Solution Overview
Innovative school safety solutions for the Digital Age

There’s never been a more challenging time to be an elementary or primary school student. Students in the Digital Age have unprecedented access to all the world’s knowledge and information, simultaneously creating both richer learning opportunities and introducing a litany of new safety concerns.

Today, nearly 95% of teenagers¹ and almost 70% of children under ten have access to a smartphone, tablet, or other internet-connected device². With those devices comes unfettered access to an array of social media platforms, communications applications, and millions of websites with decidedly adult-focused content.

The fear isn’t just that children and teens will be exposed to inappropriate content and messaging, but rather that they’ll be negatively influenced by it and potentially even act upon what they’ve seen.

In an age where as many as 43% of students have experienced cyberbullying³ and the threat of physical harm — both self-inflicted and from other students — continues to rise, parents, teachers, and education leaders are aggressively seeking ways to protect children in both online and offline environments.

Securly has pioneered a comprehensive and integrated school and student safety solution to empower parents, administrators, and IT leaders with the intelligence and information they need to proactively address evolving student safety concerns in both online and offline environments.

New generation, new safety challenges

School safety is a complex and evolving issue. Previous generations had to contend mostly with analog physical threats to health and safety like playground bullying, talking to strangers, and preventing drug use and abuse.

Today, many districts with deeper pockets and the available staff have addressed physical safety concerns by investing in video camera systems, metal detectors, and hiring police or other security professionals to guard entrances and exits. Yet, they’re still often woefully underprepared to take on the digital challenges in today’s considerably more complicated safety picture.

Student safety threats in the Digital Age

- More than 20% of students report being bullied in school; more than 59% have been bullied or harassed online
- Only 40–50% of cyberbullying targets are aware of the identity of the perpetrator
- Teen depression, self-harm, and cyber bullying rates have increased by as much as 70% in a decade
- At least one in four teens are receiving sexually explicit texts and emails, and at least one in seven are sending them
- Just 23% of teens who have been cyberbullied report notifying an adult

Approximately 40% of school districts nationwide have taken advantage of cheaper and more powerful technologies like current-generation mobile devices and cloud technologies to implement a 1:1 initiative in which each student is supplied a district-issued device to keep for the academic year or a bring-your-own-device (BYOD) program.

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4 “Student Reports of Bullying: Results From the 2015 School Crime Supplement to the National Crime Victimization Survey.” National Center for Education. NCES.ed.gov. December 20, 2016.
Though the explosive growth in school-issued devices has opened new learning opportunities for many students and levels the playing field, it’s also wreaking havoc on traditional methods of school and student safety and creating unique challenges for everyone involved with protecting kids in school and at home:

**IT network teams**
There are more devices to monitor, more reports to create, and more users to authenticate — all without the benefit of more resources. The emphasis on scalability, performance management, and data security from outside threats has monopolized IT resources, limiting the time and effort available to address specific student safety concerns.

**Administrators and Teachers**
The first line of defense for student safety, school administrators — district superintendents, principals, and vice principals — oversee hundreds of faculty and potentially thousands of students. Despite the availability of various reports, security camera footage, and calls from concerned staff or parents, administrators generally lack the tools and resources to properly evaluate, prioritize, and quickly address student safety risks at the individual level.

Likewise, teachers are preoccupied with their academic responsibilities and keeping a watchful eye out for erratic or unusual behaviors in the classroom. In addition to their limited scope of responsibility, they also lack insight into the rest of a student’s activities and social engagements outside of class time.

**Parents**
Student safety begins at home, but parents are often out of the loop when it comes to their kids’ daily interactions and experiences. Children and teens are notorious for guarding secrets and reluctantly discussing scary or embarrassing interactions at home, and most parent-specific online safety tools provide limited control and visibility into their children’s online lives.

**Students**
In the age of “see something, say something,” students can play a pivotal role in improving their own safety and should be empowered to report inappropriate or dangerous behaviors. But most fear the retaliation, shaming, or increased bullying they face if it isn’t done anonymously and discreetly.
Legacy and point solutions fall short

For much of the last two decades, school safety initiatives have largely been the domain of IT directors. Administrators were often focused on adding physical security barriers — metal detectors, additional on-premise staff, and more restrictive hallway or lunchroom policies — while IT professionals were busy worrying about how to keep kids safe on the internet while in the computer lab.

Web filtering products have been the mainstay of online security for nearly 20 years. The technologies allow network managers to actively blacklist inappropriate or adult-themed websites for both students and teachers without blocking legitimate educational ones.

Technology providers aiming to combat increased digital access and uncover potential threats from students trying to circumvent filters have explored various approaches toward proactively searching for troubling trends, including:

- Email filters
- Social media account monitoring
- Keystroke logging

However, these providers do not address the problem with a holistic approach. Some often focus on just one type of threat — suicide or self-harm, bullying, substance abuse, or school violence — and rely heavily on the keyword or phrase searches that might miss more nuanced threats or coded language.

**Shortcomings of a web filtering-only approach**

- Keyword or phrase based
- Misses nuanced or coded language
- Inaccurate results and frequent false positives
- Data silos from disparate tools across platforms create blindspots
- Focus only on one aspect of safety
- Excludes parental involvement
Other solutions take screenshots of documents, videos, and web forums that are automatically emailed to administrators when a blacklisted word or phrase appears. But these technologies are underdeveloped and in their infancy, frequently delivering false positive alerts and unreliable data with no context to guide administrators to an appropriate response.

