# EdTechNext:

Leveraging Technology for Improving School Wellness and Safety



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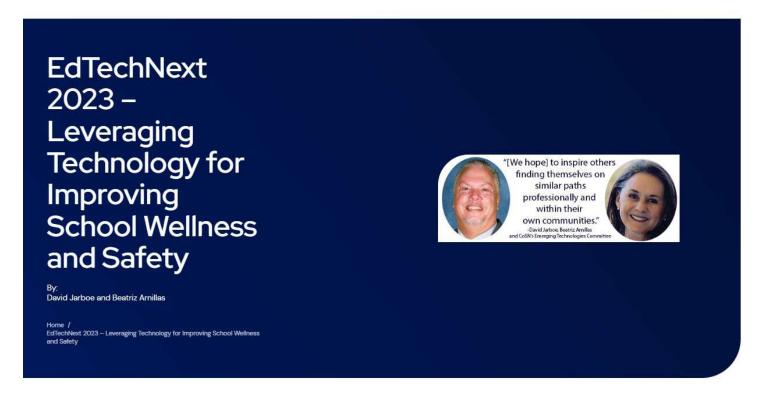
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Part of a Blog Series from the Emerging Technologies Committee Leveraging Technology for Improving School Wellness and Safety

When David Jarboe and Beatriz Arnillas convened the Emerging Technology Committee last May, the group reflected on the rich feedback received during our CoSN conference session. We were encouraged by the broad interest in the committee work as we set out to develop this year's report. We discovered a common thread throughout the discussion around leveraging technology to improve the overall wellness of schools for students, staff, and the community. Four overarching topics began to come into focus. We decided it would be beneficial for members to hear from practitioners in the field who had accomplished progress and success in these areas. The committee hopes to inspire others who find themselves on similar paths professionally and within their own communities. We know that not

everyone deals with the same variables or situations, but we believe " nuggets " can

be found in sharing their stories.

Although technology cannot fix everything, it can provide tools for teachers to reduce stress and assist with school safety. This project aims to explore areas where technology can help educators, students, parents, and administrators attend to the most important aspects of learning. This report is a compilation of interviews with technology leaders around the nation. We tried to get a representative sample of districts, including various sizes, geographical locations, and socioeconomic status. Not every product or practice is necessarily practical for every district, however learning from what others are doing can spark conversations, new ideas,



and change. The best practices and recommendations come directly from practitioners. We hope that you will find the work of others useful in district-level conversations around Student Mental Health, Social Media Issues, Teacher Stress, and School Safety Technology.



We have modified the format to engage our members more thoughtfully. We know it can be difficult to find time to sit and read 12-page reports, so we have divided the report into a series of blogs sponsored by a panel of individuals whom we have interviewed for this report. Our goal is to deliver a more personal report that readers can enjoy in more manageable parts.

# Technology's Key Role for Personalization Differentiation

By: Tricia Kennedy

Home / Technology's Key Role for Personalization Differentiation



"It is a struggle to meet ... the demands placed on K12 education, ... look for strategies and mechanisms that not only offer a high return on investment, but also hit multiple targets with a single arrow. The pairing of personalized learning and social emotional supports can be a great example." -Tricia Kennedy

The renewed focus on the whole student, specifically on social and emotional needs and growth (social emotional learning – SEL), is certainly a positive direction in K12 education. Technology leaders and providers have answered the call, with the development or enhancement of digital content and resources to assist teachers and parents in promoting students' growth. However, perhaps we as ed tech and curriculum leaders are overlooking the value of other high impact avenues for addressing those needs.

Alongside the increased focus on SEL, we have been working to leverage technology to promote more customized, or personalized, learning experiences. I see a distinct overlap between the objectives and outcomes of these two areas of focus. In my former district, leadership has been working for many years to develop paths for learning that optimize student choice and interest. As an example, several years ago the district transformed coursework to offer personalized learning paths, focused on areas of emerging technology and industry trends. High schools began providing students customized coursework, with intensive areas of focus in career clusters such as health sciences, information technology, STEM, public safety, international law, performing arts and technology, and now even artificial intelligence. To date, the district offers students more than 60 different pathways to high-demand, high-skill, and high wage careers.

