



So What's All the Drama About? The Impact of Brain Development on the Lives of 7th Graders

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As a seventh grade teacher and advisor in a K-8 independent girls' school, I have often been intrigued by the amount of drama that surfaces in the lives of seventh graders. (I use the word "drama" because at times it seems that everyday situations take on monumental proportions.) This drama occurs not only in their academic world, but also in their personal relationships. Seventh graders are transitioning from the world of concrete thinking, to one of more abstract thought. I suspect that this shift in thinking skills not only impacts them academically, but affects their friendships as well.

One of the recurring topics in the seventh grade is how the type of things the girls are learning has changed from the sixth grade. The nature of schoolwork shifts dramatically, taking on a more abstract quality. Seventh grade students are rarely given simple worksheets, or questions that can be answered with a single sentence taken from the textbook, as they were used to doing in the lower grades. Assignments require students to analyze stories, write reactions, find themes, make deductions. In Math, for example, teachers continue to reinforce the basics, but many students begin to study Pre-Algebra and Algebra, which require more abstract problem solving. In English, students are not only asked what happened in a story, but why they think it happened, and what it means.

Every year I have many discussions with my advisory about class work and homework. Students become frustrated when they don't understand the concepts presented, or the questions posed in class. Homework-wise, students now find that the tried and true work habits they have developed no longer work. In lower school, many of my students would do a week's worth of homework on Sunday night so they could have more free time during the week. That's not possible in the seventh grade. Class discussion and explanation are often necessary before students can begin to do their homework. As the seventh grade year progresses, the students slowly adjust to the workload and the changing nature of learning. Their teachers work with them on developing new strategies for studying, analyzing, writing, and approaching all the academic pieces that make up the seventh grade. In advisory, for example, we sometimes map out the week, or maybe two weeks of work if there are long-term projects, and talk about what work has priority on various nights, how they can break up the work so it's not overwhelming, and how to keep up with reading and studying while looking ahead to completing a major project due next week.

I began to wonder whether this shift in the nature of learning might also affect the personal lives of a seventh grader. I decided that I needed to find out more about this developmental transformation before I could see if there might be a connection.

During my research, I discovered that a lot of work has been done regarding the brain and how its development affects children academically and emotionally. Much of the research to date still seems to refer to the work done by Jean Piaget, a Swiss psychologist who, in the 1920's, began his work related to the cognitive development of the child. Piaget identified various stages that individuals go through as they work their way up the developmental ladder to the highest stage that he calls the "Formal Operational

Stage," which is basically "adult thinking." According to Piaget, children generally begin to transition into this stage around the age of 12 (seventh grade) and the development continues into adulthood. Before that time, the frontal lobes of the brain are not developed enough to handle more abstract thinking and analytical skills.

Piaget theorized that children from the ages of 7-11 are in the "Concrete Operational Stage." In this phase, children need to refer to personal experience. They are very literal, thinking about actual physical objects or events and how they relate to their own lives. Children in this phase tend to be egocentric and often bring the topic back to themselves. They are comfortable memorizing facts, and tend to see and focus on only one solution to a problem. Academically, students can take in information, but aren't as easily able to reflect deeply about it or to generalize from one situation to another.

Last Fall, for example, my advisory went on a three day camping trip with the rest of the seventh grade. Our outdoor education instructor had the students involved in a simulated archeological dig. First, the students participated in a treasure hunt to find written historical information about the site, a mill house in the Calistoga area. They then went to the "dig site" to search for actual artifacts that the instructors had found and reburied on the site. After the students retrieved the artifacts, they were supposed to use them to create a skit that told a story of the people who had lived in the area at that time. The activity went fine as long as the digging (the "concrete" activity) continued. Once the students had to discuss the culture and, using the articles they found, create a skit depicting life at that time, the activity became painfully frustrating for them. Students would handle the artifacts, dig aimlessly in the dirt, talk about what they wanted to do during their free time, anything but discuss possible cultural scenarios regarding the site. When a student would attempt to present a skit idea, her idea was met with silence and downcast eyes. The instructor mentioned something to me about going back up to the lodge after the activity, and all of a sudden a couple of the students yelled out, "We're going back up to the lodge now?!!!" They could not focus on the activity, but when the instructor made an offhand comment about returning to the lodge, their ears perked up and they were ready to get on with their free time. It was only when the two-minute warning was given that students kicked into gear and came up with a skit idea. Most skits showed little creativity or thought. What started as a fun activity due to its concrete nature, became tedious as higher-order thinking skills were required. I don't think the girls were at the developmental stage where they could brainstorm and come up with potential scenarios. They were unable to expand upon the readings, and basically repeated what they had learned in the informational handouts.

