



# EMPATICA IMPACTS EDUCATION

Have you ever sat in class in utter bewilderment wondering how the teacher arrived at their point? You misunderstood just one explanation and remained lost and confused throughout the remainder of the lesson, however if you were particularly unlucky, the remainder of the class. You received a test grade and realized you knew less than you thought you did? Well you're not alone; millions of students feel this way.

In classrooms across the country there is a disconnection between teachers' curriculum and students' retention. As it currently stands, the only immediate feedback a teacher can use to ascertain student comprehension are unreliable nods and infrequent questions; proving detrimental for students' grasp of future material and the general subject matter. We have found a way to fix the problem.

Welcome to the future of education, the solution, E4 by Empatica. This device is a wristband that provides teachers with the ability to personally monitor students' stress levels to ascertain their comprehension of lessons. With technology use in the classroom on the rise, what better way to track student engagement than through a lightweight, screen-less device that provides accurate feedback to educators?

The E4 by Empatica has the capability to monitor subtle electrical variations that occur on the surface of the skin. The E4



*E4 device by Empatica*

has a variety of sensors that track changes in heart rate, temperature and movement. These physiological changes signify the body's responses to outside stimuli like the stress of learning information in class and not comprehending the material.

The device measures Electrodermal Activity on the skin as sympathetic activation increases. In essence, if a student begins to feel stress or excitement the skin and heart rate will react. Then the E4 device will record



*Empatica Proprietary User Interface*

this data so that educators can effectively help students. Currently, patients of Post-Traumatic Stress Disorder and epilepsy are utilizing this technology. In PTSD cases, the E4 is considered a reliable data collection tool that helps healthcare professionals identify triggers or external stressors. In patients that suffer from epilepsy, the E4 is used to instantaneously collect data and notify others of an impending episode. The E4 device already impacts the health industry, however this technology can also revolutionize education.

As it stands educators have to wait to modify their curriculum until after the test results are tabulated, at which point students have already fallen behind. The E4 is a game changer in the education sector due to the fact that it provides immediate results, allowing teachers to reinforce the information that proved most stressful for students.

The device's software uploads the students' stress data to the teachers using Bluetooth software. After the lesson teachers will study the output on Empatica's customized user interface to determine how they will address students' needs now, to improve students' test scores and comprehension later.

This device requires a relatively low one-time purchase of the E4 wristband, which will be updated regularly with the newest form of firmware. The hardware is durable and long lasting; therefore it can withstand the wear-and-tear from the daily use of elementary school students.

The future of education has arrived; the E4 provides a solution that allows teachers to reinforce confusing information before students fail. Encourage your school board to adopt this technology today!