As research and practice predicted, students immersed in studies within areas of individual interests experienced secondary (or perhaps primary) benefits of growth in collaborative skills, problem solving, self-regulation, self-efficacy, i.e., social and emotional growth.

Technology plays a key role. Teachers must rely heavily on technology to keep up with

vetted content in these ever-emerging fields. In addition, the offered pathways are future-focused and in the epicenter of the emerging technologies that will define society's future.

The district stretched the skills and concepts of these emerging fields back into the middle and even elementary school content as well. For instance, in a cluster of schools where the high school offers an artificial intelligence (AI) focus, students as early as kindergarten are exposed to AI concepts as consumers. The AI content builds through the grades, helping students move from informed consumers to skilled developers and creators. The content by its very nature embeds supports for students to become effective contributors to society as well as promoting a sense of self worth and efficacy... again, social and emotional skills.

While not all schools or districts are positioned to provide multiple course programs in an array of fields, all can seek to offer increased choice and personalized options to students. What might otherwise be a heavy lift for development can be eased by ready access to a wealth of digital content, increasingly sophisticated scheduling systems, computer-based curricula, etc.



Technology now also provides unprecedented support in the design and delivery of more personalized learning experiences, down to the lesson level. Most learning management systems help teachers manage differentiated instruction by using performance data to automate the learning path, allowing students to receive just-in-time, personalized instruction. Through curriculum-based measurement and management tools,

teachers can facilitate learning activities exactly where, how and and when students need them. In fact, many if not most systems now incorporate SEL standards into those learning paths. These tools can truly change the way students learn. We know the myriad of benefits for students who are continuously operating in their zone of proximal development, benefits that definitely support students' social and emotional development.

It is a struggle to meet all of the demands placed on K12 education, and they are only growing. We serve ourselves and our students well to look for strategies and mechanisms that not only offer a high return on investment, but also hit multiple targets with a single arrow. The pairing of personalized learning and social emotional supports can be a great example. Let's keep asking ourselves how we can leverage more customized, personalized, and therefore engaging learning opportunities to help our students grow in social constructs and emotional strength?

Leveraging Technology to Support Social Emotional Learning (SEL)

"Schools need to provide manageable ways for teachers to help meet the needs of students in their classes."

-Stacy Hawthorne, Ed.D., CETL, Learn 21, CoSN Emerging Technologies Committee Member & Erica Shumaker, Northern Arizona University Educators have aptly noted that the number of students coming to school with increasing mental health needs has increased in the last five years. With rising rates of depression and anxiety students are coming to schools in need of educators who are able to meet them where they are and help them access classroom content while working through their mental health needs. While educators cannot take the place of a mental health counselor they can provide a space for students to explore and learn through effective integration of Social and Emotional Learning techniques.

Social Emotional Learning (SEL) is defined by the Committee for Children as the process of developing the self-awareness, self-control, and interpersonal skills that are vital for school, work, and life success. Research has confirmed that SEL leads to better academic performance, less emotional distress, and a decrease in conduct issues such as incidences of violence, substance abuse, and aggression. With growing interest in SEL has come more demand for emerging technologies to help educators meet the social and emotional needs of their students. SEL is learning that can happen on many levels within a school community.

## Technology to support SEL in the classroom

One of the first ways that educators can help students increase their social and emotional awareness is through seamless integration in classroom lessons. With the use of rising technology the workload on teachers to create new lessons is decreasing while the ability to help students identify their needs is increasing.



Simple ways to help students on a regular

basis are with quick check-ins. Products like Microsoft Teams' Reflect or Nearpod's interactive presentation allow students to share where they are emotionally as they enter the classroom or during a lesson. Both of these platforms allow students to identify their emotional or mental state without the pressure of sharing out loud amongst their peers. In real time teachers can see the emotional barometer of their class. They can check in one on one with students who may have expressed experiencing difficulty and address any issues right away. Teachers can also gauge how a class might be doing with new material and make adjustments as needed to meet the needs of their students.