This concrete approach to the world, so evident in my advisees' reactions to the archeology activity, continues until around the age of 12 or so. At that time the child's mind starts to work on a higher level, Piaget's "Formal Operational Phase." This shift is contingent on a physical component, the development of the frontal lobes of the brain. This newly developed part of the brain doesn't automatically kick into action, but can be triggered by various factors such as the type of academics required of students, the practice they get with problem solving at home or with their friends.

"Other factors may include :

- 1) an inherited potential and timetable
- 2) the quality of previous brain development
- 3) cultural expectations
- 4) the amount and type of stimulation given by school and home
- 5) the child's own emotional strength and motivation to make sense out of new information and practice skills." (Healy 92)

This part of the brain enables skills such as taking initiative, analyzing the steps of a problem, generalizing from one situation to another, planning ahead, and discussing various solutions. As development continues, children start to see the implications of their actions and can brainstorm more potential solutions to problems.

In my advisory, for example, we discuss ways students can approach a problem such as talking to a teacher to discuss grades, to disagree, to lodge a complaint, or to ask for help. We role-play various conversations

and how they might go. Seventh graders, very direct and literal (especially at the beginning of the year,) usually start by saying, “Ms. Haller, I think you’ve made a mistake.” (Or “You’re unfair.”, “I think what we’re studying is boring.”, “I think you’re wrong.”) I usually ask questions about how a teacher, or anyone for that matter, might react to that approach or wording, and we discuss how the choice of words and body language can sometimes produce a less than positive reaction. We talk about other ways to address the same issues that might produce a more satisfactory conversation and outcome. As the year goes on, students get better at finding other ways to approach situations and become effective advocates for themselves and others. Based on what is happening developmentally, I think students improve in this area as they become able to look outside themselves and see the impact they can have on others.

With the onset of this type of abstract thinking, students begin to depend less on the visual, concrete world and how it affects them. They begin to look outside themselves and their physical world, to see that other people may have different viewpoints and everything is not as simple as they once thought. As I mentioned, the seventh graders are asked to use those kinds of skills academically. In addition, as part of our seventh grade program, we take the seventh grade on a week-long trip to Yosemite to participate in the Yosemite Institute program. There, students are responsible for such things as getting to our meeting place on time, fully prepared for a day of hiking, and keeping track of cabin mates and cabin keys. When a student locks her cabin and takes off with the key, inadvertently leaving her cabin mate locked out, she quickly learns that her actions affect others. Students handle these responsibilities with varying degrees of success, but these activities do help students practice using more abstract thinking skills such as thinking ahead, reasoning and problem solving.

Anyone who has spent any time around seventh graders knows that friendships play a key role in their lives. In his book, *Field Guide to the American Teenager*, Mike Riera states “If children, roughly eleven years or younger were asked to whom they would turn if they had a problem, most would respond, in order, parents, teachers and friends. If a teenager were asked the same question, the order would be completely reversed – friends, teachers, and parents.” (Riera 149) Given the prominence of friendships in a 12-year old’s life, I suspect that they may also be impacted by this shift in the thinking process. In my advisory, I have noticed that as the year progresses, discussion topics and the depth of our discussions change. If this happens in advisory, it is likely to happen among friends too. In addition, the types of activities friends enjoy may change. Seventh grade students have told me that when they were younger (6th grade and below), much of their time with friends centered around actual events such as play dates, skating, etc. They say that now they don’t necessarily make solid “plans” other than just getting together, or possibly connecting online or on the phone. The level of intimacy changes. They talk about events or conflicts at school, teachers, actors, musicians, books, music, and, of course, their “crushes.” I suspect that now they don’t require “concrete” events to feel a connection with each other. A seventh grade parent mentioned that she has noticed that her daughter and her friends now discuss movies, celebrities, or just “hang out” and listen to music. They are not just interested in themselves, but have branched out and find it intriguing to discuss others. Perhaps this is a function of where they are developmentally in the concrete vs. abstract thinking puzzle.