Worse, each solution has its own reporting suite and dashboard, creating data silos that dramatically limit visibility and transparency across all digital platforms. Instead, IT managers, education leaders, and parents need a holistic solution that leverages all of the above approaches, drawing upon the strengths of each in order to cover each other's individual gaps. Student safety today requires intuitive and integrated technologies that provide deep-dive insights, actionable intelligence, and the ability to collaborate closely to protect students from online and offline threats.
End-to-end protection and visibility with Securly

Securly is revolutionizing school and student safety with a comprehensive suite of integrated tools, purposefully engineered for the Digital Age. Securly is a complete cloud-based solution featuring nearly unlimited scalability and low-latency performance regardless of traffic volumes or bandwidth demands.

Securly is a different kind of student safety solution
- 100% cloud-based
- No agents or appliances to cover all devices in a district
- Comprehensive filtering, auditing, tipline, and 24x7 human-reviewed live alerts
- Unified platform with free parental control apps
- At home and personal device filtering
- Full support for all device types
- Full support for Google, Azure, and Active Directory Sign-On

Securly provides the most complete collection of powerful, continuously updated tools for:
- Mobile device management (MDM)
- User authentication against Google, Azure, and Active Directory for use with GSuite or Office 365
- CIPA-compliant web filtering
- Monitoring web searches and site visits
- Email analysis
- Social media monitoring and analysis
- Unified software environment for protection at school and at home

Securly’s modular design enables administrators and IT managers to access and deploy tools and capabilities configured to their district’s or school’s unique needs and budget considerations.
AI-powered analysis and alerting with human oversight

Unlike conventional monitoring tools that require manually combing through every single activity or that use keyword searches ignoring context and history, Securly uses Natural Language Processing (NLP) powered by Artificial Intelligence (AI) to analyze sentiment and tone, identify slang or colloquial speech, and contextualize key phrase and keyword search results across all digital channels.

Securly delivers 24/7 monitoring and analysis of:
- Social media platforms
- Web searches and sites visited
- Videos played via browser
- Emails and other cloud-based documents

Securly’s unique human-assisted AI offers 24x7 analysis by trained professionals who review individual alerts flagged by AI and investigate the fuller context behind the alert to determine its veracity and potential urgency.

AI analysts evaluate a student’s searches, web site visits, social media posts, and other actions to conclude that the alert is either a false-alarm or a credible warning requiring outreach to the districts, parents, or emergency services as appropriate.

The data from each flagged alert and subsequent analysis is also used to enrich the AI algorithms by continually retraining machines to improve alert accuracy, reduce false alarms, and deliver an unrivaled feedback loop for school leaders and parents.
Cloud-based web-filtering, device management, user authentication, and classroom tools

Securly empowers IT administrators and educators to take full control over school-issued hardware and software, no matter where the devices are used.

A pioneer in web filtering, Securly is the only cloud-based solution that doesn’t require software to be installed on each device or need an appliance to manage BYOD and guest devices. Other solutions often can’t cover all devices in the district or require downloading various software and buying different appliances to achieve ubiquitous coverage. Securly’s cloud-native architecture means it’s the only fully integrated web filtering solution available for districts who place a premium on student safety.

Securly, powered by TechPilot, supports all the latest Apple MDM offerings for iOS, macOS, and tvOS, while Google ChromeTools provides complete control over browser-based activities on any networked student device. Securly authenticates against Google, Azure, and Active Directory, laying over top of existing GSuite or Office 365 platforms, making it easy for your students and staff.

With Securly, teachers and IT administrators have greater control over school-issued devices with tools such as:
- Selective screen and application locking
- Remote passcode clearance
- Browsing histories and restrictions
- App and website blacklists
- Lost device locations
Exclusive parental portal and insight tools

Securly is the first and only solution available with dedicated tools for parents. With Securly, parents can gain insight into a child’s online activity by providing snapshots of search histories and sites visited, delivered via user-friendly dashboards and email reports.

Parents can set their own filtering standards for school devices at home for greater control. In addition to governing access to websites and social media apps, parents can also take advantage of a variety of other powerful tools included free with a paid filter license, such as:

- Self-harm and cyberbullying detection with instant mobile alerts for parents
- Pausing the internet on children's devices
- At-home filtering for personal devices with Hub
- Activity-specific schedules for homework, free time, and bedtime*
- Monitoring and filtering of personal devices both at home or anywhere off-campus

Anonymous student tip line

Students play a vital role in stamping out cyberbullying, direct and indirect gang-related violence, or even the possibility of a lone wolf attack. Securly’s Tipline empowers students of any age to anonymously report an incident or concern to Tipline by calling the hotline, sending an email, or submitting an online form.

From there, the system applies a risk assessment to each report and immediately alerts authorized personnel to situations that are deemed urgent.

*Available late 2019
School safety used to mean getting pushed down near the swings or having milk money stolen. But students now face a rash of more serious, insidious, and dangerous threats.

Yesterday’s safety strategies and tools are no longer sufficient for protecting against today’s threats. And keeping students safe at school, in the classroom, and at home must be a collective effort among schools and parents to protect kids in a digital world.

As the internet’s complexity evolves, Securly continues to innovate and develop scalable, flexible, and powerful solutions to meet even the most challenging present and future threats to student safety. Cloud-native tools without software downloads or additional appliances give school administrators and parents unparalleled visibility and control over students’ digital activities on any device — at home, at school, and everywhere in between — while empowering students to contribute to their own safety.
Securly was founded in 2013 with a single intention: to keep kids safe online. Securly develops solutions that keep kids safe and engaged online, at school, and at home.

From tools that help adults create a kid-friendlier internet to an AI that recognizes signs of bullying and even intuits risks of self-harm, Securly breaks new ground and innovates to meet modern problems head-on. For every child that we empower to stand strong, for each kid that chooses hope over hopelessness, Securly is motivated to continue forging ahead.