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When Jack's mom walked into her 9-year-old son's classroom, she had a good idea of what she was looking for in a teacher and in a classroom. Jack had been identified as gifted and talented at the age of 7. As a kindergartener, he was a nonstop reader, as well as a nonstop talker. His constant questioning and announcements of knowledge tried the patience of his teachers. Jack's mother, Layne, wanted a teacher for her son who would value creativity, uphold academic rigor, and inspire and embrace Jack's uniqueness. She wanted a classroom where questioning was encouraged and students were engaged in active learning. Layne wanted what educators call a "culture of thinking and dialogue" for her son.

Layne knew what a culture of thinking might look like in a classroom, but she hadn't thought

how to create a culture of thinking at home. Most parents of gifted children are aware of the benefit of having books and other hands-on learning materials available to their children. However, there is more involved in creating a thoughtful and intellectual learning environment at home than just books and science kits.

The way a group communicates, what it communicates, and what it values are all components of a culture of thinking. In The Thinking Classroom: Learning and Teaching in a Culture of Thinking, Tishman, Perkins, and Jay (1994) describe the process of establishing a classroom culture of thinking in four distinct ways; modeling, explanation, interaction, and feedback. The four methods can be modified to create an environment of thinking and inquiry in the home.

Developing Thinking Dispositions Using Modeling

Aristotle once said, "We are what we repeatedly do. Excellence, then, is not an act but a habit." What thinking behaviors or dispositions should parents model for their children?

A disposition is a person's prevailing tendency, mood, or inclination. Thinking dispositions are comprised of one's attitudes, emotions, and motivations that emerge when facing a situation that requires thinking (Costa, 2001; Tishman & Andrade, 1995). Often these dispositions are acquired when young people pay close attention to how their parents solve problems. Consciously or subconsciously, they're taking notes and watching their parents. Are their parents persistent or impulsive? Do they seek out multiple approaches? Are they creative and innovative? Do they question unknowns and seek out problems? These are just a few dispositions that make up successful thinkers. Modeling thinking dispositions provides an effective way for parents to cultivate these behaviors in their children (see Table 1).

Many children learn more from watching parents' behaviors than listening to their words. Observing a young child playing with a doll can illustrate this point. As a parent, Layne always verbally stressed the importance of acting in kind and caring ways. However, she was quite alarmed when she witnessed her 4-year-old daughter yelling and scolding her doll in an aggressive manner. She reflected back to her own parental behaviors when she was upset or frustrated with her children. It was her angry behaviors rather than her words of wisdom that stuck with her daughter.

Every parental action, either positive or negative, becomes stored in a

Table 1 Thinking Dispositions That Parents Can Experiment With at Home

| Thinking Disposition | Definition | Application |
|---|---|---|
| Seek multiple approaches to problems | Generating an abundance of ideas sheds light on problem from every direction. | Experiment with different ingredients when making dinner. Take new driving routes home. List all of the ways you can conserve energy. |
| Persistence | The ability to stay with a task through its completion. | When a recipe fails in the kitchen, make adjustments and try it again. Grow a vegetable garden. If a plant dies, plant a new one and make changes in the watering schedule. |
| Risk-Taking | Being courageous, not afraid to try something new, and willing to cope with failure. | Encourage your child to try a new sport, enter a writing competition, or invite a new friend over to your house. |
| Curiosity | A desire to investigate and learn. Having wonder and intrigue in the novel, strange, or unexpected. | Take apart an old toy and see its inner workings. Explore all of the museums in your town. Check out a wide spectrum of nonfiction books from the library. |

child's brain and added to his or her framework of life perceptions. Parental actions provide children with a roadmap for life. Verbal lectures or words of wisdom often lack the long-term efficacy of actions. Thinking dispositions are cultivated through social interaction. Some thinking dispositions to model include being clear and seeking precision, managing impulsivity, and acting in innovative or creative ways. Expressing oneself musically, verbally, artistically, or through writing allows children to see their parents challenge conventions and take risks. Children also have some of these dispositions or characteristics, however, they tend to focus or rely too heavily on just a few (Tishman et al., 1994). For example, a gifted child may be overly careful and organized at the expense of taking intellectual risks. She may have a large storehouse of knowledge and therefore only offer arguments in favor

