



## **USING HEART RATE MONITORS TO HELP STUDENTS LEARN SELF-REGULATION**

### **BACKGROUND**

A growing focus on the importance of mental health has school districts across the country looking for creative ways to help students learn how to manage difficult emotions such as anxiety and anger. Littleton Public Schools in Colorado recently developed a new program that pairs students with a heart rate watch that provides instant feedback about their internal state.

According to Nate Thompson, the district's Director of Social Emotional and Behavior Services, the program was developed as part of a larger effort to promote student mental health. "We believe it is important to help all students learn ways to keep themselves both physically and mentally healthy. Your heart rate is one of the best measures of your internal state and a great tool to help kids self-monitor. The skills that come from understanding the brain and body connection can be used throughout your whole life."

*Operation Dragon Heart* was born after a team of LPS mental health experts partnered with Administrators and Counselors from East Elementary to create an innovative pilot program focused on the simple goal of showing young students how to calm their bodies down. Named after the school's mascot, the project was a great fit it with the school's focus on meeting the needs of the whole child, including those who have a history of trauma or other life challenges.

"Our goal with *Operation Dragon Heart* was to address the social and emotional self-regulation needs of our students," said Principal Kelly Card. "This program helps kids who struggle with anger control as well as those who struggle with panic attacks and anxiety."

The effort at East Elementary included a number of specific activities to focus on the social emotional needs of students.

### **PROFESSIONAL DEVELOPMENT FOR STAFF**

A strong focus on "Getting to the Heart of Every Child" has driven professional development for teachers and support staff over the past few years. This has included training on equity, culturally responsive strategies, trauma, brain development and behavior support. It is an expectation that all staff participate and support social emotional learning. School mental health staff and administrators help reinforce these concepts in every day interventions with students.

### **SCHOOLWIDE SOCIAL EMOTIONAL LEARNING**

All students receive Social Emotional Learning through daily "Morning Meetings" led by the classroom teacher that utilize the *In Focus* curriculum. This resource is aligned nicely with our focus on the brain and how it is connected to heart rate. Teachers generally report that it is easy to teach and that the morning meeting is a helpful way to start the school day.

## **HEART RATE MONITOR PROGRAM**

Selected students participate in the heart rate project for a minimum of six weeks. The school team identifies students who have challenges with self regulation (either externalizing or internalizing). They wear a heart rate monitor watch that provides real-time feedback on their heart rate including changing colors based on thresholds you can set individually to each student. Data is tracked in a web-based software and can be reviewed at the end of each day and/or week.

Participating in the heart rate program also includes:

- Written parent permission to participate
- Pre and Post Surveys of the student, parent, and teacher
- Daily checkin/checkout of the watches that include personal connections and reflections with the Administrator or School Counselor
- Regular time (group or individual) with the School Counselor to learn how the watch works, review calming strategies, etc. (We are currently putting this into a structured set of lessons)

## **OUTCOMES**

Initial data shows a decrease in discipline incidents school wide, including students who used the heart rate monitors. LPS is currently exploring research partnerships to further evaluate the heart rate monitor program. Surveys of students, parents and staff indicate positive feedback regarding the impact of the heart rate program.

## **VIDEOS**

<https://www.today.com/video/elementary-school-using-technology-to-teach-students-about-emotional-health-76048965800>

<https://vimeo.com/345507763>

## **FOR MORE INFORMATION**

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For more information on the heart rate monitors, contact Interactive Health Technologies President Jen Ohlson at [jen@ihtusa.com](mailto:jen@ihtusa.com)