Innovation Insight: Benefits and Risks of Student Well-Being Tools in K-12 Education

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Initiatives:Education Technology Insights

A growing market of products offer support for K-12 education's challenge of students' declining mental health, with tools that monitor indicators for early identification and potentially even prevention. K-12 CIOs can use this research to evaluate the benefits and risks of using such tools.

Overview

Key Findings

- Student well-being is a complex topic that rests on a balanced intersection of society, environment, technology, economy and politics. A multidimensional approach is needed to understand and address the challenges to well-being, wherein the role and impact of technology is still evolving.
- Well-being tools are a broad category of products that help educators and/or parents potentially identify early risk indicators of declining mental health, cyberbullying, and physical and social isolation, which are exacerbated by increased digitization and social media.
- Behavior management has long been part of EdTech offerings, but well-being software providers are incorporating the use of AI to increase the capacity for monitoring, identifying and, possibly, automating intervention in the near future.

Recommendations

- Prioritize understanding and managing the risks and shared responsibility of student well-being before selecting your technology. Consult teachers; counselors; academic, operational and IT leaders; applicable government or legislative agencies; and parents/guardians to communicate drivers and ensure focus on compliance, equity and security while maintaining consensus on anticipated outcomes and data minimization.
- Align the technology selection process with the overall well-being policy or processes at your institution to determine the appropriate option for your students. For example, evaluating tools for monitoring versus intervention tools.
- Scrutinize standard offerings and claims from vendors as your adoption and use of technology evolves, confirming their ability to service your specific needs. If needed, replace default offerings with configurable settings that can be easily tailored to the needs of your teachers and students.

Strategic Planning Assumption

By 2029, the impact of declining mental health linked with increased digitization on national GDPs will trigger more than 50% of education institutions to implement social media and device regulation policies.

Introduction

Indicators of declining student well-being may include declining academic scores, cognitive challenges, absenteeism, enrollment drops, rise in cyber and physical bullying, low self-esteem, self-harm and other forms of emotional distress. In many parts of the world, declining academic indicators can adversely impact public funding for education.

Surveys from parents/guardians also show that mental health concerns are among top factors for parents/guardians considering alternative schooling options, further contributing to enrollment decline. [1]

School systems around the world are overwhelmed and understaffed. Countries like the U.S. face a historically low average student-to-counselor ratio at 385:1 against a recommended 250:1, restricting access to professional help at school and spurring the growth of student-led mental health clubs. [2,3]

Tools that leverage technology to help monitor well-being at scale may alleviate significant challenges (see Table 1).

Table 1: Student Well-Being Tools in K-12 Education

Types of tools	Stakeholders	Benefits	Risks
■ Direct capture (overt) tools ■ Passive capture (covert) tools	■ Education leadership ■ Teachers/counselors ■ Students ■ Parents/guardians ■ Vendors	■ **For leadership:** Insights, signalsand reporting ■ **For teachers:**Scalable, personalizedsupport ■ **For students:**Safe and secureexpression	■ Privacy, transparency and stability ■ Surveillance and misdirected impact ■ Digital fatigue and culpability

Source: Gartner (January 2025)