of her own case rather than examining issues from multiple perspectives. Modeling fair mindedness, inquisitiveness, and flexibility starts with the parents. To borrow from Mahatma Gandhi, "Be the change you want to see in the world." In addition to parental modeling of thinking dispositions, children's and adolescent literature provide a wealth of examples of good reasoning or thinking. Fictional characters such as Atticus Finch in To Kill a Mockingbird and historical figures such as Martin Luther King Jr. model open-mindedness and determination.

Deep Explanations Using Tiered Questioning

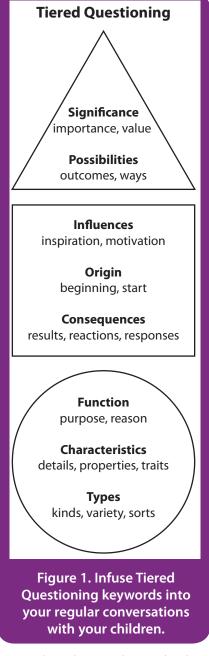
International Baccalaureate (IB) is an academically rigorous school model based on inquiry. When I went through my IB training, I was told that you could tell when you are in an exemplary classroom by the depth and complexity of the questions students asked. I think the same can be said for the intellectual quality of homes. Recently, experts have placed greater emphasis on the idea that thinking or questioning skills need to be taught explicitly (Anderson et al., 2001; Cotton, 1991). Before children can engage in good questioning, they need to know what good questioning is. How can parents and teachers demand higher level questioning without explicit tools? At a school I worked at in Oregon, we developed a simple cuing system called Tiered Questioning to help children ask questions that required depth and complexity. These questions demanded more of students than just telling them to ask "why" questions. As a parent of a 4- and 5-year-old, I know that elementary-aged students have the question of "why" mastered.

Students in Kindergarten through eighth grade at this school in Oregon systematically were taught Tiered Questioning keywords to assist them in posing their own high-level questions. The Tiered Questioning words were function, consequences, influences, origin, significance, and possibilities. These keywords were broken down into three levels of sophistication. For example, function was at the lowest level because it only requires students to list details. Influences and significance are progressively more complex questions necessitating that the student synthesize information (Hunkins, 1989; Walsh & Sattes, 2005). As students progressed throughout the school year, their mastery of these keywords improved, as did the quality of their discussions. Parents were encouraged to explain and use these keywords with their children throughout the day and especially during story time or readaloud time with children. Inquiry prompts are instrumental to opening new paths of thought. These few Tiered Questioning keywords allowed children to ask and learn at a higher level. Imagine the sophistication of questioning at the dinner table if children became proficient at using these keywords. A 10-year-old might ask his parents, "What's the significance of a particular bedtime?" or "What's the origin of our 8 p.m. bedtime?" These are simple examples of using the key words, however, gifted children with diverse expertise and interests can use these words to stimulate endless indepth conversations (see Figure 1).

Authentic Interactions With Choices and **Decision Making**

Good thinkers examine their choices and make sound decisions. Decision making often is best learned through real-life practice and repetition. Children can practice decision making at a young age when the stakes are small. Given the inspiration to make decisions, children need to be provided with choices so they can examine their options based on their own criteria. What will happen if I choose this? Should I do my homework after school or after dinner? Is this a good choice? Why? What will happen if I decide to do my homework after watching all of my favorite TV shows? Should I play on the soccer team or join the art club?

Younger children need to have a magnitude of challenging experiences before they reach their teenage years. Rimm (1996) emphasized that entrusting children with more choices and freedom as they mature to adolescence will help them feel trusted and empowered. Sending kids the message that they are able to make good choices and that parents trust their thinking ability will assist them in their teenage



years when they need to make decisions of greater consequence.

