didn't change when it switched markets, so students are treated like criminals instead of learners. If we want to understand remote test proctoring and what to do about it, we need to first trace how we got here.

The police started using predictive analytics just over a decade ago as a method to predict where and when crime will happen and who will commit it before a crime takes place. While that may sound like a good idea, these technologies[9] often classify people of color,[10] poor people,[11] and people with mental illness or disabilities[12] at higher risk of committing crime. Based on this software, police target these populations with more patrols and more aggressive stops, which, in turn, generates more arrests and creates a feedback loop of harm. Dr. Ruha Benjamin aptly describes[13] these technologies not as crime prediction, but rather crime production. Some law enforcement agencies have gone even further by introducing machine learning to determine people's jail sentence[14] or bail.[15] Predictably, machine learning software consistently gives Black and poor people longer sentences and higher bail rates. Despite groups like the Stop LAPD Spying Coalition,[16] the ACLU,[17] and others[18] calling out these technologies as discriminatory and ineffective, there is every indication that the use of these technologies will expand over the next five years.[19]

Regardless of the growing evidence of discrimination, educational technology companies decided that predictive analytics and machine learning would be great to use in education, meaning they could make a lot of money selling it. They rebranded it as learning analytics, and by some estimates the market was worth $23 billion[20] in 2020 (by comparison, the 2020 budget of the US Department of Education was $64 billion[21]).

Learning analytics is software that tracks students' data to make

predictions about things like grades and graduation rates. Based on their demographics, scores, or behavior, it also may suggest they do things like visit the writing center, find a tutor, or change majors to improve their chances of graduation. Where the software engineers failed is in the premise that schools function perfectly, and if anything needs to change, it's the student's responsibility to fix it. This is a common neoliberal assumption that "success" is determined more by an individual's choices than the equity of the systems they're working under. For example, science, technology, engineering, and math (STEM) disciplines are notorious[22] for building curriculum and communities that are hostile to Black women, which lead to fewer Black women enrolling in and graduating with STEM majors. If a Black woman were to enroll in a physics program at a typical university, its learning analytics software would notice that very few Black women had ever successfully graduated from that program and conclude that being Black and a woman are risk factors to graduation. It would advise this student to switch to a different major where Black women are more likely to graduate. In this example, it is the physics department that needs to stop being racist and sexist, not the student who needs to conform to a racist and sexist department. This kind of discrimination isn't hypothetical; it's happening right now in universities across the country.[23] Learning analytics can also work against students who are LGTBQ, first generation, disabled, or undocumented. Learning analytics imports the same discriminatory features of predictive policing but calls it by a different name, meanwhile students are being hurt without ever knowing how or why.

Facial recognition and detection, which are used by every test proctoring software to validate students' identities, are one of the clearest examples of carceral pedagogy in terms of its integration with law enforcement and consistent anti-Black discrimination.[24] Facial recognition technology has consistently been demonstrated as racist,[25] but that hasn't stopped it from being valued at over $3.8 billion in 2020 and is projected to grow to $8.5 billion[26] in the next five years. Companies like Palantir and other facial recognition technology companies actively seek out contracts with police departments and prisons, and there's little oversight about when and how they can be used. Its use has led to the arrest of innocent Black men on at least three different occasions[27] that we know of. Facial recognition also has been used to try to infer people's gender with disastrous results.[28]

There is some good news, however. Protests in the wake of Breonna Taylor's and George Floyd's murder has caused some companies[29] to pause or cancel their facial recognition contracts with the police, and recently the state of New York banned the use of facial recognition in K-12 education.[30] These bans typically restrict facial recognition products related to school safety, such as trying to prevent school shootings[31] or the spread of COVID-19[32] (there is no evidence they can do either, by the way). Contradictorily, many schools who ban facial recognition technology still use test proctoring software. For example, MIT is listed on Stop Facial Recognition on Campus[33] as "Won't Use," but MIT also forces its students[34] to use Proctortrack, which employs facial recognition.[35] This means that either

the regulatory field hasn't caught up to how companies are hiding facial recognition technology inside their products or the schools who purchase test proctoring software care more about student cheating than they do about subjecting their students to discrimination. Perhaps it means both.

