The Chilling Effect of Student Monitoring: Disproportionate Impacts and Mental Health Risks

As technology becomes an increasingly prevalent part of school life, students and their activities are increasingly monitored. Student activity monitoring systems are generally deployed with the intent of making schools safer, more effective in reaching educational goals, or more efficient. In prior research, CDT has found that 81% of teachers report that their school deploys monitoring software, particularly on school-issued devices. In separate research, CDT found that school administrators are surveilling students to comply with perceived federal requirements as well as to keep students safe.

Student activity monitoring (technologies that collect data on individual students, such as a learning management system that logs when students use the system or software that allows for real-time features, such as viewing students' screens) has become increasingly pervasive, occurring in both on- and off-line spaces. Off-line, schools are increasingly employing cameras, including facial recognition systems, on campuses in the name of school safety. On-line, student activity monitoring software tracks students as they use their devices, social media monitoring systems track student activity on social networks, network monitoring systems observe online activity on school internet connections, and software, particularly on school-issued devices, allows for real-time surveillance such as viewing students' screens or even accessing cameras and microphones. Critically, this monitoring is often not confined to the school day and can involve 24/7 monitoring over school-issued devices used at home.

Impacts of Surveillance

The negative effects of surveillance on student mental health are often not accounted for when using these technologies. While schools are often monitoring students in an attempt to keep students safe and evaluate and preserve their mental health, this may backfire in that the monitoring itself may have a deleterious effect on students' mental health. For example, six in ten students report that they did not feel comfortable expressing their true thoughts and feelings online if they knew that their activity was being monitored. This "chilling effect," where people who are aware that they are being monitored will alter their behavior and curb exploration and self expression, can prove especially problematic for minors in an educational setting.

- **Stifled learning and self expression**: Exploration and learning are critical for young people in the process of learning and self discovery. Surveillance may cause students to

avoid or limit this critical exploration. Exacerbating this concern is that children and adolescents often have limited agency in all aspects of their life. Introducing surveillance in a school setting, including software programs that monitor student activity and social media 24 hours a day, 7 days a week, means that minors may never be able to move into a less surveilled context because they are not necessarily in control of their physical movements or online lives, leaving them with no safe opportunities for exploration. This can lead to students who do not feel that they can ask questions when they are questioning the behavior of adults in their life or of abusive partners or peers, who do not feel like they can explore resources if they are questioning their own gender or sexuality, or who are afraid to do research to understand the nuances of complex issues in their own lives. This self repression can be damaging to students' mental health and well being.

- **Disproportionate impact on marginalized communities**: Additionally, these negative impacts are not evenly distributed, as research shows that populations like youth, women, and minority communities are [disproportionately impacted by chilling effect](s), in part because of more fraught relationships with institutions like law enforcement or disciplinary frameworks. Given that [students of color face disproportionate rates]( ) and [severity]( ) of punishment as compared to their white peers, the effect of surveillance is likely to fall more heavily on those communities. Additionally, the raw amount of surveillance is also not evenly distributed. For example, students who rely solely on school-issued devices, without any access to a personal device, are likely to be subject to [more frequent monitoring]( ) than their peers who have access to personal devices. This results in economically disadvantaged students being subject to more surveillance than students from wealthier families. These disparities will reinforce and exacerbate existing inequities in society, such as the school-to-prison pipeline.

Best Practices

Given the mental health impacts of chilling expression and the disproportionate impact on marginalized communities, schools should consider the following best practices to ensure the well-being of their student community:

- **Assess the disproportionate impact of current and proposed practices:** Schools should assess any monitoring practices to determine whether they are likely to have a disproportionate impact on certain communities. This assessment should consider axes of marginalization, like income (students relying on school devices may be disproportionately monitored) and race (students of color may be more distrustful of

institutions like law enforcement and may therefore be more cautious about their actions when being monitored). This can mean auditing and reviewing systems and databases for bias and measuring system outcomes once deployed to ensure that they do not behave differently for different populations. For vendor-provided systems, schools should ask vendors how they evaluate their systems for bias and disproportionate impact, and analyze whether their approach is sufficient.

● **Engage communities:** Schools should solicit and weigh community feedback with respect to student activity monitoring. This is particularly true of any program directed at ensuring student safety, given the particular complexity of these initiatives and that they often involve law enforcement. Many marginalized communities, including communities of color and LGBTQ+ communities, have complex relationships with law enforcement where they are sometimes an *impediment* to student safety and well-being. Gathering feedback from these communities is absolutely critical to ensuring that monitoring programs are effective and safe for all involved.

● **Impose limits on student monitoring:** Limiting what is monitored and when monitoring is active can help establish safe contexts for exploration. Turning monitoring off outside of school hours can help to provide students with a safe time for exploration and help to limit the disproportionate monitoring of economically disadvantaged students who rely on school-issued devices. Additionally, limiting who has access to monitoring data can help to protect student privacy and limit the potential for harm to students. This is particularly important for marginalized populations who may have a particular need for safe environments, such as LGBTQ+ students who are worried about being outed may avoid searching for anything related to their sexuality to a greater extent than their peers.

● **Prohibit damaging uses:** To limit the chilling effect and disproportionate impacts, schools should prohibit the use of monitoring data for certain uses, like discipline or data sharing with law enforcement. These uses can reinforce damaging phenomena like the school-to-prison pipeline, and erode trust with the impacted communities.

● **Provide transparency around monitoring policies:** Schools should be clear with communities about what is being monitored, when monitoring systems are active, and how monitoring data is used. Providing clarity about the limits and boundaries of the monitoring allows students to understand when they are *not* being monitored, offering them safe times for exploration. Schools may worry that transparency about monitoring will provide students with the ability to circumvent the monitoring program. Threat

modeling and pressure testing the monitoring system can help schools to spot unintended gaps in the monitoring program and address them, without relying on "security through obscurity" to protect their systems.

Self exploration and learning are critical to young people's health and well-being. Monitoring programs, if not carefully implemented, can stifle growth and leave students vulnerable to the chilling effect, placing their mental health at risk. Schools that use monitoring programs should carefully consider the potential negative effects of surveilling students on their psychological well-being.

This is one in a series of information sheets designed to give practitioners clear, actionable guidance on how to most responsibly use technology in support of students. More info: cdt.org/student-privacy/.