These techniques are simple but effective ways to help students identify their emotions and feelings. Allowing students to explore their feelings and emotions allows them to come to class feeling safe which leads to higher levels of learning and engagement with course content.

### Technology to support SEL at the district level

The job of helping students grow is not limited to the role of teachers. It is a whole school endeavor. The Gwinnett County Public School has implemented technology to drive data and help students find career paths that meet their interests while leading to increased student self-efficacy and self-advocacy, both of which are related to healthy emotional intelligence.



One of the best ways that a school can help meet students' unique needs is through personalizing learning. Through personalized learning students learn to develop self-awareness and interpersonal skills. Through self-exploration students are able to learn what works best for them and how to advocate for their own learning. An example of how students can practice these skills comes from Gwinnett County Public Schools (GCPS).

GCPS has implemented a learning pathways program that supports students on their path.

Starting at the elementary and middle school levels, teachers use their Learning Management System, LMS, to record student preferences and class selections. This data is helpful for students as they reach high school and have a choice of over 60 career pathways to pursue within the district. These career pathways can lead to high paying jobs that require a high level of skill and are in high demand. Not only does GCPS have different career pathways for students, they have a number of high interest high schools that allow students to study more in their chosen career clusters, such as STEAM or Health Sciences.

This data-informed practice improves student engagement and supports adaptive methods to assess students' learning needs. Some ways technology can support personalization and multi-tiered systems of support are:

- Data collection shows if students are in need of extra support.
- Information that allows students to see that they are doing well in a subject and prompts them to take more advanced courses in topics students enjoy.
- Automated or adaptive platforms that can identify the need for remediation or acceleration and can provide digital resources to educators and students.
- Learning Management Systems provide educators with the ability to help students while not increasing their already overfilled workload.
- Expanded universal screening technology identifies students earlier and gets services to them quicker.

# Technology to support SEL in Family Communication

Communication between the school and caregivers is important to support each student's success and mental health. Technologies are able to connect school and home more effectively and efficiently than ever. As a result of the increased need for effective communication with families, many districts decided to update their Learning Management Systems and/or purchase additional communication tools. We spoke to districts that have recently upgraded their LMS and/or improved their communication within the whole school system. Some of the features that facilitate better communication between parents, teachers and students are:

- 24/7 Learning: Having an LMS that allows for 24/7 learning allows students to work on their own time and for caregivers to be able to help at home.
- Transparency: Having materials easily accessed online allows families to view and access classroom activities, assignments, attendance records and other important material to support their student at home.
- Ease of Access: Having one communication platform for all communications (newsletters, text messages, emails, attendance).
- Improved Accessibility: Using technology allows parents to translate text into the language that is easiest for them to understand. Additionally, accessibility tools like Ally allow students to view instructional materials in a format that is best suited for their learning style or needs.



# Social Emotional Learning Technology Solutions

Implementing SEL programs can be challenging for educators and schools. While it can take time for teachers, schools, and families to buy in to implementing SEL resources the rewards are worth the investment. Gwinnett County Public Schools, Greenville Public Schools (GPS), and Bartholomew Consolidated School Corporation (BCSC) shared their experience in implementing their technology driven SEL solutions.

- Establish an SEL Department: At GCPS, the newly formed SEL department is responsible for identifying what materials and resources a school needs in order to meet the needs of educators, students and parents.
- Pilot the program: Mobilize a small team of teachers who are invested and support the idea of incorporating social and emotional learning to implement the program to troubleshoot any issues before it is released to the whole school/district.
- Use a double feedback loop: GCPS implemented a SEL committee made up of teachers, administrators, district staff, and a separate student committee that weighs in on the decisions (curriculum purchased etc.).
- Incorporate all stakeholders: BSCS reached out to public, private, and social
  sectors in their community to form a coalition of stakeholders invested in
  improving SEL support for students. BSCS is using an asset based approach to
  tap into all the resources in their community. This coalition has already
  supported the purchase of mindfulness programs and learning materials with
  embedded SEL components.

