

Associated Press

Device Helps Learning-Disabled Focus

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Watching a whale on a computer screen has helped 8-year-old Ricky Stone, who suffers from autism and learning disabilities, and his mother live more normal lives.

A device called "Play Attention" combined with a dedicated teacher at Brooks Global Studies, an extended-year magnet school, helped Ricky learn how to better control his actions and cope with the ups and downs of everyday life by teaching him to concentrate.

An Asheville-based company offers "Play Attention" as an alternative to traditional attention deficit disorder treatments, by asking users to move images on a computer screen using only their minds.

"What this does is make attention concrete," says Peter Freer, founder and CEO of Unique Logic and Technology. "It takes it out of the abstract realm. ... It's the first time in their life that they actually see an attentive state as it happens."

Built on technology originally used by NASA and the U.S. Air Force, "Play Attention" taps into brain waves through a red bike-helmet lined with sensors. The sensors send information to a computer that in turn controls the outcome of scenarios on the computer screen.

For example, Ricky plays a game where a whale swims in the ocean. The more Ricky focuses on the whale, the deeper he swims, and Ricky's score jumps. A high score can't get Ricky too excited because, without his full concentration on the whale - which he nicknamed 'Shamu' - the whale swims to the surface.

Ricky's mother, Lana Stone, saw her son develop cause-and-effect thinking - "an absolute miracle," she says - within a couple of months after he began to use "Play Attention" in March 2003. Before using the program, Ricky wouldn't equate his actions with their consequences. Now he understands that if storms out of after-school care, his teacher will call his mother to pick him up.

"Having any sort of reasoning skills or cause and effect thinking is the difference between kids like my son having any kind of a chance at a typical life or winding up in an institution," Stone says.

The program is a learning tool that builds a person's understanding of what it really means to pay attention. In an attempt to practice something that most closely resembles the actual event, "Play Attention" allows users to develop skills needed to perform better in a classroom, work or general setting.

But Freer, the creator, acknowledges that the device is not a miracle: "It takes hard work and consistency."

For most cases Freer recommends that users get at least 40 hours of work with the program in order to see substantial results.

The cost of the "Play Attention" system for in-home use is \$1,795, which includes an initial 90-minute tutorial, unlimited access to staff and technical support as well as progress reports and reviews based on data sent into the company. As a full distance-learning program, use is moderated remotely by trained specialists to increase productivity and focus by giving feedback and analyzing results.

For schools and learning centers, the price is \$2,500, which includes everything for in-home use, but allows the program to be used for an unlimited number of people, versus just two for in-home use.

"Play Attention" is being used in more than 300 school systems throughout the United States as well as learning centers and psychologists offices worldwide, including Beijing, Singapore and New Zealand.

The company is also in discussions with an unidentified U.S. Olympic team to use the system to help the team benefit from increased and improved focus.

Freer started testing the system in the Asheville school system in 1994.

The program came about when Freer, who spent 14 years as a teacher in western North Carolina, experienced problems with a student who had problems paying attention. When he went to the administration, he was told to "dangle a carrot over his head," move the student's desk closer to his desk and shorten his assignments.

Still feeling inadequate, not being taught how to cope with these issues and unable to accommodate the student's needs, Freer looked for a way to help train students - children and adults - to control their attention and filter out distractions.

"They have no idea what we're asking them to do and where they need to be physiologically and mentally," Freer said. "They just don't know."

For years, traditional treatment for ADD/ADHD and other learning disabilities has been medication such as Ritalin and Adderol. For those looking to supplement medication, Freer thinks "Play Attention" is the answer.

"Medication does not teach skills; that's where we come in," Freer said. "There has to be some kind of supplement to that because you can't just hope by osmosis by taking a pill that these kids are going to perform better."

Performance successes with students like Ricky has given teachers like Linda Creamer no choice but to take on a mission - and more hours - on top of her normal teaching day. Creamer recently opened a learning center in Greensboro to accommodate more students.

"This is the best program I have found," Creamer said. "It's very positive for the children. ... They can set goals for themselves on behaviors. It just performs wonders."

Both the State University of New York at Plattsburgh and East Virginia Medical School are studying "Play Attention", with results expected within the next year. Results of a satisfaction survey sent to psychologists, teachers and parents asking about the effectiveness of the program indicated that 85 percent of the students showed improvement.

Kenneth Kaufman, director of Focus Through Fun and the Institute for Behavioral Health in Commack, N.Y., now has 30 patients using the program, which he started in January.

Kaufman said the program gives options to patients looking to forgo traditional medicinal treatments for ADD/ADHD.

One drawback, Kaufman said, is that since most patient sessions include only 30 to 45 minutes of real treatment, achieving results can take a year or more - a long road for parents and students looking for faster results.

Freer will hold free demonstrations of the system at upcoming events in Winston-Salem, Dallas, Houston, and Atlanta.