



# LEARNING DISABILITIES STUDY SHOWS COMPLEX ISSUES BEHIND LEARNERS' STRUGGLES

UNTIL HIS JOB WAS DOWNSIZED, William, 46, had worked steadily since he was a teenager and dropped out of school to get married. The former sanitation worker suffers from diabetes and has only one real complaint: he can't find a pair of glasses that work well for him. He is on his sixth pair of glasses in just two years. William comes across as intelligent, but his TABE scores are 5.4 in reading and 7.8 in math.

Stay-at-home mom Henrietta is living her dream. The 34-year-old always wanted to be a housewife and entered an adult basic education (ABE) class to improve her reading, which TABE puts at 3.1. Curiously, Henrietta says she loves to read and "reads all the time." But she was diagnosed as learning disabled (LD) in second grade and now her daughter is having similar difficulties with reading.

Then there's John, a 28-year-old who just left prison. Like many of his fellow inmates, John dropped out of school early, the seventh grade in his case. John joined the prison literacy program and finished the "Challenger" series with a peer-tutor. He wants to go to vocational school to learn data entry, but he has vivid, unpleasant memories of school.

"The teacher made fun of me, called me names, and so did all the other kids," he recalls. To make matters even worse, John was shot in the head and can only hear out

of his right ear. He is also on medication for depression. His CASAS score is 212.

"What is really going on here?" asks Laura Weisel, Ph.D.

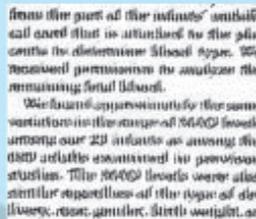
Weisel is a 30-year literacy veteran with experience in community, workforce, and institutional-based adult basic literacy, ESOL, special education, and mental health service delivery. She is the author of *PowerPath to Education and Employment*, a diagnostic screening and intervention system for learners.

She says these three real-life adult education students represent many who walk through the doors of adult ed programs every day. They have dreams and goals but also plenty of challenges and often some pretty heavy educational baggage—bad memories of formal education, labels, and failures.

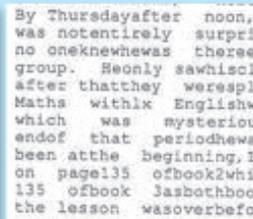
The three learners are also part of Weisel's research into exactly what is behind the struggles many adult education students face. In a multi-year study of 4,567 adult ed students in 108 programs in 13 states, Weisel found it's not what the public might think—low intelligence or an unwillingness to work. And it's not even what many adult ed teachers might think—difficult childhoods made worse by poor life choices—or at least that's only part of it.

Instead, Weisel's research shows that many of the struggles stem from undiagnosed

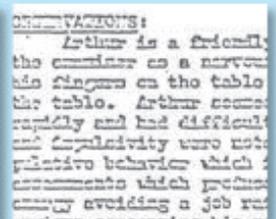
*Learners who have difficulty reading may be nearsighted or farsighted, or they may have more complex visual challenges. Three examples show how individuals with VSS see a page of text.*



Blurry



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problems and in many cases physiological issues no one knew how to diagnose until recently. Here's a snapshot of what Weisel found of adult education students participating in the study:

- 48 percent had problems with vision function
- 41 percent suffer from hearing loss
- 78 percent have attention difficulties
- 90 percent suffer from visual stress syndrome
- 40 percent are already diagnosed as LD

"When I ask people testing for learning disabilities if they ever check to see if the individual being tested could see or hear, they say no," Weisel says. "They just assumed they could hear and see."

And when it comes to standard sight and hearing tests, the learners probably are typical of the populations as a whole. But Weisel says we now know that there are hosts of serious visual problems regular eye exams do not address, the very kind of visual problems that turn learning problems into lifelong problems.

"The newest discovery is visual stress syndrome (VSS)," says Weisel. "People with VSS have problems with the basic way we learn—black letters on white pages under bright lights. They tell us the words swirl, disappear, move, stack on top of each other, smear and then come back together, or fall off the side of the page. Every student who had not been previously diagnosed thought that what he or she was seeing was normal and that everyone else was seeing the same thing.

"The biggest issue with visual stress syndrome is that no amount of reading instruction will help without first addressing the VSS."

Binocularity is another vision problem prevalent among adult learners.