Unfortunately this development isn't necessarily linear, and these fluctuations can create the “drama” we often see in school. Children can be developmentally ready to reach into the abstract in one area, but not so ready in other arenas. In addition, behavior can fluctuate daily. One day students may need to retreat to the “concrete” to get a break from their newly complex world. Therefore yesterday’s events may be perceived differently today. A parent told me a story about how her daughter got into a huge argument with some longtime friends. When she asked her daughter what the argument was about, she said it was hard to say, and she wasn’t really sure anymore. I think the developmental shift may be part of the reason why it was unclear. One day the cause of a conflict seems clear and defined. The next day, in a more concrete moment, the reason becomes fuzzy, although the feelings of discomfort and hurt remain. Often girls avoid dealing with the conflicts, and hope they will just go away. Sometimes one of the girls tries to express her frustration to her friend(s). I believe this can work if both parties are at the same developmental place (abstract vs. concrete) in time. It can become a problem in the friendship if a less abstract child can't comprehend the

problem, can't see how her behavior may contribute to the problem and therefore can't negotiate a compromise.

Another parent mentioned that the stories and emotions her daughter shares about school events seem to change daily. One day her daughter was distraught about a conversation she had with a teacher. When her mother brought it up a few days later to see how her daughter was feeling about it, her daughter denied the importance of the confrontation and denied ever having the feelings she shared on that day. I don't think her daughter was lying. I think she viewed it differently, depending on where she was developmentally on a particular day.

In relating to friends, the shift from concrete to abstract thinking may not play out in the same way for every child. I have observed abstract-thinking students struggle with longtime friends who want to remain a small group, and want to keep the friendship as it has always been. It is a painful process. The more abstract-thinking girl wants to expand her circle of friends, yet she doesn't want to hurt her friend's feelings. A girl who is still steeped in concrete thinking may feel threatened and confused when her longtime friend suggests venturing into new friendship territory. She may be hurt because she is no longer the center of attention.

On the other hand, it can also be comforting to have an old friend as one enters the new world of the abstract. On class trips, I have noticed that some friends insist on sitting together on the bus ride to wherever we're going. Once we arrive at our destination, the same two friends may separate and go their own way, and then reunite on the bus ride home. As these seventh graders begin to try on new behavior and thought processes, they still need to feel safe and retreat to the familiar world of the "concrete," symbolized by their longtime friends. This is similar to young children who go to the park with their mom, dad or caretaker. They may venture off to play on the swings or the slide with new friends, but they return periodically to get a hug. It's a touchstone that gives them confidence to try new things, knowing that security and safety is right there, sitting on the park bench. In the case of the seventh grader, her touchstone is sitting beside her on the bus listening to the same CD as she is. Old friends can offer a respite from a scary, yet exciting new world where the rules of engagement are changing.

As children develop and begin to see more of the bigger picture, they may also become more aware and intolerant of behavior that they now consider immature or inappropriate. Parents may see this as their children become ultra-critical of their family. This can also cause conflict in friendships. A couple of my advisees mentioned that this year they notice more behavior that they consider "annoying." They say it's because now they can "see how the person really is." I wonder if they now see this behavior because they are not as self-focused and are beginning to observe more in the world. A counselor at another school related a story to me in which two longtime friends began to have relationship issues in the seventh grade. The problem, according to one of the girls, was that her friend's behavior was "getting on her nerves," as it never had before. This student needed space to develop new friendships. Her somewhat clingy friend could only keep repeating that she wanted just the two of them to remain friends. That behavior was only pushing her more "abstract" friend farther away. Perhaps these two friends were on different developmental paths at that time.

When I spoke with our school counselor about this topic, she noted that the ability to "abstract," as she said, allows and encourages growth, and may bring out or help develop different qualities in a student. As students begin to see the bigger picture and expand their ideas, she feels they also begin a journey toward independence and start to have more of a sense of self. They begin to become more self-reflective, which impacts the way they make decisions and develop values. This can affect whom they choose for friends. And as students begin to see more than one problem solving option, negotiation and compromise take on a new meaning. This may impact the way students deal with tension and conflict resolution.

