

GIFTED CHILDREN and the DETAILED MIND

Charles H. Townes, physicist and Nobel Laureate, once noted, “If you think of intelligence as knowing a lot of things, of responding quickly and brightly, you can recognize that. But if you think of intelligence as someone who is creative, someone who can think new things and deeper thoughts, that’s not always easy to recognize. People have different characteristics.” (2001)

Advocacy may be viewed as being able to communicate an understanding in such a way so that others may then provide help, assistance, support, etc. to individuals that will aid them in their success. Advocacy may be viewed from a national, regional, state, local, and individual context. It is to the individual level that this paper is devoted.

Clearly, gifted children have a wide range of different characteristics despite a somewhat common assumption that gifted children are all the same. That is, gifted children are quick and able to understand all subject matter and excel in everything academic. Further, gifted children are assumed to be able to do so with ease and engage easily with their peers as well as their teachers. These are children who are observed to raise their hands quickly in class, complete assigned subject matter rapidly and excel at projects, whether short term or long term. Such children thus become the standard by which many in the world begin to define the gifted child, and when another child presents himself in a manner that is contrary to this popular myth, confusion develops and questions arise.

Another somewhat popular myth among educators and those who are charged with deciding the funding for educational services is that gifted children will always succeed and therefore require fewer services than other children with other types of needs and that the gifted do not need any types of accommodation in order to help them succeed. Why

would they? “They’re gifted!”

Such “myths” serve to provide reasons and/or “excuses” for not providing funding, services, and/or accommodations for gifted children. Thus, if the bar is set at a level that only recognizes the gifted child who is also the high achieving, quick thinking, and highly motivated individual, then fewer services need to be created and/or provided for the gifted population. At the extreme are such school districts which “set the bar” at the 99th percentile in all assessed measures in order to be included in a “gifted program.”

However, the above myths clearly fail to recognize the uniqueness of gifted children. There are a multitude of different organizing schemas and conceptual structures that serve to explain our understanding of gifted children. Lovecky (1992) focused on the unique and oftentimes very disparate social and emotional aspects of gifted children. He also concentrated on divergent thinking, excitabilities, sensitivities, and perceptiveness among other things in his discussion of the importance of understanding gifted children.

Dabrowski (1964, 1977) provided the gifted community with a clear understanding of many gifted children’s over-excitabilities and extreme sensitivities which serve to explain their functioning to others in a way that provides empathy and a clarification of understanding of gifted children.

Meckstroth (1998) expanded Dabrowski’s thinking in her effort to provide an understanding of the complexities of gifted children and clearly explained how an understanding of such complexities aids in developing both the identification of and services for gifted children.

PERCEPTUAL ORIENTATION

Perceptual orientation is yet another dimension by which to organize and develop a clear understanding of how individual gifted children function in their daily lives. Perceptual orientation has been studied by a wide range of cognitive psychologists throughout the history of psychology. However, there is a particular area of perceptual orientation that the author, in working with gifted children over the past thirty years, has found to aid significantly in not only developing an understanding of specific gifted children but also in communicating that understanding to parents as well as teachers -- thereby allowing for the identification, advocacy, and development of accommodations for gifted children.

One can approach any task from the extreme position of an entirely global viewpoint or an entirely detailed viewpoint. The majority of people have some type of balance in their perceptual fields between perceiving things globally and in a detailed manner. Such flexibility allows for a quick grasp of a situation and/or task and placing the details together in a methodical manner so that an integrated and comprehensive conclusion can be reached.

Others are unable to quickly move from either a global to a detailed perceptual understanding or from a detailed to a global perceptual understanding. Such people tend to rely upon their strengths in a specific perceptual style to compensate for their relative weakness in another area. As long as such compensatory efforts are successful, the individuals utilizing them find success and pleasure in their work.

The idea of having a balance of different types of perceptual organization styles is no different than our understanding of other distinct characteristics and functions of the human being. There are different personality types, a continuum of developmental defenses, coping mechanisms, and social abilities. Each area of functioning in the human

being typically lies on some type of continuum where the balance between differing weights on the continuum serves to provide a relative balance and success in our lives. Indeed, it is when there is a preponderance of a modality of functioning on a single side of a continuum that people experience impairments and dysfunctions in their work efforts and relationships.