Description

Definition

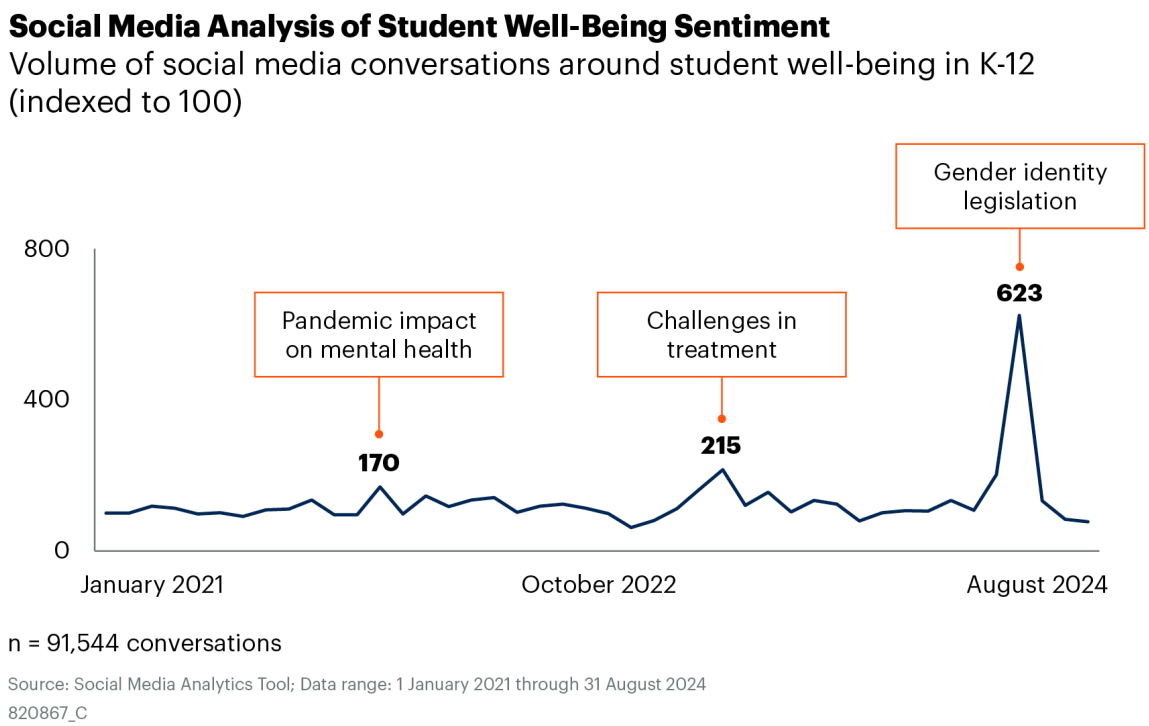
Student well-being tools are a broad category of products and technologies that help educators and/or parents/guardians address the growing challenges of declining mental health, physical and social isolation, and cyberbullying. These challenges were worsened by the pandemic and continue to be exacerbated by increased time spent online. These tools leverage technology, including AI, to monitor students, identify at-risk behavior, educate teachers and parents/guardians, and potentially even intervene in an effort to prevent negative consequences.

COVID-19 exposed and exacerbated existing inequities in the education system. This has put racial and sexual minorities (especially LGBTQ+ students), low-income groups, females in particular and other vulnerable populations (such as English learners, learners with disabilities or those facing emotional distress) at greater academic, social and emotional risk. [4]

However, mental health issues can impact any learner and widespread personalized solutions for support may be beneficial for all students. Recent data from the U.S. indicates alarming numbers, with two in 10 students seriously considering attempting suicide and 69% of public schools reporting an increase in the percentage of students seeking mental health services from school since the start of the pandemic. [5,6]

A social media analysis of conversations around student well-being in K-12 education echoes some of these sentiments (see Figure 1).

Figure 1: Social Media Analysis of Student Well-Being Sentiment



Well-being tools support the work done by teachers and counselors by providing schools and parents insights on the emotions, energy levels and physical needs of students. Some products rely predominantly on technology, including different applications of AI for natural language, context and sentiment analysis. Others use a combination of technology and human content reviewers to provide insights.

These are usually SaaS-based products, accessed through single sign-on or integrated with student information systems (SISs) or learning management systems (LMSs). Tools that leverage AI and computer vision for physical well-being and the safekeeping of school campuses by detecting unauthorized intruders, guns, smoke and fire are outside the scope of this research.

Formats for gathering insights and data are of two types:

- Direct capture (overt) solutions:
  - Self-reported data through surveys
  - Interactive check-ins online
  - Open virtual communication spaces
  - Awareness and prevention training modules
  - Educational resources for students, teachers, leaders and parents/guardians
  - Digital forms where students, teachers, parents/guardians and counselors can provide structured feedback on well-being initiatives or school climate
- Passive capture (covert) solutions:
  - Emotion AI for mood monitoring and sentiment analysis
  - Online behavior monitoring and filtering on school networks and devices
  - Online monitoring and threat detection on school networks and devices
  - Longitudinal behavioral data collection
  - Network traffic analysis to detect unusual activity that might indicate well-being issues

Some vendors choose to anonymize the direct capture process (such as through anonymous check-ins), which they claim may encourage some students to express themselves more freely and lower the barriers to participation. [7] Some products focus on granular insights on each individual while others build well-being estimates at a group or classroom level.