Domineering and overcontrolling parents often don't allow their gifted children to make significant or even minor decisions. Their children constantly are told what to do. They are told when to do homework, when and what chores to do, and who to play with. Overprotective parents shelter their children from the consequences

of decision making and act as their rescuers. When free from the direct management of their parents, these children are rank beginners in decision making. As an elementary school principal, I was amazed by the number of parents who would drive back to school to deliver a forgotten lunch, coat, or homework assignment. Situations such as these are perfect, low-stakes learning situations for a child. These parents robbed their children of the opportunity to learn the consequences of poor decision making by swooping in and rescuing them. Confidence and self-efficacy are both byproducts of decision making (Butler, Robinson, & Scanlan, 2005; Dreikurs & Soltz, 1990; Fay & Funk, 1995). When a child is comfortable and skilled in decision making, her belief in the ability to handle problems is enhanced. What messages are parents giving their children about their thinking ability when they prevent them from making decisions and protect them from consequences? They are really telling their child, "You don't know how to think. You can't make it without me. I have to do your thinking for you and tell you what to do."

Help your child become comfortable with making decisions by using everyday situations when they arise. When your child comes to you upset because his brother is "being mean" instead of solving the situation, ask your child "What are you going to do?" Give him some time to come up with some possible choices. You can assist him by asking, "Do you want to hear how some other kids solved this problem?" Give him the opportunity to work out the problem on his own, while providing large amounts of empathy and encouragement. Recognize low-stakes situations such these and take advantage of them.

Feedback Develops Metacognition in Daily Life

Metacognition is an individual's ability to monitor his or her own thinking. It is the inner conversation that takes place in your brain when you're confronted with a problem or new situation. Some common metacognitive skills include knowing when a subgoal has been obtained, detecting and addressing mistakes, and identifying the various types of resources available for assistance. Providing feedback is an effective way for parents to make children aware of their metacognition and to help them develop reflective thinking. Before assigning children tasks, parents can ask them what steps they will take first. If a child declares that something is too hard or too difficult, ask her to figure out what information or skills are needed to complete the task. For example, when I dealt with discipline issues at school or at home, I would ask the child, "How are you going to make this situation right?" This approach inevitably lends itself to students developing previously unknown skills such as phoning a parent or writing a letter. Often children's thinking stalls when they are confronted with these new tasks. Asking them to ponder what information they are missing can guide their thought process.

Good teaching in a math classroom provides a classic example of metacognition. Exemplary math teachers require students to explain how they reached a solution. The students will verbally or in writing review the mental steps they engaged in to solve the problem. Parents can follow the same process at home. When my daughter was first learning to read, she would come home from school and tell me about a new word she had learned. I would ask, "How did

you learn that new word?" She would explain how she would look at the picture on the page and then sound out the word. Children, like adults, solve problems every day. Asking children to explain their successes not only improves their metacognitive skills, but also develops their self-concept (Fay & Funk, 1995).

A think-aloud is a metacognitive strategy that makes a child's cognitive processes visible (Wilhelm, 2001). Think-alouds ask children to make predictions, ask questions, and visualize outcomes. Teachers and parents often utilize think-alouds when reading with children. They might ask questions such as, "Why did the boy leave the monster island?" or "What do you think he will do next?" Thinkalouds can provide parents with an opportunity to assess the metacognitive thinking of their children during everyday activities. A parent can model a think-aloud by saying, "Boy, this is a lot of trash to take out. I'd better give myself plenty of time to take care of it." A powerful way to improve a child's metacognition is to ask reflective questions. When a child is completing homework ask, "Can you summarize what you've been working on?" "What do you think will happen next?" "How does what you are doing relate to your life?" Thoughtful questions will help children evaluate their self-awareness and monitor their own thinking.

Developing a new culture anywhere is difficult and making changes in the home is no exception. Allowing children to make independent decisions and accepting their choices is a challenge for many parents. There will be times when parents give in to their overprotective rescuing or drill sergeant lecturing (Fay & Funk, 1995). When stress levels rise and time is short, they won't always explain their thinking process to their children or take the time to reflect on mental actions with them. Successful

thinking dispositions can give way to fight or flight responses. However, if parents are cognizant of these four strategies (modeling, explaining, interaction, and feedback) they can make the incremental steps that will create an insightful and thoughtful home environment. GCT

Suggested Resources

Although there is not any one book that encompasses all of the concepts mentioned in this article, below are some books that individually examine the ideas for creating a culture of thinking and dialogue at home.

