The gifted visual-spatial learner
A quest for knowledge and understanding

An important initial step in helping visual spatial learners is to recognise that these children are not "broke", and don't need "fixing"? Rather, they simply have a world view that exists on a different plane to many of us.

I believe one of the most successful strategies we can apply to help these kids, begins by understanding their different way of thinking as being a strength, rather than a deficit. As part of being reflective practitioners, one of the most important first steps may be to consider whether we can apply to ourselves the advice, "If you're not part of the solution, you may be part of the problem". I first came across this philosophy while studying discrimination in schools by teachers against Maori students, and the point was made then that it applies equally to any situation involving minority groups who have needs that are different to the accepted norm.

To elucidate this point further, consider the impact on the child of a lifetime of repeatedly failing to reach imposed standards. I am suggesting the possibility that we may serve these children better when we remember that there can be more than one pathway to the standard required.

The concept of a visual spatial learning style is not new to me. I discovered some years ago that my son was gifted, and then that he had the added challenge of a learning disability. Since then, I have read a lot of literature surrounding the perplexing state often referred to as "twice exceptional", or gifted and learning disabled. One phenomenon I encountered and immediately recognized was that of the visual spatial learning style.

There are many "learning styles" inventories available, based on the idea that individual learners have strengths and weaknesses that, if taken into account by teachers when planning their pedagogical approaches, have considerable influence over the successful uptake of knowledge. With Dr Silverman, we briefly reviewed some of the more popular models, including Gardener's Multiple Intelligences, of which there are seven original plus one or two more recent additions; the Myers Briggs Personality types, described in sixteen different formulations, and mention was made of Guildford, a researcher who identified 120 different types of intelligence.

As much as one might like to try, catering for all these differences is a big ask. One answer would be that it must be enough to recognize that there are “many different ways to skin a cat” and the most important thing is to provide a variety of formats for presenting material and make choices available to children as to how they present their work.

However, Silverman has proposed a different model based on findings of recent brain research which supports the discovery that some functions are carried out by the right side and others by the left. While we all in fact do use both sides of our brain, Silverman has worked for the past twenty five years on distinguishing the different characteristics of what she terms “Auditory-Sequential” (AS) learners, who draw their strengths from processing carried out on the left side of the brain, and “Visual-Spatial” (VS) learners, whose strengths are tied to right-brain activities.

Parenting a visual spatial learner is a challenging and often frustrating task, especially if you yourself are of the opposite variety. Their teachers will also attest to finding these children hard work.

Silverman suggests that generally teachers do a good job of teaching children with AS preferences and that these children tend to enjoy and succeed at school – they learn the way we teach.

AS learners are those who think primarily in words, have auditory strengths, and relate well to time, step by step, sequential processes, and trial and error learning. They attend well to details, follow oral directions well, and are suited to phonics style reading and spelling instruction. They can write quickly and neatly, and are well organized. They learn well through rote memorization, and benefit from repetition to reinforce learning. These are all right hemispheric brain functions.

The difficulty for children with VS strengths is that teaching methods that value the above modalities can create some significant barriers to successful learning for VS learners.

One central principle of visual spatial style thinking that was continually impressed upon us by Silverman was that VS learners “think in pictures, not in words”. It was almost like a mantra she repeated over and over, “Make it a picture, make it permanent”; thus ensuring we came away with one key idea: The way to teach VS learners is to help them make that picture.

The flip side of this is that some traditional teaching methods, such as drill and repetition to cement an idea, can be counter-productive for VS learners. Once they form a visual image of the concept involved, whether it be how a word is spelt, or some mathematical fact, that "picture" becomes permanent – it will not go away – thus there is no point in repeating it over and over. The unfortunate effect of such practice can be to turn the student off learning.

Some other implications of learning by visualization of a whole concept include the fact that the "whole language" reading approach is more appropriate for these children than a "phonemic" approach. Breaking down words into sounds is not helpful – they need to be helped to "make a picture" of the whole word.

Students who process information visually in preference to auditorally face other challenges in our classrooms. When faced with too much sensory input, they may have difficulty paying attention, listening to and following oral instructions given in a noisy environment. Ensuring that information is presented visually as well as orally becomes critical. Also, try to seat them at the front of the classroom to minimize distractions.

Silverman advocates computers be provided for these students whenever possible, for several reasons. Firstly, keyboarding uses both hands and thus stimulates both sides of the brain, whereas handwriting is using one side only. Research has shown that higher thought processes occur when challenges require us to use left and right sides of the brain simultaneously.

Visual spatial learners are noticeably slower at writing. According to Silverman this is because of the time it takes to translate the "picture" in their minds into words, and then get the words in the correct order to record in written form, not to mention the letters being the correct order in the words. Thus keyboarding is helpful, especially once they have reached a stage of automaticity and do not need to think about the act of typing.

Computers can also help with tools for spelling and word processing – taking out the painful element and allowing for faster flow of thought processing.

Computer keyboards are designed as a tool to rapidly produce thoughts on a page – handwriting was, in times gone by, intended to be a form of expression over which time and great care should be

spent. As we move into the future, we should use each form in the way to which it is best suited.

Conclusion

When my son first began to show signs of the difficulties he faces at school through displays of inappropriate behaviour, I recall saying to his then Principal, “All I want is for my child to come through the door at the end of the day and tell me he has had a good day”. Nothing has changed – I still feel this to be a high priority objective. What I have become more acutely aware of is the huge part we as teachers have to play in attaining this goal, and what the consequences are for the student if we fail.

“When they are placed in the right learning environment, where there is a good match between their learning style and the way they are taught, visual spatial learners can actualize their potential to become innovative leaders in our society” (Silverman, 1994: Teaching gifted children with classroom adjustment difficulties: Invited address to the International Council for Exceptional Children).

The parent of three gifted children, two of whom strongly identify as visual spatial learners, Sharon was prompted to seek answers to the many questions this posed. In 2002 she began a Bachelor of Education through Massey University. In 2003, her elder son was an inaugural student when the George Parkyn Centre opened a One Day School in Napier. Sharon was involved in the programme from its inception also as a Teacher Aide and then a Relieving Teacher and once graduated in 2005, commenced teaching for the GPC three days a week. She is currently based at St Joseph’s School in Hastings.