

How to Reach and Teach the Visual-Spatial Learner Penny Choice

Before I read Linda Silverman's book, *Upside-Down Brilliance: The Visual-Spatial Learner*, I didn't even know there was such a thing much less that I WAS one! (A visual-spatial learner has a preference for learning through the right hemisphere of the brain instead of the auditory and sequential approach to education commonly used in schools.) But what a wake-up call I have had since then. I finally realized why I had such difficulty in mastering difficult material in school. The problem began with the fact that most material throughout my elementary and secondary education was easy! I just had to read the text (and often I didn't even have to do THAT) and I had it. The teachers repeated and repeated the same information, over and over again, so it wasn't much of a challenge. So I sort-of slid my way through school not ever having to develop an understanding of what it meant to handle difficult material.

And then I got to college! And I woke up to a whole new world: A world where learning could be a struggle. I had a very difficult time my first few years – and I didn't know why. I remember attending lectures in a giant lecture hall at the University of Wisconsin. I would take notes like everyone else I saw there. I took them down, faithfully, and then returned home to study. But a strange thing occurred: I discovered that I had a great deal of difficulty passing the tests. I would go over and over my notes and study them over and over. I would read the texts but I never figured out what “the professor wanted”. I was totally confused.

Finally, I checked with someone in the same classes who seemed to do very well. Lo and behold, her notes were very different from mine. Upon analysis, I learned that she had a great deal of information written down in her notes that I didn't have. That was when I learned that I was not hearing the whole lecture that the professor was giving. I was missing things – and therefore didn't have a clue what the professor considered important (which at times was very different from what the text stated.)

I couldn't figure it out. What was happening? Was I not hearing what the professor was saying? How could this be? I knew I had good hearing because I was musical – and had perfect pitch (a genetic ability to reproduce specific sounds accurately and to know what notes were being played on a musical instrument) so I became very frustrated.

With help from my friends, I developed some strategies to get me through. First, I bought a tape recorder and taped my professors' lectures. Then I would bring the notes and tapes back to my room and play them over and over, filling in the blanks in my notes where I had heard the lectures incorrectly. I was astounded at how much I missed! It made all the difference.

It was obvious that I had an auditory processing deficit and needed help to overcome it. But I didn't have a clue that there was a type of learning preference called the visual-spatial learner. I just knew I had a problem.

I then developed a system for myself where I used different colors in texts and notes to highlight the materials. It seemed to help me remember better when asked to recall information. For example, I would use one color for each category, or topic, and different colors for sub-topics and other things to remember. My texts and notes became very visually stimulating, and when I took tests, all I would have to do is visualize the page and color(s) and I was fine! Over time, I went from a 1.75 average up to a 3.0 and by grad school I was a straight A student.

Another strategy I developed was a kinesthetic one. My science classes gave me specific challenges – and the difficult material was hard to master. So I created a mental square on the floor and physically moved from one spot to another, associating my physical location on the square with the material I had to learn. So whenever I had to utilize the information, I would visualize the square and where I moved within it to recall the material. That trick transferred over quite effectively in many classes and situations over the years.

Another trick I learned (remember I am a bit musical) was to memorize material by creating a musical melody around it. I noticed there were advertising jingles that really got “stuck” in my head. So I developed a learning strategy for myself. I would take a series of numbers, or words, set them to music, and I never forgot them. (I even used this trick with my own children when they were young and were attempting to learn their telephone number, address, and other important information. It worked like a charm, and they can still “sing” those songs back to me as adults! They never forgot.) Advertisers know this strategy well, and use it very effectively to sell their products. Try it for yourself; what “jingles” can you remember? Now the trick becomes one of transferring that strategy into education for those students who learn differently.

However, I was frustrated that I had not developed effective auditory skills when I was young. Now that I knew I had weaknesses in that area (auditory processing deficiencies), I became determined to remediate that skill. So since that time, I have rented books on tape and forced myself to develop those skills doing something I enjoyed – reading! In fact, I still do that today – check out my car! I always have an auditory book going, and it’s wonderful! I am working on my auditory processing weakness while enjoying learning through books.

