Teamwork: Working With Teachers and School Administrators to Meet the Needs of Gifted Visual-Spatial Learners

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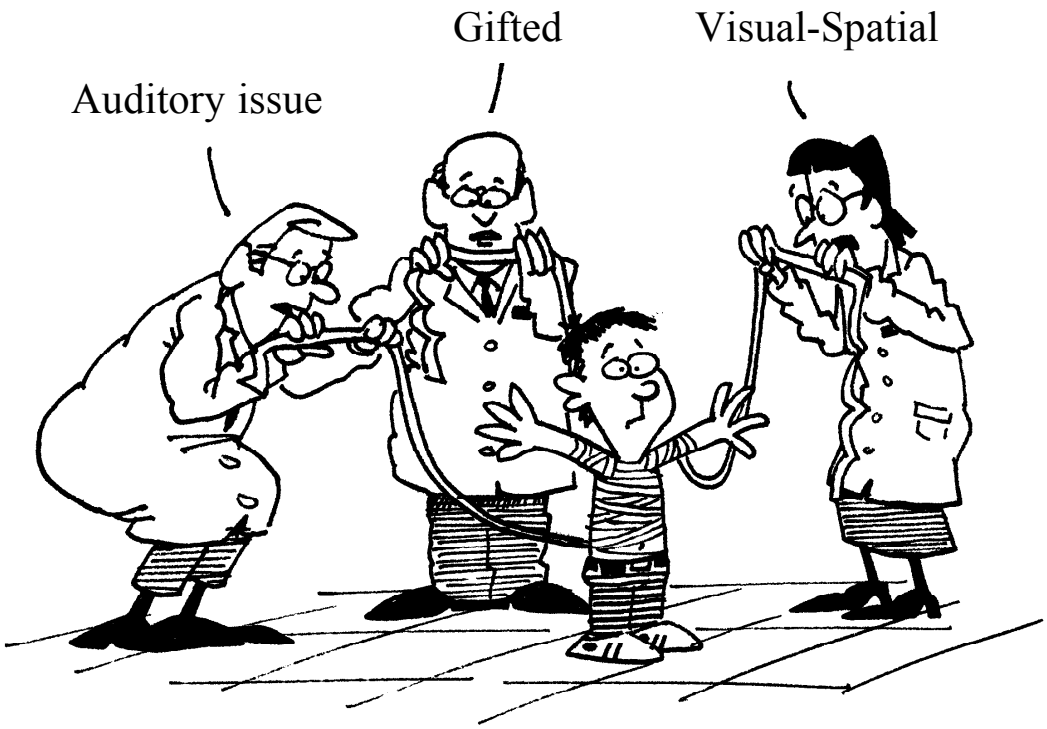
One of the many roles you assumed when you became a parent was that of advocate. Your role as the voice for your child became infinitely more difficult when you discovered your child was gifted, particularly if your child was anything but "plain vanilla" gifted. Gifted plus an issue of concern or difference—whether it be a learning disability, underachievement, an auditory or vision processing issue, the list goes on and on—means you, as this child's advocate, have had to be well read and well prepared to thoroughly understand your child's needs and to seek accommodations that may be necessary in the classroom. Your gifted child's preferred learning style (*not* to be translated as a learning disability in any way) may be yet another piece of the puzzle, or unidentified clue, in the unraveling mystery that is your son or daughter.



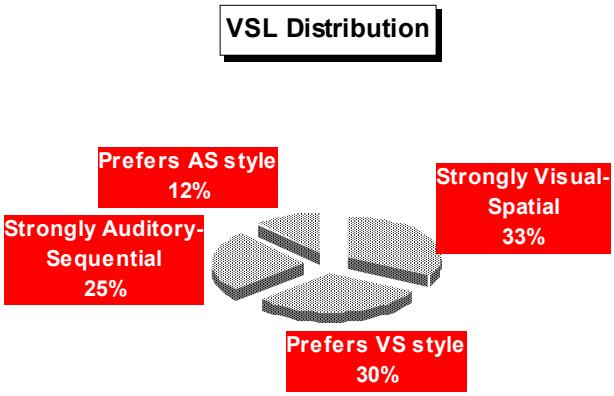
Most gifted children, even the "plain vanilla" variety, have strong right hemispheres. They think in images as opposed to words and they learn by doing and watching, rather than being given a series of oral directions. They are visual-spatial learners. They think and learn and are able to view the world in multiple dimensions. Visual-spatial learners (VSLs) are our artists, inventors, surgeons, architects, engineers, pilots, creators, musicians, computer geniuses, and visionaries. And, while not all visual-spatial learners are gifted, most students who are identified as gifted, prefer this learning style (Silverman, 2002; Sousa, 2003; Golon, 2006). These children (and adults!) learn best when they are allowed to use the gifts of their right hemispheres, the source of creative thinking, humor, and imagery. And their time has come. As Thomas West writes in *Thinking like Einstein:*

> I believe we are now at the early stages of a major transition—moving from an old world of education and work largely based on words and numbers to a new world largely based on images that are rich in content and information. (p. 16.)