K-12 CIOs will need to balance individual privacy concerns with the ability to provide personalized student well-being insight and interventions.

Benefits and Uses

For Leadership: Insights, Signals and Reporting

According to a recent EdWeek Research Center survey, 53% of teachers, school leaders and district leaders believe that mental health staffing in their schools or districts is somewhat insufficient or nonexistent. [8]

Leveraging well-being monitoring technologies, school leadership can potentially:

- Use aggregated data laterally and/or longitudinally to identify patterns, spot trends and anomalies, make informed decisions to alleviate problems, and even predict at-risk behavior
- Offer timely interventions and tangible assistance to teaching staff and, if needed, to parents/guardians
- Comply with laws such as Children's Internet Protection Act (CIPA) through content monitoring and filtering tools
- Where applicable, share and report information regarding student well-being with local agencies
- Demonstrate their commitment and proactive role in nurturing safe public spaces to parents/guardians and the community in general
- Optimize insights to enhance the overall education success strategy

For Teachers: Scalable Personalized Support

With the ubiquitousness of social media, the growing popularity of AI and a shortage of mental health professionals in many education systems, classrooms have become emotionally, psychologically and behaviorally more complex places for teachers to teach. Teachers need support to deal with unprecedented behavioral challenges they may not be equipped to manage.

Equipping teachers with well-being monitoring tools can support education outcomes in the following ways:

- Preventive action:
  - Interactive check-in, online content monitoring, filtering tools, self-reported data and mood-monitoring technologies can alert the teacher in charge to a change in behavior that may warrant additional intervention and support, which they might miss otherwise.
  - Analytics offerings, a common feature of well-being monitoring products, can help educators draw correlations or patterns between vulnerable students and academic performance, both at an individual and classroom level.
- Proactive support:
  - Most product suites include tools and training modules designed to help teachers to understand varied issues facing different age groups, recognize positive behavior, motivate students and increase engagement through community- or group-based activities.
  - Some products offer socialization features, such as the visualization of class mood boards, for peer connections. These can foster a sense of belonging or community.

For Students: Safe and Secure Expression

Safety is indispensable for student success. While school leaders work toward nurturing a sense of security amid growing currents of isolation, burnout and anxiety, in many places students are leading the effort through self-sponsored clubs devoted to expression, shared experiences and information on mental health. [3]

Measured use of well-being apps in a school day can support ongoing efforts by:

- Creating a safe space for self-expression. Many tools permit anonymized interactions/check-ins which can encourage students, especially minority groups who may otherwise find it challenging, to communicate their feelings.
- Building age-appropriate user interfaces and formats to ensure student engagement across a range of age groups and cognitive abilities.
- Offering safe forums for students to share their feelings rather than using unmonitored social media platforms.

Risks

Privacy, Transparency and Stability

The main risk of well-being and monitoring technologies for humans is the security and reliability of the data generated, the transparency of its usage, and appropriateness of action taken based on the data. According to a Center for Democracy and Technology survey, 20% of parents are not aware if their school is using monitoring software for students. [9] Schools must build stable well-being strategies on principles of trust and transparency between the institution, students, parents/guardians and vendors.

Key questions education stakeholders must have clear answers to when considering a solution include:

- Which format is used for collecting information: direct (voluntary/interactive/self-reporting) or passive?
- What data points are collected, who has data access, how is data being used and who owns the data?
- Where and how long is data stored? When is data deleted?
- Does the solution meet your required compliance standards (for example, General Data Protection Regulation [GDPR], Health Insurance Portability and Accountability Act [HIPAA] and emerging AI legislation) and security protocols (for example, Service Organization Control 2 [SOC2] and ISO 27001)? Ensure these standards and protocols are reviewed on an annual basis.

The above questions will help sift appropriate and reliable offerings in an emerging technology market. However, the regulation of AI must be considered. Given that regulation around the use of AI in education is at a stage of infancy, K-12 CIOs stand the risk of procuring tools, many of which deploy AI for monitoring and alerts, that may not adhere to subsequent legislation. K-12 CIOs may drive the procurement, implementation and management of well-being solutions, but they must ensure that the vetting and selection process and the governance and regulation of well-being solutions are well-represented and transparent for all stakeholders.