The problem is – a child doesn’t know he/she has a problem until it is discovered! It took me until college to figure out I had a problem because school was so easy, I didn’t have to struggle. And I didn’t have a clue to my learning preference. This is an excellent case for providing appropriate educational challenge for students in schools so that they can develop the skills they will need to survive in their own lives!

This brings me to another challenge I have dealt with in my journey towards understanding the visual-spatial learner in my own life: Following map directions to get from location to location. This has been a special challenge for me because my occupation has required me to drive to individual schools and locations all over and in

very unfamiliar locations. I would ask for directions and would get something rather terse in return such as:

- Take the 294 North to 120
- Take 120 West to 45
- Take 45 North to Washington St. etc.

I always got lost! Then one day a person with obviously right-hemispheric preference added details like the McDonalds and Shell stations on the corners, etc. The picture started to clear. And finally, I learned to always get a detailed map (like from *The Chicago Tribune* map book) to draw on and add the landmarks of interest. Then I would commit the map to memory. It was amazing. I had the pattern in my head and I no longer got lost.

This led me to another discovery. Visual-Spatial learners MUST get a picture in their heads. This takes time. So now, when I know I have a VSL to work with, I give them extra time to convert knowledge into pictures (because it takes longer to GET the picture, but then it's instant recall).

So students who have right-hemispheric preference need a different approach for learning. The first directive for all teachers and parents is to understand that: ALL STUDENTS MUST HAVE CURRICULUM AT THEIR CHALLENGE LEVEL so that they develop the skills they need. And it is imperative for appropriate challenge so that any problems might surface early. Far too many bright students develop coping strategies for masking learning problems – which may surface only at the time they finally reach their challenge level. All of us know people who coast through school only to “crash and burn” when that time arrives. I was fortunate: I found support to guide me to awareness and mastery over my learning problem. But what about others?

There are specific strategies that are very effective with the visual-spatial learner in school. Ones that helped me were:

1. Taking time to create a visual image of learning material: Getting the picture makes all the difference
2. Use colors to create categories and make information stand out
3. Find ways of organizing material visually
4. Use music (or any of the Fine Arts for that matter) to help learning
5. Create kinesthetic connections

Also, it is important to remediate through strengths. I realize that we still live in an auditory world. So those of us with auditory weaknesses should develop strategies to strengthen them. I chose auditory books because I love to read and listening to books improved my auditory skills. It was, and is, a double benefit.

Linda Silverman, Betty Maxwell, and Allie Golon have also come up with fabulous strategies for the VSL. On page 187-88 of *Upside-Down Brilliance*, suggestions for strategies include:

- Show them, don't just tell them. Teach them to picture concepts.
- Use hands-on learning experiences.
- Don't make them show their work. Let them find answers their own way.
- Avoid times tests. Arrange for more time for standardized tests (e.g. SAT).
- Allow them to use a computer for all written work (voice-activated also works).
- Use visualization techniques in all subject areas.
- Give them advanced concepts even if they haven't mastered easier work.
- Expose them to role models of successful twice-exceptional adults.
- Teach them to use a day planner.
- Teach them to make lists.
- Allow them to use spell check when word-processing.
- Arrange a quiet study center at school and at home.
- Let them tape record lectures (see earlier in this article).
- Use earphones to block out auditory distractions (I do this, frequently).
- Have a place in the classroom where they can retreat when over stimulated.
- Provide a Franklin speller or *The Bad Speller's Dictionary*.
- Practice visualization as a memory aid. Ask them to picture concepts in their minds (and give them extra time to do so).
- Have them estimate answers before calculating.
- Shorten written assignments.
- Substitute oral for written tests.
- Allow use of a calculator when necessary.
- Allow them to dictate assignments to a scribe when necessary.
- Avoid rote memorization. Use more conceptual approaches.
- Use computer-assisted technology in subject areas.