Binocularity is the ability to use the two eyes together. "When people read, they need two eyes," Weisel says. "The dominant eye goes in first and the non-dominant eye follows. If the non-dominant eye overshoots or undershoots the target, the person misses parts of words or lines of text. That's why you

often see students read along, skip three lines and keep going, never realizing they missed three lines. That's also why they score so poorly on comprehension tests."

Problems with visual motor integration create issues with copying information from a workbook or textbook to paper, from a test booklet to an answer sheet or from a blackboard to paper.

Other problems stem from attention and auditory problems.

Attention deficits have received much more attention in recent years, but include a wider range of issues than many of us realize, including impulsivity, hyperactivity, short attention span, over sensitivity, difficulties focusing and completing tasks, the need for stimulation, distractibility, social immaturity, and the need for supervision.

Auditory difficulties can cause problems not only in hearing but in understanding



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inferences.

So, the big question: what should adult educators do to address these issues?

"Ask for screenings," Weisel recommends. "Sometimes a county health department will conduct vision screenings. Those with TANF [Temporary Assistance for Needy Families] clients may be covered for a visit to an optometrist. But the key is to insist on being checked for binocularity because that's where the huge issues are for adult learners. Regular eye exams will not catch these issues."

Teachers can also use Weisel's program, PowerPath, to test for visual, auditory, and attention issues. Issues that fall under these three categories can be diagnosed quickly using this program.

In addition, Weisel says there are some computer-based vision screenings. She warns, however, to check the reliability of the screening and the science behind it.

There are also easy ways to spot some

problems and some simple accommodations as well. Students who use their finger to follow along while reading and those who struggle with workbooks—falling asleep, closing their eyes, suffering with headaches—clearly have vision deficiencies.

She recommends that teachers adjust the lighting in their classrooms. In one section, keep the lights bright, in another take out one of the fluorescent tubes, in another section take out two, and in the final section take out three. "Students will naturally gravitate to the area where they can best learn," she says.

Using colored paper or putting a colored film over the paper will help many students, she says.

"For certain individuals—90 percent of our learners—there is an over-stimulation in the part of the brain where comprehension should be taking place.

The brain is basically vibrating because the individual has hypersensitive color receptors which send off erratic chemical and electrical messages. Putting the correct color overlay over the paper eliminates this over-stimulation.

"Suddenly, the words stop moving on the page or going in and out of focus. The person's eyes stop hurting. They don't have headaches anymore."

There is no magic color, however. Teachers must try a variety of colors until they find the one that works for that student. It will likely be a different color for each student.

"If we are really looking at how people learn, grow, and change, we must be able to get information into the brain," Weisel says, "and the biggest way is visually. Four out of six adult education students with these problems makes it pretty important information to know."

Which brings us back to William,

Henrietta, and John. In Weisel's words, what is really going on with them?

William suffers from binocularity. His new prism glasses correct for distance, close-up reading, and alignment. He also uses one blue and one grey overlay and now reads fluently. He changes the color of his computer screen and uses a visor under bright lights.

William is also deaf in his right ear and never knew it. He now uses a \$25 device with small headphones to increase the volume anywhere. The device fits in his shirt pocket. He tapes class discussions so he can listen to them later with increased volume and sits at the front of the room. William passed the practice GED test.

Henrietta has severe VSS. She uses two purple overlays and purple paper. Now she really loves to read. She left the literacy program and entered an ABE program to work on her GED. Henrietta wants to become a teacher.

Henrietta's daughter was also screened for VSS. She immediately went from a 2.0 to a 6.0 reading level by simply using rose and goldenrod overlays. "The words stop disappearing," she says.

John, as expected, had multiple issues. He saw an optometrist who fitted him with glasses. He has hearing loss in his left ear and modifies situations on his own by doing things like sitting in the front of the room and repeating directions. John uses a hearing device, which he says everyone thinks is his iPod. He also has severe VSS and uses one purple and one gray overlay. "The color lets me see all the words," he reports. "Wish I had this when I was a kid...I wouldn't have gotten into trouble."

For the first time, John feels hopeful about the future, never misses classes and even got a Franklin Speller that can say words out loud. John is now able to read on his own. 

**To find out more about the study or about PowerPath, contact Laura Weisel at [dr.weisel@powerpath.com](mailto:dr.weisel@powerpath.com) or call her at 620-343-4630.**

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