During those times of tension, conflict and drama among students, immersing students in a concrete activity seems to help. I mentioned that my school's seventh grade goes on a three-day camping trip every October. Without fail, a friendship conflict develops the last night, the night of the bonfire. Prior to the bonfire itself,

each advisory creates a skit revolving around some aspect of the trip. What appears to happen is that one friend gets angry because the advisory group, or one of her friends in the group, ignores her skit idea. As all of the advisories regroup for the skit performances, the student with the hurt feelings stands on the fringe of the entire group, looking rejected, sullen and often crying. She feels threatened, so she retreats and hopes for sympathy from others. This continues as the advisories perform the skits. When the skits are over and it's time to make s'mores, all conflict ends and everything is forgiven. I have observed this scene over and over. I wonder if it too is related to some members of the advisory group being more abstract, being able to listen to and accept others' ideas. The playing field evens again as students begin to roast marshmallows.

Food is also the great equalizer at school. In an advisory that is not connecting, not listening to each other and just having trouble accepting each other, my colleagues and I have noticed that organizing a potluck, or even just having lunch together as an advisory, can help.

Sometimes, when more than food is called for, I've found that it's best to be direct. When talking to a seventh grader regarding a problem, whether it be about grades, homework, friendships or something at home, determining where that student is developmentally often helps me to help her, and can eliminate lots of frustration on my part. It's been my experience that the more the student responds, "I don't know," to my questions, the more concrete she tends to be. For example, a student told me a story about why she had been unable to do her homework. I called her home for another reason, and inadvertently discovered that the elaborate story she had created as a reason for not doing her work had never happened. When I confronted the student, our conversation went something like this.

Me: "Why didn't you just tell me you didn't do the homework?"

Student: "I don't know."

Me: "Didn't you think I'd figure it out?"

Student: "I don't know."

Me: "Could you tell me about your thought process when you came up with the story?"

Student: "No, I guess I didn't think it through that well."

Well, clearly that conversation didn't go too well. I didn't really know where to go from there, but for some reason I started to ask more concrete questions.

Me: "What did you think would happen to you if you didn't do your homework?"

Student: "I'd get in trouble."

Me: "What does it mean to get in trouble?"

Student: "I'd get a 'notice'." (Our school's disciplinary form.)

Me: "What is the worst thing about getting a 'notice?'"

Student: "I'd get in trouble at home."

Etc.

It was much easier to have this conversation and to come to some kind of understanding when we were both on the same "concrete" level. It was a good lesson for me, and I've used that strategy over and over since that time. It has also made me believe that we, as advisors, need to facilitate more activities that will help our advisees practice abstract thinking. In my reading it was noted that certain types of games and activities help children exercise their brains in order to reach for more advanced thinking skills. "Playing games of strategy which require weighing alternatives, planning moves ahead, or viewing a situation from the opponent's perspective can help." (Healy 83) I imagine that advisory discussions that involve hypothesizing and problem solving can also trigger those frontal lobes of the brain and help students practice abstract thinking skills.

I have taught grades 3-12 in public schools, private schools, co-ed schools and now in an all-girls school. I have to say that I find seventh graders to be the most challenging students to understand. That being said, I really enjoy being with seventh graders. One day we can talk about how to achieve world peace, and the

next day we are discussing why it would be fun to go to Hogwarts like Harry Potter. I had never thought about it before, but I guess this range of conversation relates back to the concrete vs. abstract puzzle too.

The more I have learned about the brain development taking place in 7th graders, the more it has helped me look at them and their daily struggles in a different way. I do not believe the shift from concrete to abstract thinking alone explains all behaviors of seventh graders. In addition to fluctuating hormone levels, students are undergoing many other biological and physical changes which impact them greatly. And to that, add the shifting nature of schoolwork and friendships.

So what's all the drama about? It's about how a 12-year old deals with all the changes happening to her at the same time. It's about how all these changing pieces combine and interact on a particular day. And each day, this combination may manifest itself in a different way.

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