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# Social Emotional Learning Technology Solutions

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  tap into all the resources in their community. This coalition has already
  supported the purchase of mindfulness programs and learning materials with
  embedded SEL components.
- Align and coordinate with School Counseling programing: Utilize the stakeholders at your school who are licensed professionals to help educators implement social and emotional learning in a way that is manageable for classroom teachers and yields results for students.

Now more than ever it is important to have systems in place that allow for students to grow socially and emotionally. Schools need to provide manageable ways for teachers to help meet the needs of students in their classes. Allowing for more emotional identification, personalization, and multi-tiered systems of support are just three ways that schools can begin to help students. Working with technology that is rooted in SEL allows students to drive their own learning and create pathways to their future while also forging stronger connections between home and school.

# Digital Citizenship, Digital Literacy, and Education

"...schools should work with educators and families to ensure students have an awareness of their digital footprint and teach ways that social media can be positive." -

positive." -Kathleen Stephany, Technology Integration Coach, Oshkosh Area School District (WI)

By: Kathleen Stephany

Home / Digital Citizenship, Digital Literacy, and Education

Sometimes it feels as though social media has taken over the world. We live in an age of competing attention to hold our interest. If you have ever been in a K-12 classroom, you will see that it won't take long for students to be distracted by the latest YouTube video or TikTok trend. We must find the balance in day to day interactions at school, work, and with family to focus on what is important at the time.

First, it is important to define a few terms. According to Virtual Library, digital citizenship is, "engaging in appropriate and responsible behavior when using technology." Digital literacy is the ability to find, evaluate, and communicate information using digital platforms. A digital footprint is the trace one leaves behind on the internet which can be from posting photos, videos, or text.

The Oshkosh Area School District (OASD) in Oshkosh, WI is actively addressing digital citizenship with students in their elementary, middle, and high schools. A team of library media specialists adapted the free Common Sense Media curriculum. They work with classroom or homeroom teachers to deliver monthly instruction based on various topics



which include: media balance, online safety,

digital footprint, cyberbullying, and more. Another option for other districts and schools could be to leverage their learning management system to push out lessons. Additionally, the OASD's library media department promotes Digital Citizenship Week each October and shares a handout with families to promote conversation between parents/guardians and their students.

It is important to note that Common Sense Media is not the only platform available. ISTE has a plethora of resources as well and emphasizes the benefits of using social media in the classroom. In *Digital for Good* Richard Culatta explains five qualities youth should develop in order to thrive and contribute as a good digital citizen. Additionally, #ICANHELP is a non-profit that focuses on helping students and educators to "lead, educate, and engage" in the positive power of social media.



The Oshkosh Area School District also evaluates apps for curricular value and for data privacy. Teachers are able to request apps, extensions, and websites that they would like to use in the classroom with their students. First, the curricular team reviews the tool. If it is deemed appropriate, they send it to the technology integration team who

reviews the Terms of Service and the Privacy Policy. Items that the team examines for each tool can include COPPA compliance, protection (or disclosure) of Personally Identifiable Information (PII), and compatibility with current technology. The resource will then be placed on an approved resources list and categorized as following: Green (district supported), Blue (approved but not supported), Yellow (approved with cautions), or Red (not approved). View more information on the Instructional Technology page from the Oshkosh Area School District website.

When families ask what resources are available, schools may refer them to Common Sense Media for Parents. Guardians are encouraged to engage in conversations with their children as to what apps they are using and who they are talking with online. Additionally, Google has offered Be Internet Awesome for internet safety. Often parents can change the settings on their child's phone to regulate access. Cell phone and internet providers may also offer resources or tools. Ideas such as not allowing computers or phones to be charged overnight in bedrooms may be helpful.

Social media companies are also investing in ways to help children balance a healthy amount of social media. While TikTok has a Kids Mode for those under 13, they will be instituting time limits for children under 18. After one hour of screen time, it will prompt teens for a passcode causing the user to have to actively decide whether to keep scrolling on the app. Of course, it will be up to the user and the family to input the correct age information when signing up for an account to take advantage of these settings.