Most schools, most teachers and most curricula have long been and continue to be, even in the 21st century, a haven for left-hemispheric thinking, for auditory-sequential learners—children who think and learn in words, rather than images, and in a step-by-step fashion. Most schools today remain word-bound in the delivery of instruction and in assessing the mastery of that instruction.

> Schools are structured environments that run according to time schedules, favor facts and rules over patterns, and offer predominantly verbal instruction, especially at the secondary level….right-hemisphere learners…are not comfortable; the stronger the right hemisphere, the more hostile the learning environment seems. (Sousa, 2006, p. 177).

So where does that leave gifted picture thinkers? Validation studies conducted by the Gifted Development Center have shown that over 60% of the regular classroom prefers a visual-spatial learning style (http://www.VisualSpatial.org/VSI/research.htm). In fact, over a third of any given class prefers this learning style so strongly that to teach exclusively to the left hemisphere (an auditory-sequential style) would be to disadvantage the student to such a degree that he or she would struggle to be successful, may underachieve, and certainly is not as likely to be identified as gifted.



Anecdotally, we know that as much as 75-80%, or more, of the gifted population are visual-spatial. In fact, one private school I've been working closely with boasts an impressive 98% of its total student body (92 children in grades pre-K through eighth for the '06-'07 school year) prefer this learning style.

Using the *Visual-Spatial Identifier* with a predominantly Navajo school district in Page, Arizona, we also learned that 71% of the Navajo students in grades 4 through 8 are visual-spatial learners compared with 66% of their Anglo classmates; over 90% of the students referred for academic services are visual-spatial; and over 90% of the students enrolled in special education classes are visual-spatial learners (DeVries & Golon, in

press). It is my belief that the results of the study conducted with the Navajo can be translated and applied to other diverse cultures as my colleagues and I have witnessed a preference for visual-spatial learning among the indigenous people of New Zealand, Australia, and Canada. And it has long been noted that students of Asian cultures score higher on mathematics and spatial abilities tests than do their American counterparts (Li, 2001).

School is geared toward left-hemispheric learning. We teach in a step-by-step manner and require mastery of one area before progressing to a higher level. We also tend to teach, particularly in the higher grades, in a strictly auditory fashion, leaving manipulatives and hands-on learning for younger students only.

> …traditional teaching methods tend to favor strong sequential learners. Concepts are usually presented step-by-step, practiced with drill and repetition, reviewed, and then tested under timed conditions. Consequently, gifted visual-spatial learners may have greater difficulty in traditional classrooms and their talents may not be fully recognized (Sousa, 2003, p. 81).

When VSLs are presented with new material in a sequential fashion, they are required to use their weaker hemisphere, rather than their stronger (Golon, 2006). This is analogous to an individual breaking the arm of a dominant hand and being forced to handwrite with the weaker hand. Eventually, and with much practice, the individual will be able to produce legible writing, but it will never be the most efficient means for them to write, nor the most beautiful writing that he or she is capable of. Only when the ability of the dominant hand is returned, can the individual produce his or her best work. My own grandmother, who was born completely deaf, said her biggest handicap in school wasn't that she couldn't hear, but that she was left-handed. Prejudice against our right hemisphere (which directs our left hand) continues in the emphasis on left-hemispheric

educational practices. Only when classrooms encourage students to access the right hemisphere will have afforded the visual-spatial learners the opportunity to produce their best work and learn in the most efficient manner for their learning style.

That's where you, as your child's advocate, come in. When you speak on behalf of your student by requesting more visual instruction, by pushing for the elimination of timed tests, or by volunteering to create manipulatives for use in the demonstration of new material, you are helping, on average, nearly two-thirds of your child's classmates to succeed, even more if your child participates in gifted-only classes. Armed with the statistics of the prevalence of this learning style, particularly in classes or programs for the gifted, demonstrate to your child's teacher, school counselor and/or principal that in meeting the needs of your child, the needs of the majority of children can be met. It is statistically impossible that your child is the only one is his or her class that prefers this learning style.