This paper serves to specifically focus on, and offers an understanding of, those gifted children who utilize a detailed perceptual organizing approach. It is clear that such a detailed perceptual orientation impacts academic processing, problem solving, reading comprehension, and all academic areas as well as learning in general, test taking, social interactions, social awareness, judgment, decision making, and also the length of time it takes to learn something, understand, and problem solve. Further, this type of detailed perceptual orientation can thus impact self-esteem, emotional functioning, and the experience of life in general.

What is meant by the term “detailed perceptual orientation”? A detailed perceptual orientation is simply defined as an approach to understanding that is based upon a gathering of details of a fact or subject matter and methodically organizing them into a global perception that lends itself to understanding. Some children may focus on larger details while others may focus on tiny and often miniscule details of a problem solving task.

There are two primary ways of assessing a child’s perceptual orientation. One is simply by observation. When one observes a gifted child, or any child, it is quickly seen how the drama of a child’s play evolves. Is there an organizing factor that serves to guide the child’s actions and thinking toward a perceived goal, or does the child appear to be discovering a series of details which have no observable organizing factor but yet which

eventuate into a final product?

Another way of assessing a child's perceptual organization is through psychological testing. There are multiple opportunities within a psychological evaluation to clearly observe how a child problem solves and develops an understanding of the task in front of him and how he works toward the completion of such tasks.

One such procedure is the use of puzzles with children. When observing a child putting puzzles together, it is quickly noted which perceptual style the child prefers. For example, in putting together a six part puzzle of a car, the global thinking child will, when the pieces are placed in front of him, quickly formulate the idea that it is a car and typically will place the six pieces of the puzzle together in an organized fashion in approximately ten seconds or less.

Detail oriented children, on the other hand, will pick up two random pieces and try to place the lines and curves together in order to make a "fit". If, in fact, the two pieces fit together, the methodical thinking detail oriented child will then take each remaining piece in order and work with it until it fit's the lines and curves of what he is trying to build. Children with weak methodical thinking and organizing skills will typically put the two originally picked pieces back on the table, pick up two other random pieces, and attempt to fit the lines and curves of those pieces together relatively quickly. If they, in fact, fit, it is a beautiful thing, and they will build the car picking up random pieces from that point in time. Both types of detail oriented children may have five or even six pieces placed together correctly before they "discover" with excitement, "It's a car!"

It is important to note that all children with at least an average IQ place the car puzzle together correctly. However, what is also clear is that the detail oriented children need a

significantly longer period of time to complete the task than their global thinking counterparts. This does not necessarily mean that that one child is brighter than another. It simply means that they approach the problem solving task in two different ways.

However simple the above observation appears, there are significant ramifications for children regarding their identification as gifted children as well as their performance in a wide range of areas. If educators and evaluators are looking for the quick thinking child who completes tasks in a quick manner as a requirement of being “gifted” then there clearly is a range of children who will never be considered. While one would suggest that this would never happen, it is only necessary to look at early elementary years in which speed tests are often given to children in different subject areas.

Clearly speed tests such as the “mad minute” for math have been used extensively for children in elementary schools not only to assess but to teach children addition, subtraction, multiplication, and division facts. Despite the wide usage of such tests, there is no clear scientific evidence that shows any correlation between success on such tests and later success in college and/or life. The danger for many gifted children who are not quick thinkers and who approach these tests from a detailed conceptual orientation is that they, in fact, never finish the test in the time allotted. They, in fact, often take an approach to the test of checking and rechecking their answers to insure they’re correct, or they approach it with a perfectionistic approach in which the numbers must be formed correctly and everything placed in perfect alignment or combinations of these approaches.

The end result is that such children perform poorly on these tests. They typically know the answers but are unable to get them on paper quickly enough to beat the stopwatch. As an adult one can shrug off such observations and say they are of little importance. However, the gifted child (who clearly knows the answer to each of the questions

involved but is unable to work at a pace fast enough to succeed at a high level) risks not being identified as gifted. Clearly, from the child's perception, as he looks around the room and sees others who don't care about the perfectionistic standards that he himself struggles with and who have succeeded in beating the clock, may begin to doubt himself and assess himself as being less bright or less competent than his peers.

