

directions help clarify instructions or written information. The temporal and frontal lobes of the brain handle verbal content.

Too much noise may be distracting and children with this strength may learn best in a quiet environment. Auditory learners will enjoy drama performances and skits, oral quizzes, audio books, story telling, lectures and talks and websites with audio functions.

**IF YOUR CHILD** is having difficulties keeping up or focusing in the classroom, his or her brain may hold the answers through different learning styles.

A learning style is the way in which each individual begins to concentrate on, process, absorb and retain new and difficult material.

Your child's preferred style guides the way he or she learns. It also changes the way he or she internally represents experiences, the way he or she recalls information and even the words he or she chooses.

"Learning styles focus on our strengths," says Dan Williams, Owner and Executive Director of SIRRI Arizona. To unlock these strengths, researchers at SIRRI use auditory, visual and timing assessments along with brain-imaging technology (brain mapping) to find out the key areas of the brain responsible for each learning style.

"Today, there is a greater awareness of different learning styles in the classroom than ever before," says Pearl Chang Esau, Expect More Arizona President and CEO. "We've seen classrooms that incorporate the energy of bodily/kinesthetic learning alongside the more traditional lecture style."

"It's important to recognize and appreciate different learning styles so we can meet the needs of individual students," says Chang Esau. "By understanding how children learn and appreciating differences



in how they process information, teachers can connect with them in deeper, more meaningful ways."

There are four main types of learning styles: auditory, visual, tactile and kinesthetic. Each learning style uses different parts of the brain. By involving more of the brain during learning, we remember more of what we learn.

» AUDITORY LEARNERS learn through listening and find it easiest to remember what they hear. The temporal lobes of the brain handle this aural content. The right temporal lobe is especially important for music.

Auditory learners have a good sense of pitch and rhythm. They typically can sing, play a musical instrument or identify the sounds of different instruments.

Children who are auditory processors learn through participating in discussions and talking things through. Verbal » VISUAL LEARNERS learn through seeing and find it easiest to remember what they read or view. The occipital lobes at the back of the brain manage the visual sense.

Children who are visual processors tend to observe a parent's or teacher's body language and facial expressions for content and learn through demonstrations and descriptions. Too much movement or action in a classroom may cause distraction for them.

There are two types of visual learning: visual picture and visual word.

Visual picture learners tend to have well-developed imaginations and often think in pictures. They learn by viewing images, graphics, demonstrations and performances. They also love drawing, scribbling and doodling, especially with colors.

Visual learners prefer using images, pictures, colors and maps to organize information and communicate with others. They can easily visualize objects, plans and outcomes. They also have a good spatial sense, which gives him or her a good sense of direction.

Visual word learners learn by reading and following written instructions. They can visualize pages and sections of printed text, and they remember the layout, headings, subheadings, key words, captions and images.

» TACTILE LEARNERS learn through touch and can remember things better when they can use their fine motor skills. Children who are more tactile prefer activities or projects that allow them to use their hands, such as experiments, puzzles, doodling or drawing to aid memory.

Tactile learners learn best either in group discussions and interactions or through quiet activities done alone.

The frontal and temporal lobes handle much of our social activities. Tactile learners heighten their learning by bouncing their thoughts off other people and listening to how they respond. They prefer to work through issues, ideas and problems with a group.

The limbic system also influences both the social and solitary styles. The limbic system has a lot to do with emotions, moods and aggression.

The frontal and parietal lobes and the limbic system, are also active with the solitary style.

Tactile learners generally need to write or type notes while listening. They concentrate best when they can manually manipulate information in concrete formats, and they like to reinforce their understanding using other self-correcting formats.

A tactile learner may have difficulties succeeding without a lot of sensory stimuli and the opportunity to touch, feel and manipulate things.

» KINESTHETIC LEARNERS learn through moving and doing. The cerebellum and the motor cortex (at the back of the frontal lobe) handle much of our physical movement.

Children who are more kinesthetic learn through 'real-life' experiences and demonstrations. They concentrate best when they are physically active and may have trouble sitting still for long periods.

Kinesthetic learners also enjoy active problem solving, experiments, charades and role-play. Flashcards help them memorize information because they can touch and move the cards around.

They feel more confident when they can practice following instructions and directions before attempting a task. Williams' experiences with SIRRI's training have proven that children with special needs learn best through "repetition." "It's the only way to get results," he says. Williams also recommends regular exercise, sleep and a healthy diet for elevated success.

"In many ways, technology is changing the educational game for all students, especially for students who learn in different ways," says Emily Pierson, Director of Curriculum and Instruction at New Way Academy, which uses SMARTBOARD technology in their classrooms.

To keep your child actively learning at home, Pierson suggests using appolearning. com for the iPad. AppoLearning provides educational apps for early childhood through high school students with a variety of subjects to choose from, including English and language arts, mathematics, social studies, science, world languages (French and Latin), fine arts and special needs.

"If you suspect that your child learns in a different way than their peers, websites such as National Center for Leaning Disabilities (www.ncld.org) have helpful resources and insights," says Pierson.

"Ultimately, families are the most important tool that children have in their educational journey," says Pierson. "The family is the expert on the child's interests, how they enjoy spending their time and what type of learning and education works for their children."