Burns, M. (1976). The book of think: Or how to solve a problem twice your size. Covelo, CA: Yolla Bolly Press.

This fun book contains puzzles, riddles, and problems designed to develop critical and creative thinking. It is written for elementary-aged children and contains numerous inviting and interesting illustrations.

Cline, F. W., & Fay, J. (2006). Parenting with love and logic. Colorado Springs, CO: Pinon Press.

Love and Logic is a parenting method that is used in homes and schools across the nation. It is well suited for parenting gifted children because of its theory of allowing children to become decision makers and problem solvers.

De Bono, E. (1994). Teach your child how to think. New York: Penguin Books.

Dr. Edward De Bono stresses the importance of creative thinking. This book is a combination of theory and practice. It covers the philosophy of thinking, as well as provides numerous thinking exercises and activities.

Eberle, B. (1997). Scamper. Waco, TX: Prufrock Press.

Scamper is a guided thinking technique that allows for children to think in new and innovative ways. The activities in this book assist children in developing thinking dispositions such as being creative and seeking multiple perspectives.

Halsted, J. W. (2002). Some of my best friends are books: Guiding gifted readers from pre-school to high school. Scottsdale, AZ: Great Potential Press.

This book provides parents with a comprehensive index of more than 100 books that are appropriate for gifted readers. The suggested books afford children an opportunity to question and inquire about big ideas using the Tiered Questioning model.

Lewis, B. A., Espeland, P., & Pernu, P. (1998). The kid's guide to social action: How to solve the social problems you choose—And turn creative thinking into positive action. Minneapolis, MN: Free Spirit.

This book allows children to apply their thinking and dialogue skills in real-world situations. It provides specific ways for children to participate in social problems at the local, state, and national level.

White, D. A. (2001). Philosophy for kids: 40 fun questions that help you wonder about everything! Waco, TX: Prufrock Press.

If you are looking for a book that will improve the depth and complexity of discussions at the dinner table, this is the book. This book, designed for children ages 10 and up, investigates fundamental philosophical questions regarding values, knowledge, reality, and critical thinking.

References

Anderson, L. W., Krathwohl, D. R., Airasian, P. W., Cruikshank, K. A., Mayer, R. E., Pintrich, P. R., et al. (Eds.). (2001). A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives. New York: Addison Wesley Longman.

Butler, I., Robinson, M., & Scanlan, L. (2005). Children and decision-making. London: National Children's Bureau.

Costa, A. L. (Ed). (2001). Developing minds: A resource book for teaching thinking. Alexandria, VA: Association for Supervision and Curriculum Development.

Cotton, K. (1991). Close-Up #11: Teaching thinking skills. Retrieved Oct 25, 2006, from http://www.nwrel.org/ scpd/sirs/6/cu11.html

Dreikurs, R., & Soltz, V. (1990). Children: The challenge. New York: Plume Printing.

Fay, J., & Funk, J. (1995). Teaching with love and logic: Taking control of the classroom. Golden, CO: The Love and Logic Press.

Hunkins, F. (1989). Teaching thinking through effective questioning. Norwood, MA: Christopher-Gordon.

Rimm, S. (1996). How to parent so children will learn. New York: Three Rivers Press

Tishman, S., & Andrade, A. (1995). Dispositions: A review of current theories, practices, and issues (ACCTION Report #1). Washington, DC: ACCTION.

Tishman, S., Perkins, D. N., & Jay, E. (1994). The thinking classroom: Learning and teaching in a culture of thinking. Upper Saddle River, NJ: Pearson.

Walsh, J. A., & Sattes, B. D. (2005). Quality questioning: Research-based practice to engage every learner. Thousand Oaks, CA: Corwin Press.

Wilhelm, J. D. (2001). Think-alouds boost reading comprehension. Instructor, 111, 26-28.