How Families Can Promote Critical Thinking Skills

Families have many opportunities to practice and apply their critical thinking and reasoning skills in real life problem-solving situations. The goals of these critical thinking activities are to provide each student with skills that will enable them to behave intelligently. Parents can promote critical thinking with their children. Art Costa, author of *Developing Minds, ASCD*, has suggested the following characteristics of intelligent behaviors, which will expand upon each child's thinking ability.

1. **Persistence: Persevering when the solution to a problem is not immediately apparent.**

   Parent Hint: When children are discouraged or frustrated and use the words "I can't do this," or "It's too hard," it is helpful to provide encouraging words and suggest alternatives to their problem solving. Remind them that Thomas Edison didn't invent the light bulb on his first try! You need to learn from what doesn't work and keep trying.

2. **Decreasing Impulsivity**

   Parent Hint: Sometimes children shout out answers quickly, and lack an organized plan, for problem solving. Parents can suggest an organized plan to attack a problem with an emphasis on gathering information and a reflection on their work before the completion of a task. Encourage children to think deeply and go beyond their first idea.

3. **Flexibility in Thinking**

   Parent Hint: Some children have difficulty considering alternative points of view or synthesizing several sources of information. They are more interested in knowing whether their answer is correct, rather than being challenged by the process of finding the answer. We may see children have the point of view that THEIR way is the only way to solve a problem or THEIR answer is the only correct answer. We need to encourage flexibility in thinking by asking children to state several ways of solving the same problem, then evaluate which course of action to take. We can ask a child to paraphrase another person's point of view or rationale. We can encourage flexible thinking by using phrases such as; "If you look at it another way. . ." "On the other hand. . ." "If you were someone else, how would you try to do this. . .?

4. **Metacognition: Awareness of Our Own Thinking**

   Parent Hint: This means to think about your thinking. Children can be unaware of their own thinking process while they are thinking. They lack a plan of action to solve a problem before they begin. Good thinkers can describe what is going on in their heads; they can describe their plan of action before they start. They can identify the information they have and need to have; they are aware of the sequence of their problem solving strategy and can tell you where they are in the sequence. They are willing to modify or change their strategy if needed. They can evaluate themselves at the end of the process. We can encourage metacognition by asking, "How are you solving that problem?" "What areas are your strength in solving this problem?" " In what areas do you need help in solving this problem?" "If you could solve this problem all over again what would you do differently?" When children are on the road to using metacognition, we hear them describing their thinking skills and strategies.

5. **Checking for Accuracy and Precision**

   Parent Hint: When activities and tasks are completed by the child, allow time for a discussion regarding how they feel about the quality of their product, and then provide positive reinforcement when they work on the precision and the clarity of the task. Help them with the process of editing after their initial ideas are in rough draft form.

6. **Questioning and Problem Solving**

   Parent Hint: Try to assist children in their questioning techniques. Some examples might be:
   - How or why did you come to that conclusion?
   - What will happen if . . .?
   - In what ways are these alike or different?
   - What are some alternative solutions?

7. **Drawing on past Knowledge and Applying It to New Solutions**

   Parent Hint: When your children need to solve a problem, ask them if this situation is similar to any other experience they have had in the past.

8. **Precision of Language and Thought**

   Parent Hint: One area of thinking that children seem to especially need help in is precision of language and thought. Children's (even adult's) language can be vague and imprecise. Children may describe attributes of objects or events as "weird," " awesome," " no big deal," " radical." Names of objects turn into "stuff," "junk," " this thing . . . or . . . that thing." Sentences become punctuated with "ya know," "er," " well . . ." Responses to questions can sound like "ahuh" or "uhuh." Children seem to love to use vague nouns and pronouns: "THEY told me so." "EVERYBODY has one." "NO ONE understands me." When asked to make a comparison, the response may be "This pop is BETTER, I like it MORE. . just BECAUSE." As parents and educators we need to encourage vocabulary development that will allow our children to clearly express their ideas and thinking. As children's language becomes more precise, we should hear them using appropriate descriptive words to distinguish attributes, using correct names, using analogies and providing criteria when describing why they think one product is better than another. We should ask our children to speak in complete sentences, provide evidence for their ideas, elaborate and clarify. We do not have to ask for a thesis every time a child speaks. But the next time your child asks to do something and says, "But EVERYONE is going!," at least ask for clarification of the meaning of EVERYONE!

9. **Wonderment, Inquisitiveness, Curiosity and the Enjoyment of Problem Solving – A Sense of Efficacy as a Thinker**

   Parent Hint: children should be encouraged to form an "I can" attitude and move toward an "I enjoy" feeling. It is most helpful for them to seek problems that they can solve for themselves . . .with limited parent or teacher assistance. Such statements as "Don't tell me the answer, I can figure it out by myself," will indicate growing autonomy. As children grow older, they will derive more pleasure from thinking. Their curiosity becomes stronger as their problems become more complex.