White Mountain Independent

Fast Forward program promises more brain power

Language processing skills key

Mike Leiby
The Independent

SHOW LOW — There is a program in the Show Low Unified School District which, according to one of its most vocal advocates, can help people with language processing skills and ability to learn and understand no matter what.

District instructional coach Anita Margeson first began offering Fast ForWord, a computer-based program, to primarily at-risk kids in the school system, but she has since found that it matters not if someone is old or young, educated or not — honing language processing skills and exercising the brain is beneficial to all.

Margeson said the district initially invested in the program to address the needs of learning disabled students, but in the process found it also improved the overall academic progress and skills of mainstream students. They also discovered that some of the kids previously considered to have learning issues were simply having difficulty with their language processing abilities.

"There are some cases where people have actual learning disabilities, and this program is essential in helping them, but there are some who simply need to learn how to process information and that's all," she said.

Margeson has used the program to teach people from the age of 3 to old age to read with more comprehension and understanding.

She said as people become older, suffer trauma to the head or simply have difficulty understanding things using conventional or traditional methods of teaching (including reading), the synaps, or firing locations of the brain, can deteriorate and sometimes stop firing.

This means the signals to and from the brain allowing people to understand what they are reading or being taught can stop transmitting the signals and the information simply does not register.

She said it is also not uncommon that young people who are sometimes perceived as troublesome or lacking in educational motivation are experiencing the same problem and often turn out to be "extremely brilliant" when given the tools they need to comprehend.

"When I showed up here five years ago, the majority of the high school students had a difficult time hearing a verbal lecture, taking notes and then being able to sequence out what was asked of them," Margeson said.

"Now kids can sit there, listen to that lecture, take notes, take that project home and work from home. They don't get home and ask themselves 'What did she say, what am I supposed to do?' and the next day you see all this copying going on in the hall, you know, everybody better find 'Jane' because she knows what she's doing, her processing is good so we'll all have the same paper as Jane."

She said being able to witness the spectacular change in students who were initially seen as doubtful and then emerge from the Fast ForWord program as successful students often going on to higher education after high school makes it all worthwhile to her.

"This last year (Principal Farrell) Adams reported that we had a 19 percent drop in our discipline at the high school," she said. "Now nothing had changed, the same people administer discipline, the same rules that have always been in the district in the five years I have been here ...

"So you have to ask yourself 'What is the difference, what changed in one year that you went 19 percent down?'. Well, I'll tell you what changed, these students started in junior high, three years ago, having Fast ForWord," Margeson said.

They each had to participate in two levels of language processing and, in high school, have at least one semester in their reading program where they built the skills for reading comprehension, fluency, vocabulary and decoding.

She added that contrary to what many people might think, the majority (80 percent) of failing students, or those not getting a "C" or better in their classes when she arrived five years ago, were not kids who were learning disabled but mainstream students.

She said by applying the visually and auditory oriented aspects of the Fast ForWord program, the district took "that pretty blonde who sits in the corner and never raises her hand or speaks up and never gets any better than an average grade" and turned that kid around by teaching her or him how to process what they read and learn so they are no longer "invisible" and the rest of the world can "tap into"

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what they have to offer.

She offers another example, this time a "skater-type" student went to her for tutoring in senior English.

"I had a student a year and a half ago who you would never have known was brilliant," she said. "He was your skater-type with the big chains hanging off of his big baggy pants that were dragging on the floor, never rubbed two words together in class," she said.

"So I would just talk to him and ask 'What is it you do, what do you like, what is your connection to this Shakespeare story, what is it that you get from this?' and his response was magnificent, so I said 'Well, put that down on paper' and I walked away."

When she returned some time later she was confronted with a blank piece of paper, so she took a different approach and told the young man they would "map it out" together.

She asked the student to "web" out the story, or make a map of its key points as he perceived them, and again when she returned shortly afterward she found a blank page, so she sat down and asked him what his opinion was point at a time, and when she finished she asked him to take everything he had written down and make a single sentence out of it.

"When I came back it was the most brilliant thing I had ever read. I turned it in with him to his teacher and she said it was 'by far the best paper ever turned in on this subject' ever.'" Margeson said.

She said by the end of the school year the same young man who was previously known as "the skater freak who smokes weed and never says anything in class" was raising his hand and making educated classroom contributions. To top it off he showed up at the senior class party at the end of the year intermingling with "sports jocks" and cheerleaders and laughing, which she had never seen him do before.

The young man has since gone on to college with aspirations of becoming a writer.

She said the program can benefit anyone looking to hone their language processing skills and that it can be of particular benefit to the elderly segment of the population.

According to a January 2000 *Newsweek* article titled "Rewiring Your Gray Matter," an old brain can be "taught new tricks" with the six Fast ForWord Circus Sequence CD games with applications for all ages.

"The players are otherwise normal children 4 to 14 who cannot distinguish between similar sounds like 'da' and 'ka.' They have trouble linking written words with sounds and therefore with learning to read. So when the computer asks the players to 'point to rake' when a picture of a lake is also offered, or to release the cursor over a flying pig when a series of spoken 'g's' is interrupted by a 'k,' it stretches out the target sounds ... and with this simple trick, Fast ForWord does something quite a bit more revolutionary than your run-of-the-mill educational CD; it rewires brains," wrote *Newsweek's* Sharon Begley.