Equally as important for teachers and administrators to understand is how critical it is to engage the right hemisphere of every single student—regardless of preferred learning style and regardless of intellectual ability. Dr. Jerre Levy, a brain researcher from the University of Chicago who is credited with discovering the functions of the brain's hemispheres in her work with Dr. Roger Sperry, is quoted:

> The right hemisphere is especially important in regulating attentional functions of both sides of the brain. Unless the right hemisphere is activated and engaged, attention is low and learning is poor. (Levy, in Silverman, 2002, p. 15)

Dr. Levy was talking about every single student in the classroom, not just those with stronger right hemispheres. All students have a functioning right hemisphere (if they didn't, they would be in a very different classroom) which must be engaged for real

learning to occur. The strategies that are vital to the successful learning and recall of the visual-spatial student play a critical role in reinforcing new material for the auditory-sequential student, as well. Besides, such strategies (including role playing, simulations, incorporating humor and rhyming, using color and music, etc.) make learning fun!

Remember that you, your child's teacher(s) and the other professionals that support your child's academic experience comprise the team that must work effectively together to support specific learning needs and afford every child the opportunity to succeed. Like any well functioning team, the group responsible for managing your child's academics must be built upon a solid foundation of positive communication and trust. If your school has a specific policy in place for parent-teacher or parent-administration communications, do not violate those rules. Typically, a discussion of possible accommodations or specific student needs begins with the classroom teacher. Request a meeting to include other members of the school's team, including resource teachers, if available, the principal, school counselor, etc., only after all avenues with your child's teacher have been exhausted.

> If…parents approach a teacher and receive an absolute refusal to consider modifications, or the teacher has been generally reluctant to make agreed-upon changes over several months, it is time to contact the principal…If a principal is willing to accommodate a child's needs, he or she often knows about many options within the school. For example, the principal may be able to choose a teacher who has strengths and interests compatible with those of the child. (Gilman, 2003, p. 245-246).

Such meetings are best conducted when you have specific input as to the changes you feel will assist your child and other visual-spatial learners in the classroom. Actions, as always, speak louder than words. If you can demonstrate success using a particular visual-spatial technique (many have been printed in previous issues of this publication or

you can visit www.VisualSpatial.org for free, downloadable strategies) with your child or a small group of students, you have a greater likelihood of affecting change. Perhaps, as a classroom volunteer, you can ask to work with students who are struggling with weekly spelling tests, for example, or help students with organizational skills or time management issues—all are typical pitfalls for visual-spatial learners. Success using this technique, or any other you choose that effectively engages the right hemispheres of visual-spatial students will reflect well on your ability to affect change in other subject areas, helping the classroom teacher to create a learning environment that is friendly to all and promotes multiple pathways for student accomplishment.

The following is a checklist of Do's and Don'ts in advocating for your visual-spatial child with school administrators. Treading carefully, with documentation about preferred learning styles, an understanding of best practices, and information on the specific changes that can easily be incorporated and will benefit all students, will likely result in the best possible outcome for everyone.

DO:	**DON'T**:
Work with your child's teacher first; suggest techniques that are effective with VSLs, educate on prevalence of this learning style;	Go above the teacher's head without exhausting all avenues in the classroom;
Incorporate one or two strategies at home with your child or in the class with a small group; document effectiveness	Insist on changes without supporting your requests with research and offering to assist in implementing new materials and ideas;
Seek support from other professionals involved with your child and/or the school, including counselors, optometrists, etc.;	Engage in "parking lot gossip"—talking with other parents about your concerns;
Understand there are many children with unique needs in any given classroom, the teacher must be responsive to all;	Bad mouth the teacher;
Stay proactive in helping your child	Demand that VSL techniques be

prepare for upcoming tests and projects using VSL techniques;	incorporated immediately—our understanding of the right hemisphere is relatively new knowledge;
Request a meeting with the team of teachers and administrators that supports your child if the teacher resists your information or refuses to incorporate strategies vital to VSLs;	Ambush! Remain professional, have all your facts and data together, including what has worked in your own experience;
Support your child's classroom experience or move on to an alternative solution; Understand that educators teach because they want to help children, not hurt;	Create a hostile situation for your child with an attitude of entitlement on your part; work with the team, not against;
Relish in your child's gifts and teach him or her to do the same. While school may not make VSLs feel brilliant—they are!	Allow your child's learning style to be used as an excuse or crutch.

When parents work cooperatively with their children's teachers and principals and serve as a conduit to further educate these professionals on preferred learning styles and their impact on student performance, as well as on effective classroom strategies that have benefit for every student, we often see a very positive outcome. There are professionals who can offer guidance and assistance in the form of staff development, counseling for the family, and more. Stay informed and up-to-date as neuroscientists are continually learning new and important information about the brain, information which will likely play a role in determining the best teaching practices for your son or daughter.

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