One teacher had great success with a student who was strongly VSL and very disorganized. She found that it was effective to use a technique that has been shown to be very effective in training puppies: First, establish an area that is somewhat confined – the smaller the space, the easier to get organized and the less overwhelmed they feel. It is a very calming technique for training puppies and it helps the VSL. She also set clear expectations for the child. She also had him use a Franklin Speller (there are others that work well, too). She focused on constructivist teaching using whole-to-part thinking in a very hands-on approach. She made certain he had the big picture – first! And she also explained WHY before making assignments – such as showing work in math. These techniques helped tremendously.

Betty Maxwell has also developed wonderful strategies for teaching reading. Check out *Upside-Down Brilliance* for excellent techniques for teaching reading to the visual-spatial learner.

There are several classroom aids for VSL's. My favorite is the use of the computer program Inspiration (for middle school-high school) or Kidspiration (primary school). It's based on concept mapping (a terrific technique for the VSL) and is very effective AND fun. Other classroom aids include:

- Overhead projectors/computers
- Videotapes
- Slides, charts, demonstrations, movies, diagrams, drawings, etc.
- Use of color and color overlays for reading
- Cartoons
- Costumes, games, action-oriented activities involving the students, physically
- Mind mapping (see above)
- Visualization techniques
- Manipulatives, experiments
- Post-its on posters all over the classroom (color works wonders here)
- Drama, etc.

Ah, yes, “drama, etc.” This brings me to perhaps the most important and effective method of learning for the VSL: The use of the arts and specifically with drama in the classroom. I have found that many VSLs gravitate towards the arts, and the theatre and the movies are full of VSLs that find real support through theatre and drama. I have been active in the field of drama for almost fifty years and I am amazed at what I have learned through my explorations.

A word about the difference between drama and theatre: Most of us are very familiar with putting on plays and memorizing lines – those are aspects of theatre. But in the 1970’s I began to learn about an instructional technique known as drama (also known as process drama and drama-in-education). It is a combination of student-based inquiry and improvisation that is used to enhance learning in an active, personally involving way. It evolved (and continues to do so) from the principles of creative drama (also known as creative dramatics). Process drama was developed in the United Kingdom and Canada by Dorothy Heathcote and Gavin Bolton for the purpose of deeper student understanding of complex educational concepts.

Its focus is on student inquiry, critical and creative thinking, and problem solving (a close cousin of this technique is problem-based learning). Students and teachers explore an imaginary world together to develop skills and create deeper learning into a topic. The teacher/facilitator creates a framework, or drama structure for students to explore through improvisation. It is a technique not designed to be seen on the stage but to be experienced in the classroom. This technique is taught to teachers in the UK, Canada, and Australia as part of pre-service training; however, many teachers in the United States are unaware of this valuable instructional tool.

Elements of drama in the classroom include a series of planned activities that take place over a longer period of time that begins with a scenario establishing setting, roles, focus, and atmosphere. It then focuses on acquiring new knowledge through active participation and interaction along with reading and research. This whole process approaches learning through the right hemisphere and is, therefore, perfect for the VSL. Process drama has many published materials available – many through Heinemann Publishing (www.heinemann.com) that guide the teacher in the exploration of this classroom technique. Some published topics include traveling on the Oregon Trail,

understanding the time when orphans were shipped from New York into the West, and understanding the world of Charles Dickens in Victorian England. Primary topics also abound.

Because this process is based on students' own learning and experience it moves students toward understanding the human condition. It develops critical and creative thinking appropriate to gifted learners and challenges the VSL. I wish every teacher would use this technique in his or her classrooms!

Finally, more and more children are entering the schools with a preference for learning through the right hemisphere. Indeed, our whole society is moving in this direction. Daniel Pink states in his *A Whole New Mind*, "We are moving from an economy and a society built on the logical, linear, computer-like capabilities of the Information Age to an economy and a society built on the inventive, empathic, big-picture capabilities of what's rising in its place, the Conceptual Age" (p. 31). We in education need to honor children with this preference for learning by teaching to the way these students learn best. This will require some change on the part of teachers but this change is both exciting and innovative and will make a significant difference in the education of the gifted visual-spatial learner as well.

References

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