EDUCATION

Parents and Teachers Working Together in the 21st Century

By David Hyerle, Ed.D.

Mapping and Seeing Relationships

Last week my son Alex had his seventh birthday, so my wife Sara created her now famous annual treasure hunt for him and his friends. In past years, Sara gave the kids verbal clues for finding little treasures in the woods. This year she decided to go in another direction: she made a hand drawn map of the area around our house with landmarks clearly identified. The map was copied, one for each child, with an "X" marking the spots for every treasure. All the kids had to do was get oriented and follow the map. Yeah, right! They were so pumped up about getting the treasures, that we had to give them gentle guidance in linking the actual landmarks to the marks on the treasure map. They happily found the treasures, the last treasure being a simple compass for every child.

Cake and ice cream was almost secondary to the fun kids had with the treasure hunt. Why? Beyond the obvious thrill of the hunt, there is something exciting and intellectually challenging about entering an unknown land and finding our way to new things . . . with map in hand. This process of discovery is a human passion, and mapping has been the essential tool of this trade. When we make a map we are showing and seeing relationships: vital information about relationships between our surroundings and distant shores, from the ancient mappings of the "flat" earth to new solar systems. While the four corners of our globe have been "discovered," we are just now able to map the dynamic and ever changing regions of the human brain. Of course the terrain in the brain is no static landscape – it is constantly reforming as more information is being absorbed and discarded!

Maps for Learning

So... why not use mapping techniques for the learning process? For the past few decades mind mapping (also called semantic mapping), graphic organizers, and concept maps have been used by folks in the workplace and by many teachers. Now many teachers are using some form of these visual tools on a daily basis. Right now these graphics are showing up across the content areas, in published textbooks, and even within standardized tests. There is a strong history of research on the usefulness of these tools.

As parents, we often ask questions to help our kids think through daily problems (see the question of the month). We may ask our kids these kinds of questions:

How are you going to organize your toys?
What are the steps for getting ready for school?
What were the things that happened that caused you to get mad?
Where are all the parts of the Lego set?

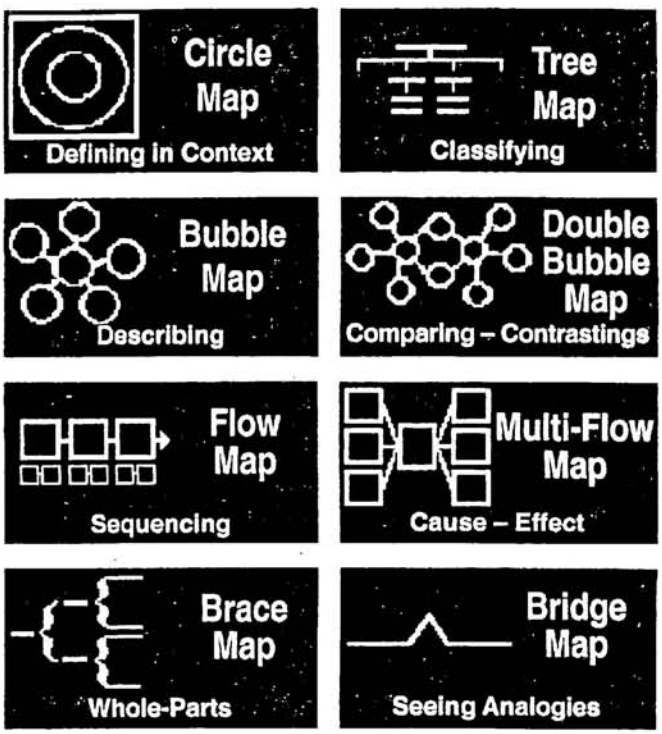
Each of these everyday questions cannot be answered with a "yes" or "no" or in a multiple-choice format. They require children to see patterns such as groups of things, steps in a sequence, causes and effects, parts of things. The problem you and I face helping our kids get out the door are the very same problems that teachers are trying to solve with our kids. Similar teacher questions might be:

How are you going to organize your ideas for your piece of writing?
What are the steps for solving that math problem?
What were the events that caused the Civil War?
Where are the basic parts of the human body?

It is so remarkable about how parents and teachers are asking the same types of questions, just with different content.

Thinking Maps®

Let's put this all together. These types of questions are based on fundamental human thinking skills and they require learners to see patterns... or how ideas relate to each other. As human beings, we think in patterns. We also have some common patterns for thinking such as categorizing (organizing), sequencing (steps), cause-effect (causes), and spatial reasoning (parts). These and other patterns all work together when we are learning. If students have a basic graphic starting point for each of these patterns of thinking – a map – then they can begin to pattern the content they are learning in and across every content area. This was my simple insight when I created a model of graphic tools called Thinking Maps® in 1988. Just as teachers use these tools with their students, you can use them very effectively with your child. By the end of this year of monthly columns, I will have introduced all eight Thinking Maps to you.



Thinking Maps®

Last month you may have seen this column where I introduced the Circle Map for helping learners brainstorm ideas about the topic "sharing." Last week I was in a first grade class in a local school and the teacher was using the Circle Map for reintroducing one of the letters in the alphabet and then again for reintroducing a number! This month I have another map for finding new treasures in your children (See Map of the Month).