These technologies are carceral in that they were invented for and support policing and the prison industrial complex. When they start being used in the classroom—or in the case of remote education, the home—they become carceral pedagogies. Surveillance becomes a default response to any perceived issue because suspicion is the default assumption. Deviance is the main lens through which both suspected criminals and students are understood, and surveillance, control, and punishment become the most obvious tools to address them. This is the essence of remote test-proctoring software: distrust, surveillance, control, and punishment.

Another important trend that contributed to the explosion of remote test proctoring is the long-term defunding of higher education. When institutions get their funding cut by the state, many have reduced the number of permanent, benefited teachers they hire in exchange for adjuncts in an effort to save money. If you're not familiar with the distinction, tenured faculty are paid a stable salary and have benefits, relative job security, and professional development funding for things like how to improve their teaching. Getting tenure is difficult and unfair,[36] but for those who have it, they conduct research, serve on committees, and teach a few classes a semester to make on average a little over $80,000 a year.[37] Adjunct faculty, on the other hand, are contract workers who get paid a few thousand dollars per class. There are no benefits or guarantee they will be able to teach the next semester. Adjuncts often must teach upward of six or seven classes from multiple institutions, sometimes separated by long distances, and they still barely make a livable wage. In short, adjunct faculty are economically insecure, overworked, underpaid, unbenefited, and teaching the majority of students who go to college. These same cuts to higher education incentivize increasing class sizes. So now the overworked, underpaid adjunct teaches 200 students instead of 40 per class. Providing individualized feedback on assignments becomes almost impossible, and one of the only ways to apply traditional forms of assessment in high-enrollment courses is to use tests that can be graded quickly or automatically.

In comes remote test-proctoring companies, who approach universities and proclaim, "cheating is on the rise!" (false) and "there's no way one teacher can make sure no one is cheating" (true). Adjuncts do not have the time, support, or incentives to redesign their assessments to make test proctoring obsolete, and universities are keen to expand their footprint in the online education market. On top of that, our collective belief in technological solutionism[38]—the ability for technology to solve complex and intractable problems—gives test proctoring companies outsized credibility in education circles. When you throw in the COVID-19-induced scramble to remote teaching, you're left with a perfect storm of failed

education: carceral pedagogy, underfunded teaching, and overfunded software companies.

The only way to respond to the carceral state is through its abolition. Likewise, the only way to respond to carceral pedagogy is through abolitionist pedagogy. It cannot be reformed. Where carceral pedagogy surveils students, we need to ensure their privacy. Where it seeks to control them, we must ensure their liberation. Where it seeks their punishment, we must ensure compassion. Abolitionist pedagogy is dangerous in that it has the potential to deconstruct everything we know about education, because its single goal is the liberation of people. It inverts who has power, what's deemed valuable, what question we ask, and to what ends. The Abolitionist Teaching Network[39] is doing some incredible work toward these ends, and Dr. Bettina Love[40] is a leading scholar we can look to for critical analysis, which we desperately need in order to make progress.

Abolitionist pedagogy demands we reject remote test proctoring,[41] but we must also reject tests and grades as accurate measures of learning,[42] "patriotic" revisionist history,[43] police on campus and in classrooms,[44] the prison-to-school pipeline,[45] All Lives Matter statements[46] from university leaders, racist donors,[47] neoliberal calls for the "marketplace of ideas,"[48] and buildings[49] or statues[50] memorializing slaveholders or the confederacy. Abolitionist pedagogy demands we reject six-figure university catering budgets[51] while the university food bank is stocked by donation,[52] students going unhoused[53] while athletics directors pull in multimillion dollar contracts,[54] and seminars on student grit[55] while mental health services are cut.[56]

We must use abolitionist pedagogy to counteract carceral practices in education right now. We must focus on compassion, student agency, trust, and mutual liberation. We must critique and dismantle every oppressive feature of society that contributes to students' trauma and disenfranchisement and replace them with something that engenders dignity and is built with love. Remote test proctoring is a symptom of a much larger educational failing. Yes, we need to abolish it, but we also need to address the circumstances that made test proctoring seem like a reasonable solution in the first place. An abolitionist pedagogy gives us the tools to do it. Now we must decide to use them.

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