Surveillance and Misdirected Impact

Having monitoring technologies on school-issued devices and conducting audio-visual analysis through emotion AI may create discomfort and restrict self-expression for some, disproportionately impacting economically disadvantaged students who may not own personal devices.

Inefficient systems can flag false positives, leading to unwarranted and damaging attention to a student. Additionally, students who have been flagged (rightfully or incorrectly), if not handled with expert care and protocol, may face stigma and unfair treatment.

K-12 CIOs should assess well-being solutions on how well they align to the overall policy on student well-being, if there is one. Ensuring that use cases and expected benefits are clearly articulated will help in the selection of most appropriate solutions.

Digital Fatigue and Culpability

Postpandemic digital adoption has created technology fatigue among some teachers and staff if they don't see direct or immediate value-add to their role, leading to inertia for new tools.

Moreover, with the availability of individualized data, teachers and school leaders risk culpability if they don't act upon sensitive data in a timely manner.

K-12 CIOs must be careful in selecting a tool that:

- Integrates smoothly with existing classroom infrastructure and simplifies access and user experience

- Balances between individual and anonymized group-level data, based on local state policies and the school or district approach to addressing the question of student well-being
- Can be tailored to the teachers' needs to reduce data bloat and demonstrate value and usability
- Comes with training and professional development to help teachers get comfortable and actively use the solution

Adoption Rate

The adoption of well-being tools is currently low as education leaders assess the growing market, with some tools and formats being relatively new compared to others. There are no established ROIs yet to measure the success of these technologies. Adoption rates are further slowed as federal funds supporting COVID-19 recovery dwindle in multiple parts of the world.

Recommendations

This is an area fraught with risks that need to be evaluated and managed carefully. Ensure your institution is aware of the opportunities and challenges of technology-led approaches. Organizational leaders must understand the risks of this approach and be willing to take on responsibility to ensure appropriate technology use. K-12 CIOs should:

- Prioritize senior leadership support by consulting academic and IT leaders to set clear objectives about the purpose of the tool, expected outcomes, and the data usage and governance policies.
- Strengthen focus on student equity and security by ensuring the tool is compliant with applicable legislative standards and meets the appropriate security standards.
- Exercise caution and build confidence by opting for pilots to ensure solutions meet your specific institutional needs before you scale.

Representative Providers

- Bloomsights
- Edsby
- Gaggle
- GoGuardian
- Komodo
- Lightspeed Systems
- ManagedMethods
- Microsoft
- Navigate360
- WOOF

Evidence

[1] Choose to Learn 2024, Tyton Partners.

[2] School Counselor Roles & Ratios, American School Counselor Association.

[3] When the Biggest Student Mental Health Advocates Are the Students, The New York Times.

[4] Educational Impacts of the COVID-19 Pandemic in the United States: Inequities by Race, Ethnicity, and Socioeconomic Status, ScienceDirect.

[5] Youth Risk Behavior Surveillance System (YRBSS), U.S. Centers for Disease Control and Prevention.

[6] Roughly Half of Public Schools Report That They Can Effectively Provide Mental Health Services to All Students in Need, National Center for Education Statistics.

[7] The Mental Health of Young People Is a Global Problem. We Know This: Let's Start Fixing It!, WOOF.

[8] Technology and Student Well-Being: 10 Charts, EdWeek Research Center.

[9] Responsible Use of Data and Technology in Education: School Safety Technology Carries Big Risks for Vulnerable Students, Center for Democracy and Technology.

Social media methodology: Gartner conducts social listening analysis leveraging third-party data tools to complement or supplement the other fact bases presented in this research. Due to its qualitative and organic nature, the results should not be used separately from the rest of this research. No conclusions should be drawn from this data alone. The social media data referenced is from 1 January 2021 through 31 August 2024 in all geographies (except China) and recognized languages. Navya Sinha from the Social Media Analytics Team contributed to this research.

Recommended by the Author

Some documents may not be available as part of your current Gartner subscription.

Hype Cycle for K-12 Education, 2024

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