In conclusion, schools should work with educators and families to ensure students have an awareness of their digital footprint and teach ways that social media can be positive. Students need time to learn appropriate digital skills and practice those skills inside and outside of the classroom. These digital literacy skills will help them to be college, career, and community ready.



Students' use of social media has increased significantly, reaching nearly half of their day spent on these platforms. While many teachers use social media in the classroom, there are still concerns regarding its appropriate use inside and outside the classroom. To ensure proper usage, digital citizenship training can be implemented, such as partnering with Common Sense Education or developing inhouse training programs. CoSN also has great resources, including Social Media & ED and Creating Effective Responsible Use Policies for Schools.

In recent years, schools have received an unprecedented amount of negative and positive comments on social media. One strategy that schools can use to focus attention on the positive is to think about their branding. Positive school branding promotes the achievements and work of teachers, students, and administrators. Schools can run campaigns, post updates, create video series to showcase their successes, and post them on various social media sites. Two examples of positive school branding that came up through interviews with school leaders are:

- Gwinnett County Public Schools' community relations department runs campaigns to highlight best practices. Their current campaign SHINE involves schools and district offices nominating students and staff members to highlight their work. Each week they have a different featured person.
- An Orange County Public Schools superintendent created a YouTube series, "Mondays with Maria," highlighting different resources and district happenings.

Positive school branding helps manage negative interactions and creates community within schools and school districts. To manage negative interactions, schools can dispel misinformation through social media and work with social media companies to remove inappropriate content. In a groundbreaking collaboration, follow NSPRA, CoSN, and other



educational partners as they make headway on *The Critical Need for Verification* and *Dedicated Reporting Processes for Schools*. https://www.nspra.org/Schools-and-Social-Media



- Another solution for managing negative interactions is to use a unified internal
  communications system with social media-like qualities, like Bartholomew
  Consolidated School Corporation's system. Their system eliminates negative
  interactions by protecting the network from non-school members and simplifies
  communication for parents. One benefit of a system like this is that parents only
  need one login to access information from everyone in the school.
- All users (teachers, parents, administrators) are opted in automatically.
- Communications can be translated into over 100 languages
- It builds a true sense of community since parents, teachers, and administrators can see what is happening at all levels of the school on one platform.

In conclusion, social media in K-12 education presents both challenges and opportunities. By implementing digital citizenship training, utilizing social media for positive branding and messaging, and using a unified system for internal communications, schools can overcome these challenges and fully reap the benefits of social media in the classroom and in their districts.

# Leveraging Technology to Reduce Teacher Stress

"Two main themes from our conversations emerged that district leaders should consider to help reduce educators' stress and burden. They are intentionality and interoperability."

-Doug Couture, Director of Technology Systems and Programs South Windsor Public Schools (CT)

By: Doug Couture

Home / Leveraging Technology to Reduce Teacher Stress

Teacher stress and dissatisfaction in the workplace is at an all-time high(1). A study conducted by the National Education Association at the beginning of the 2022-23 school year found that over half of educators are considering leaving the profession earlier than planned(2). Educators are under enormous strain due to teacher shortages, heightened politicization, low wages, and student learning gaps caused by the pandemic.

The increasing reliance on educational technology has only added to the long list of what teachers need to learn. Gone are the days when a teacher only needs a textbook, worksheets, and subject knowledge to teach a class. Now teachers are expected to use educational software platforms for grading, creating assignments, taking attendance, and assessing student work, among other things. The COVID-19 pandemic only increased the acceleration of adopting new technology in education. Data privacy laws, cybersecurity concerns, and interoperability with existing district systems are also considerations that complicate matters for teachers.

With this in mind, reducing teacher burden and stress while implementing technology in the classroom should be a priority for district leadership.

# The Sweet Spot: Making Life Easier for Educators

Finding the sweet spot between technology solutions and the needs of educators is a difficult task. As previously mentioned, the technology must be accessible to all, meet data privacy and cybersecurity requirements, fulfill the curriculum's needs, and make the



job easier and less time-consuming for educators. We interviewed four district technology leaders nationwide to gather feedback on best practices for adopting and implementing new technology for educators.