The Mind as a Live Treasure Map

Just as my son and his friends got pumped up for the treasure hunt ... the treasure map slowed them down. The brain, while quite powerful, is easily overloaded and distracted! Maps enable treasure hunters to focus on the steps necessary to find each treasure. Of course, this happens in classrooms and at home as children jump to conclusions without thinking. We have found that some children who have problems with being attentive in

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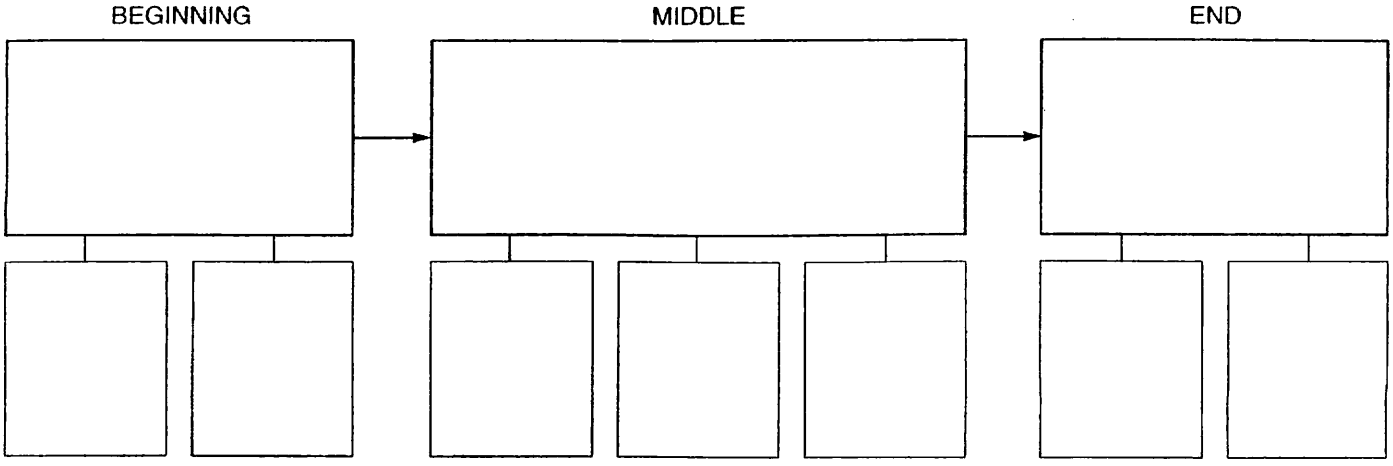

school respond well to visual mapping. Thinking Maps and other mapping tools help learners draw out their best thinking rather than impulsively blurting out an answer (see Thinking Habit of the Month). By the way, brain researchers have estimated that about 90% of the information that comes into our brain comes through our eyes! So it is no small wonder that kids love to watch television. It is visually stimulating. But this one-way stimulation is overwhelming over time. The power of our visual mind is thus also an advantage from which we can draw. Using visual tools such as Thinking Maps stimulates our children's minds, giving them guidelines to hold onto as they actively build their own lively mind . . . full of unique treasures to behold.

Question of the Month

The question of the month is less of a direct question than an offer to your child to stop and think by patiently asking, "Why don't you think about it?" This gives your child what teachers call "wait time," or time to wait and think about the problem or question you just asked of them. Back in 1974, an educational researcher found that on average teachers were waiting for a response from students to their questions for less than one second after asking a question! By merely waiting an additional two to three seconds, students actually improved their academic work. So try this out. After asking your child a question, give him or her at least five seconds to answer. Then ask, "Do you want to think about it some more?" You will be telling your child that you want thoughtfulness, not just any answer that comes to mind.

Map of the Month

The Flow Chart, or Flow Map, has been a traditional form of sequencing information and planning for steps of any kind of operation. Unfortunately, most students are shown information in a pre-formed flow chart and are never taught how to create their own. Here is a great starting point. The next time you are planning a day with your child, draw three large boxes as shown above, writing beginning, middle and end above the boxes. Have your child name the three major events of the day from each time period and then either have them write the words or draw a picture in the box (depending on the age). For example, the events could be " soccer game," "grocery shopping" and "going to the movies." You can make this more complex by adding substages below each box and have them show the details of what they are going to do within each stage. How will this help your child as a student? Teachers, almost every day, ask their students to use or show the steps for writing a story, telling the plot of a story, the steps in a math problem, or the sequence of events for something happening in school.

Mental Habit of the Month

One of the key "Habit of Minds," as identified by Dr. Art Costa, is called "managing impulsivity." If our children don't know how to gain control of their mind and focus on the task at hand, they become lost on their way to new treasures. For some kids impulsiveness – or "one-shot thinking" – regularly spirals into failure. How can you help your child become less impulsive? One of the key strategies mentioned by Costa is having students map their thinking visually as described in this article. Effective thinkers put a plan together before working. Here is a suggestion for helping your children manage impulsive behavior: Whenever you are about to take on a new project around the house, or go on a trip, sit down with your children and talk with them about how you do your planning. Ask them to make suggestions and changes. If you do this regularly, they will become natural planners and begin to manage their own impulsive behavior and reward you with thoughtful ideas.

David Hyerle, Ed.D., lives in Lyme, New Hampshire and works nationally and internationally with whole schools and districts in the areas of thinking process instruction, reading comprehension and writing. He has authored over a dozen books and guides for teachers and has helped produce software and videos based on his work. His most recent book, "A Field Guide to Using Visual Tools" was published in May 2000. He may be reached through his Website at: www.mapthemind.com.