Nine Thinking Strategies

Explanation and Ideas for Parents

QUESTIONING
Active learners are always questioning. Students who take responsibility for asking their own questions become more productive and engaged in their learning processes. Metacognition, or thinking about thinking, involves questioning our individual learning processes. Such questioning helps us solve problems by developing, implementing, and evaluating plans of action. Guiding the development of thinking skills in all students empowers them, increases their independence, and helps them develop to their maximum potential. Children always have a wealth of questions – encourage questioning in your child and work with them to find answers.

FLUENCY, ORIGINALITY, FLEXIBILITY, AND ELABORATION
When students are able to come up with ideas (fluency), combine ideas in new ways or come up with unusual ideas (originality), then categorize and develop their ideas (flexibility and elaboration), they are more able to make inventive or creative connections between ideas. Students should become comfortable with generating lots of ideas without pre-judgment. The process of suspending judgment is important to brainstorming and maintaining an open mind. Fluency and flexibility open up the thinking of students to consider many possibilities, and originality and elaboration stretch the uniqueness of their thinking. This is a great strategy to use with your children to generate ideas for a family trip, a way to spend the weekend, the best pet for the family, creative solutions to problems that arise and other situations that lend themselves to multiple ideas for consideration.

VISUALIZATION
This strategy opens up student thinking by using sensory information to stimulate imagination with both spoken and written words. The process of visualization can also help students plan out an experience before execution. Students can “see” roadblocks and problems before encountering them. This strategy helps with planning, goal-setting, and organization. Research studies have shown that visualization greatly increases the level and depth of comprehension of both spoken and written words. Visualization can be a powerful strategy for helping your child set goals, picture the steps that need to be taken, consider alternatives, and visualize a plan to achieve their goals.
MINDMAPPING
Mind mapping is a method of visual note taking that helps students organize information in unique and personal ways. It is appropriate for all students because it helps them retain, remember, and recall information. It also helps students to see the whole picture at once and make connections among related ideas without interruption. As students begin to work with more information in the content areas, this is a key skill which is especially important for visual learners and students who enjoy making connections among ideas.

Mindmapping is a lot of fun – you and your child can write a word or draw a circle in the middle of a page. Next, draw lines and new circles to ideas and words or pictures that connect to the original word. For example, maybe your child is interested in space. Together you could create a mind map of all that you know about space and then add things that you want to investigate.

POINT OF VIEW (POV)
This thinking strategy allows students to explore an idea from multiple perspectives. This helps to broaden students’ thinking and demonstrates that an idea should be examined from many points of view before an opinion is formed. The discipline of examining an issue from many perspectives will provide students with a good model for open-ended receptive thinking and empathizing with the opinions of others. Everyone has a viewpoint! It is important for children to become comfortable sharing their own viewpoint and listening to and learning from others. Parents can help their children recognize different viewpoints through books and stories or conversations that encourage a discussion of questions that have no definite answers, e.g., what makes a good friend? Another example would be a discussion of a movie that you attend together that might lead to different viewpoints on the theme or message of the movie.

ANALOGIES
Analogy allows students to make connections at a more sophisticated level. This structure for thinking helps students relate material to previously learned concepts as well as generate new comparisons. A facility for working with analogies gives students a structure for generating creative ideas, seeing complex relationships, and making unusual comparisons. Analogies are fun – how is thinking like a volcano? How is a dandelion like a good book? They stimulate the imagination and lead students to deeper understandings by connecting things that do not always appear connected.
ENCAPSULATION
Encapsulation is the process of stating ideas in a concise, precise form. It is not a summary and does not involve simply stating the main idea or restating information or opinions. Encapsulation requires students to synthesize information and nuances in order to capture the essence of an idea, object, or activity, and then communicate their thoughts clearly.

Vanity license plates are an example of encapsulating an idea with letters and symbols – try creating your own with your child!

DECISIONS & OUTCOMES
This strategy provides a framework in which students can assess and evaluate a variety of decisions and possible outcomes. Understanding cause and effect relationships helps students recognize the importance of examining the outcomes of multiple decision options before embarking on a course of action. The concept of examining outcomes is relevant for all students as they learn to consider both short-term and long-range consequences in the decision making process. For example, your child may want to make a purchase. This would be a great time to consider the short term consequences (the purchase may use up all of their savings, they may have to forgo other purchases for awhile, etc.) and long-term consequences (it could be less expensive if they wait, a newer, improved model may come on the market, it may be impulse buying and later they may regret spending the money.) These are important considerations for children to think about that will carry on into adult life. This strategy also works well for decisions about what sport to play, whether or not they do their homework, and many others as they realize that all decisions have outcomes that must be considered.

PLUS, MINUS, INTERESTING (PMI)
The PMI strategy encourages students to think about many possibilities, and to explore the positive and negative aspects of ideas or activities. PMI encourages students to develop the habit of looking beyond the polarity of "yes or no," "wrong or right," "my answer or your answer." The goal of PMI is to develop independent thinkers who consider a range of ideas and/or possibilities and see beyond the obvious. The "interesting" category can also include questions. This strategy works well when discussing books, events, family trips, musical instruments or any other ideas that can be considered through the lens of pluses, minuses, and interesting aspects. For example, your child is trying to decide which musical instrument to play. Together you make a chart of the plus, minus, and interesting aspects of each instrument that they are considering. Often the interesting column leads to insights that will help them make a decision.