Two main themes from our conversations emerged that district leaders should consider to help reduce educators' stress and burden. They are intentionality and interoperability.

# Intentionality

John Lein, the Senior Administrator of Instructional Systems at Orange County Public Schools (FL), emphasizes the importance of intentionality by district leadership in selecting new technology. Intentionality involves district leaders' thoughtful, deliberate approach to implementing new educational technology that stresses support, simplicity, and stakeholder engagement.

- Support: Establish and maintain a core set of resources that can be used when
  needs arise, such as online training guides and videos, and other materials that
  are available 24/7 for teachers. To ensure security and consistency, only
  software that follows an approval process should be allowed to be installed on
  school servers/computers or accessed through the Internet. Provide teachers
  with time and opportunity to practice and learn the tools better on an ongoing
  basis, not only in a crisis.
- Simplify: To provide the best possible user experience, simplify the number of technology options so it does not interfere with teaching. Provide a list of a finite number of applications in an approved software list that can be utilized/modified over time for longevity. Ralph Valenzisi, assistant superintendent for digital learning and innovation for Norwalk Public Schools, highlights the benefits of using an approved software list. According to Valenzisi, approved software not only provides instructional support but also serves as guardrails for teachers, ensuring that they are using technology solutions that align with the district's goals and priorities.
- Stakeholder Engagement: Before Greg O'Dell, E-learning Specialist at Hall County (GA), rolls out new software to the whole district, he has pilot groups to provide feedback and make changes. This ensures that stakeholders are engaged and included in the process.

## Software Request Process

John Lein has a Teaching and Learning Software Request Process to ensure student achievement, and efficient operations are considered when schools request to purchase software. Only software applications that follow an approval process can be installed on school servers/computers or accessed online. The Software Request Process covers free or paid administrative software, curricular software, website unblocks, iPad Apps, and Google Chrome extensions. Software applications can be a program installed on a computer or accessed through the Internet. This process allows benefits such as discounted volume pricing and ensures that all software aligns with district goals and the Strategic Plan. This process also permits ITS (Information Technology Services) or other departments to support the successful implementation of the software and protect student data. Other benefits include looping in all necessary stakeholders before implementation, weeding out duplicative resources, and ensuring that the requested software meets a need and is curricular and beneficial to teachers and students. Additionally, the process provides transparency by providing an approved software list available to anyone in the district.

# Interoperability



Eddie Nemec from Gainesville City School System (GA) emphasizes that interoperability should be a priority for district leaders as it reduces time-consuming manual tasks, giving educators more time to concentrate on teaching. Interoperability includes providing technology solutions that integrate with each other and existing district systems, ensuring that different technology solutions work seamlessly together. Interoperability can include:

Single Sign-On (SSO): Educators and students shouldn't have to remember multiple usernames and passwords. Ralph Valenzisi of Norwalk Public Schools says that SSO is a critical resource for the district,

serving as a lifeline for educators and students. SSO allows users to use one account to access multiple software applications quickly and securely. By streamlining the login process, SSO makes it easier for educators and students to access the tools and resources they need for teaching and learning. SSO also enhances security by reducing the risk of password sharing and credential theft.

Limiting Choices: Prioritize selecting technology solutions based on their interoperability with other platforms and ease of use for end-users. By limiting choices to those that integrate well with existing systems and are user-friendly, district leaders can help reduce the administrative burden on educators and promote more effective use of technology in the classroom.

Learning Management Systems (LMS). Learning Management Systems can help educators organize, manage, share, and assign content to students. However, district leaders should be mindful of any barriers that may hinder the effectiveness of an LMS. Specifically, they must work to recognize components of the LMS that are not helpful or efficient and may actually consume valuable time.

Integrating technology into education has presented teachers and administrators with new challenges. However, district leaders can help by prioritizing intentionality and interoperability in selecting and implementing technology solutions that support educators, simplify their job, and protect network and student data security.

