Campus Safety CONFERENCE 2021
Be Vigilant

Improve Student Mental Health and Welfare: How Schools Can Leverage Technology to Help

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About Us

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About this Session

Session Takeaways

- Receive tips to monitor students' activities, engagement, and mood with the help of technology to prioritize early intervention.

- See specific tools that can be used to record aggregate data to help predict issues related to mental health.

- Learn how information delivery can be customized and why tailored messages and platforms are so critical as we consider student mental health especially as we emerge from the COVID-19 pandemic.

What is Situational Awareness?

Being aware of what's happening around you in order to take action to save or improve lives.

Events we are notified about after they occur…

Fire Burglary Medical Emergency Armed Intruder Environmental Emergency Suicide

Early Intervention

Observations and assessments provide us with insights that can change the outcome of a situation.

The COVID/Social Isolation Factor

…60% of high school students answered that their mental health had worsened or worsened significantly. This is concerning because young people's mental health needs were already not being met before the pandemic. In a study from 2017-2018, it was found that "60% of youth with major depression did not receive any mental health treatment."

Imagine what **monitoring and compiling** information could lend itself to in the way of predicting what might happen in the future, and more importantly how **a change in course** could prevent bad things from happening to good people.

Observations of a student…

Even when self-reporting is an option, this does not guarantee that all students will take advantage of it or that they will be flagged, so there needs to be redundancy when it comes to monitoring students' mental health.

Attendance	Grades	Behavior	Involvement, Activities, Social Interaction	Hygiene	Change in Family Dynamics	Change in Friend Dynamics	Physical Changes (ie. Weight loss/gain)

Observers…

Teachers

Doctors/
Therapists

Guidance/School
Counselors

Parents or
Guardians

Other Students

Friends

Other Parents

Coaches

Bullying Example

Bullying can seriously impact a student's mental health. Giving students the option to self-report this through surveys or a communication portal is a great way to encourage students to ask for help. But monitoring students in these other ways can also help reveal a student that might be experiencing bullying.

By implementing technology that builds **situational awareness** for and about a student through **monitoring behavior and mental health** in various ways, schools can help ensure that no student falls through the cracks.

Components of incident prevention

- <u>Observers</u> - People or systems that provide critical information

- <u>Observations</u> - objective and subjective data derived from observer-provided information, used to paint a picture of student's behavior and trajectory

- <u>Interventions</u> - Actions performed to "change course" based on these observations

A multimodal approach to student well being and mental health

Proper **intervention** requires understanding the root cause of negative behavior. **Observations** may be indicative of a root cause, or they may simply illustrate symptoms of an underlying condition or situation. Therefore, it is important to make many **observations** from many angles to properly address the root cause.
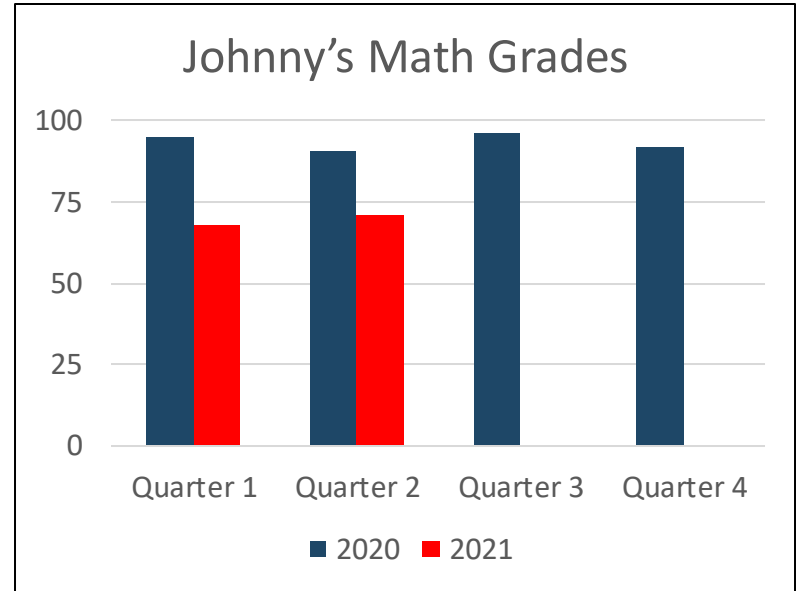
Case study: Johnny's attendance issues

- Johnny begins to skip math class
    - Attendance as a predictor of substance abuse, delinquency, teen pregnancy, dropping out of school, decline in mental health
    - Later - violence, marital problems, job problems (Dryfoos, 1990)
    - 75% of chronic truants fail to graduate high school (Ratcliff, 1980)

Case study: Johnny's attendance issues

Scenario 1: Classroom factors only

Historically, Johnny has been a good math student who is engaged during class. But lately, his grades are dropping, he has not been engaged and he's even been skipping class. When asked about these recent events, Johnny tells his teacher that the class material is too challenging.

Johnny's Math Grades

Case study: Johnny's attendance issues

Scenario 2: Adding in self-report surveys

Johnny completes short, biweekly surveys via his smart phone or tablet as a part of homeroom, which are automatically synchronized with his records.

- This quarter his score on the Beck Anxiety index increased

- His perceived social support, as indicated by the Multidimensional Scale of Perceived Social Support (Cheng et al, 2004), has gone down

Adding in family factors

Why do we start with family factors?

Family factors are particularly strong predictors of truancy leading to delinquency - having siblings with behavioral problems, separation from a parent, having parents who are uninterested in academic achievement (Farrington, 1996)

Case study: Johnny's attendance issues

Scenario 3: Adding in family factors

From after school activities to parent teacher conferences, Johnny's parents are very engaged. There is no reason to believe anything at home is negatively impacting Johnny. Additionally, their self-report surveys indicate that Johnny's behavior at home seems normal.

Here, we hit a dead end - perhaps Johnny really is just struggling with math this quarter.

⭐ Star High School

Johnny Doe

👥 **Parent/Guardian Engagement**

View the list of events attended by parent(s)/guardians below.

- Q1 Parent Teacher Conference
- Wrestling Match - 10/11/20
- Wrestling Match - 10/15/20
- Bake Sale
- Wrestling Match - 10/20/20
- Q2 Parent Teacher Conference

Case study: Johnny's attendance issues

Scenario 4a: Adding in school/community factors

Johnny was registered on the wrestling team, which just started practicing this quarter. The system indicates that this is Johnny's 2nd year on the team, and that Johnny attended practice but quit the team after a couple of weeks. Johnny's coach adds a note that he was struggling with coursework and didn't have the time. He is unaware of any negative interactions with teammates or any other issues.

Here, again, we hit a dead end. However, there is a clear deviation from baseline given Johnny's past participation.

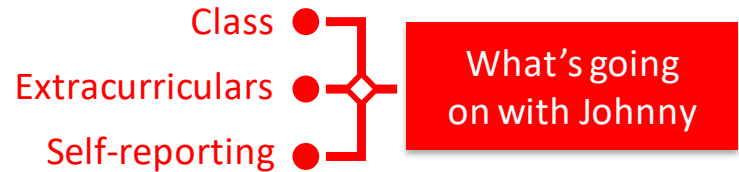
Case study: Johnny's attendance issues

Conclusion

Today, systems are secure and connected, allowing for cross correlation between many variables that in the past seem unrelated. With enough data and machine learning, many of these indications can be automated and presented to observers in real time, allowing for swift intervention and better student mental health management.

Reminders

- Access to the presentation
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