Begley said scientists have discovered that brains are "malleable" past the age of 3 and do not become the rigid structure that was previously accepted as fact.

According to Begley, recent scientific discoveries indicate the brain continually reorganizes itself in a process called "neuroplasticity," meaning a person's brain is continually recreating itself through the input of new information.

Margeson said that is why the Fast ForWord Program is so helpful in teaching students whose primary language is not English.

She said when a student is asked to speak English in the classroom and another language at home, it can confuse the brain's ability to distinguish between sounds and words.

For example, Margeson said, a teacher can ask a student who speaks Spanish at home to "dash across the street" and the student will hear "bash across the street."

She said it is not a matter of the student not being able to understand what is asked of them, but that their brain confuses sounds so the student naturally would not know how to respond to such a ridiculous request as to "bash across the street."

Margeson said the same principle applies to elderly people whose hearing is beginning to fail as well as those who are hearing impaired or have suffered head trauma.

Fast ForWord can help so many different people, Margeson said, adding that it is like gardening — good soil is the key to a good crop and good "soil" for the brain is also necessary for repair and regeneration to occur. She believes Fast ForWord supplies that good soil for the brain.

Pinetop-Lakeside resident Karen Peterson, 70, said she immediately began seeing a difference not only in herself after taking the Fast ForWord Program when it began June 2, but in her grandchildren who she enrolled as well.

"I believe, in fact I know, that I'm getting a lot of my memory back, and I think that I'm a lot sharper than I was before I started taking it," she said, adding, "I'm going to take it again this next session and I'm hoping to get even better."

She said she was unable to multi-task as she could when she

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was younger and after taking the program she has regained a lot of that skill by retraining her

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brain to comprehend anew.

She hopes that her three grandchildren, Christian, 16, Jack, 15, and Cody, 11, will also benefit from the program.

The youngest, Cody, has always been a reader so the program has only enhanced his abilities and desire to read, but Jack and Christian have had some reading difficulties and have therefore avoided it because it is a chore rather than a pleasure. She hopes the Fast ForWord Program can alleviate some of that situation, and she believes it will.

Janice Stewart of Jefferson Academy in Show Low has also found respite for her children's learning difficulties through the district's Fast ForWord program.

She said six of her 10 children attend a local school and five have already taken the program. In her opinion she has seen profound results.

"It was too cost prohibitive for Jefferson Academy (where her children attend school) to have it, something we've been wanting, but we just financially couldn't do it, so when Show Low (school district) got it, I was just thrilled," she said. "I knew what it was going to do for their kids, and when they offered it to us we were really excited."

She said three of the five Stewart children who have benefited from Fast ForWord are autistic, and she was anxious to see what it would do for all of them, but especially the one boy whom she described as being "more severe than the others."

Stewart said that since taking the program the boy is talking more, carrying on conversations with good sentence structure, reading more and even catching mom when she skips a beat during their reading sessions.

Stewart is well acquainted with the benefits of the program's basic foundation, neuroplasticity.

She said it was indeed a breakthrough for educators when scientists discovered that the brain can continually retrain itself to compensate for injuries, illnesses or diseases that can affect brain functions and even regenerate brain cells.

Stewart said MRI scans of before and after images of brains using Fast ForWord after only two weeks clearly show greater oxygenation of the brain and even heightened activity in previously quasi-dormant parts of the brain.

She said another of her children with "severe auditory difficulties" has shown marked improvement.

"We're seeing some results understanding what we're telling her better and processing it faster where as before when I would tell her something she would stop and look at me and I would have to say it one or two times again and she would watch my mouth, and it was not her hearing, she hears fine, it was her processing, and now I'll tell her and she gets it a lot faster," she said.

Stewart said the girl is also becoming more social and interacting with her siblings more at the dinner table.

Previously the girl tried to keep up with the other kids, but because of how fast children tend to speak and the noise level of multiple kids talking at the same time, it was almost impossible for the girl to participate and she would eventually go off on her own. According to Stewart, the program has helped the girl's self-esteem and willingness to engage with others.

"Now we're seeing her get noisy with the other kids more, not as much as I would like, but the progress is there," she added. "It's just wonderful to see the light in her eyes when it is clear she understands what we're telling her."

Stewart said the $85 fee for each of her children is not easy to afford, but well worth the price in her opinion.

Her 11-year-old charge, Kamara Hancock, said she likes the program because it does not feel like learning to her, just fun.

Her favorite sequence game is called Space Racers, which she likes because she gets to compete with others.

Stewart hopes Show Low will be able to continue offering the after-school version of the program open to anyone in the White Mountains.

"In a perfect world I would see that all kids have it because it's not going to hurt them if they don't need it, but it will definitely help them if they do," Stewart said.

The program is free to all students in the Show Low Unified School District but is open to anyone in the community for an $85 fee. A summer session is being offered free to parents and grandparents of district students, which runs July 6 to July 24.

For more information on the Fast ForWord Program, call Margeson at (928) 532-6877 or the district at (928) 537-6000.

Reach the reporter at mleiby@wmicentral.com

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