### References:

- 1. NPR. 4/19/2021. 'We Need To Be Nurtured, Too': Many Teachers Say They're Reaching A Breaking Pc
- 2. National Education Association. Survey: Alarming Number of Educators May Soon Leave the Profes

# School Safety Technologies

By: Adam Rogers, Director of Technology Services, OSSBA

Home / School Safety Technologies



"Through strong rapport and open communication, IT leaders can work together with their superintendent to provide the best outcomes for their students and district."

-Adam Rogers, Director of Technology Services, OSSB

School leaders are looking for ways to make their schools safer, and purchasing new technology is a route that many choose. The choice requires critical conversations around student privacy vs. safety. Decisions about whether to invest in school security technology for a school or school district are complex. They must take into account various logistical, economic, and political factors. There will never be a one-size-fits-all effort, and it should be noted that we cannot provide an overarching recommendation for districts. Only a conversation with some district leaders that are or are considering implementing technology based interventions to reduce school violence.

"The privacy of students is to be respected but not at the cost of a less safe learning environment, so we have to look for ways to monitor student interactions without crossing personal boundaries." – Greg O'Dell, E-learning Specialist at Hall County (GA)

Most everyone interviewed had a district security team, including school security officers, principals who monitor alerts/threats, and student services. Notably, technology staff seem to have varying levels of involvement with security related decisions and technology purchases. Those with technology staff as part of their regular security team tended to have more advanced technology specific safety interventions. This is something that districts and schools should perhaps pay attention to.

As more schools integrate school safety technologies, some areas that need additional consideration are:

- Who should drive purchasing decisions in relation to safety and security
- Whose responsibility is it to manage school safety technology
- · Are technology based interventions more effective than other methods
- · What are the privacy issues
- · What are the bias concerns

The implementation of new technologies comes with some privacy considerations as well as potential bias. As the districts interviewed grapple with these decisions, they all rely on groups of stakeholders to come to their decisions.

"In general, the risk of bias is that we don't look at the implementation of technology from all perspectives." – Greg O'Dell, E-learning Specialist at Hall County (GA)

The following graphic demonstrates how school safety technology is rapidly changing. On the left hand side we have commonplace technology that has been used for decades in schools to protect students. On the right we have the new and upgraded technology that districts are currently considering purchasing to improve the safety of their students.

Common Technology	Emerging Technologies
Basic security cameras	Al security cameras
Locked entry teachers have to use a badge to get into the building	Facial recognition software
Metal detectors	Passive body scanners
Anonymous threat reporting system (hotline, email, online form)	Digital panic buttons connecting staff directly to emergency dispatchers
Two-way radio to any staff	Silent communications, such as texts and messaging between any staff and students
An electronic notification system that alerts parents of emergencies at school	

# Monitoring student activity and communications

In addition to technologies that identify immediate threats, there is proactive software that identifies student behavior and flags it for intervention before the student decides to act with violence. Jessica Preisig, Assistant Superintendent for Technology Services at Pickens County Schools (SC), uses software supported by contracted specialists that do just that. The software identifies inappropriate messages using sentiment analysis and natural language processing and then prompts the student in real-time to automated interventions. They also recall harmful messages and quarantine inappropriate images and files. When school staff is needed, the contracted team of experts will alert school officials of bullying, violence, and danger to students and teachers 24/7. The district has had great success with the product as it analyzes a student's well-being and notifies a teacher if it starts to drop.

"It has helped a lot of our students that were in need of help. Students that were thinking about harming themselves or others, we've been able help a lot of those students because we have this [product] in place."

Another benefit Jessica sees is that principals are not inundated with every little incident since the software takes care of the minor ones and teachers are also alerted. The principal is now only getting involved when a student is really in need of support and help.

These conversations and decisions are not easy and will be challenging for administrators for years to come. Administrators need to be able to trust the IT department when it comes to the technology that is being put into schools. Having a positive and collaborative relationship with the superintendent is an essential part of tech directors' success in the district. Careful management of this relationship gives IT leaders the opportunity to build mutual trust with the superintendent, school board, and community. With a strong foundation in place, tech directors can confidently serve their school district by providing the necessary technology and systems to support its educational mission. Through strong rapport and open communication, IT leaders can work together with their superintendent to provide the best outcomes for their students and district.