Reported remarks made by teachers gathered from parents seen over many years is that their child "does not appear gifted compared to the other children in the classroom" are often the result of assessments made from speed tests as well as the results of a wide range of standardized tests on which gifted children will often take a detailed approach that does not serve them well in terms of completing something in a timely manner. Thus, a seemingly unimportant "little test" can set the stage for a gifted child's self-perception as well as a view of that child by the external world which holds the power to include or exclude him from gifted services.

Timed tests clearly are not the only areas which are negatively impacted by a detailed cognitive orientation. Another area that is also negatively impacted at times is reading comprehension. It is not that these children cannot read or understand what they're reading. However, children with a very detailed cognitive orientation may approach reading a book as a collection of facts. They will read each word in the book and oftentimes read the book more than once. However, when they are asked what the book is about or what the author is trying to communicate, they may come back with a series of "facts" that they recall from their reading. The difficulty is that such facts may not be in any organized format but rather a disparate collection of facts that the child found "interesting" as he read through the book. However, what he has difficulty with is communicating and understanding the general story or the message of the book.

Such thinking also negatively impacts test taking in a wide range of subjects. That is, the child will study for a test and will oftentimes put more work into studying for it than his peers. Clearly it is not a lack of work on his part but rather a difficulty with how the studying was done. Following his study, the child feels confident about what he has studied and when asked by a parent if he's ready for the test, he will most often say he is. However, the child then takes the test and performs poorly and possibly fails. Upon review of what happened it is oftentimes discovered that while the child clearly studied and extended a significant effort to learn the material, he learned it in a very detailed manner as a collection of specific facts stated in a very specific way. Sadly, the test format was not presented in the exact same detailed manner that the child spent hours learning. A word had been changed. The structure of a sentence had been changed. An example had been replaced by a different one. Such "changes" seemed foreign to the child when he saw them on the test. As such, the detailed thinker may perform poorly on a test he felt hopeful and even confident about.

So, it is not only a matter of time (and clearly some gifted children do require extended periods of time in order to complete tasks in their detailed way) it is also a matter of helping such children learn how to read and study from a more global perspective as well as how to build a perspective which allows them to recognize ideas that perhaps others think are important but that they, in fact, may disregard when they take notes or study.

Writing is yet another area with which gifted children with a detailed perceptual orientation struggle. Some of the struggles with reading comprehension clearly apply to the effort of having to write a paper. That is, children with a detailed perceptual orientation have a plethora of ideas about a subject. They are often excited about a range of ideas, even contradictory ideas, about a project or paper. They struggle however with developing a comprehensive model of what the paper is going to communicate. Thus,

they begin writing about a detail and discover an excitement about that detail. They then spend a significant amount of time writing about that specific detail and then may associate that to another detail while writing about the first one and then explore the second detail at some length and follow that with exploration into yet another detail with the equal interest and excitement afforded the first detail. The difficulty is that the child may end up with several pages written with no end in sight and a lack of understanding of an overall theme of where the paper is going to end. An inherent difficulty for such children is that writing a paper then becomes an onerous task in which they feel a lack of success and frustration which leads to a displeasure in writing and may therefore weaken an ability to communicate in written form.

Other children with detailed perceptual orientations understand quickly their own style and their propensity for engaging in such detailed thinking when writing a paper. Thus, even by second and third grade such children begin to “dummy down” their papers. That is, they perceive that to write the paper they have in mind would require so much work it simply would be easier to condense it down into a few simple sentences, hand it in, and be done with it. Thus, the danger is that the teacher receives a paper that is either a shell of the ideas that the child has or possibly even less than that. The teacher then sees the fragment of the written work and the possibility of such children being identified as gifted slips farther and farther away.

Another area of potential difficulty and danger of a detailed perceptual orientation for a gifted child is in the area of social interaction. That is, social interactions generally demand a capacity for a quick, global assessment of a situation to identify if it is one that invites comment, one that invites interaction, one that is serious, or one that is humorous among other things. Clearly, it requires a quick assessment in a social situation to understand whether other children are teasing in a pleasant way or teasing in a

not-so-pleasant way.

The challenge for gifted children who have a very detailed perceptual orientation is that they become focused on insignificant details in social interactions. Thus, they will get caught up in a look someone gives them and/or a specific tone used and/or a specific word said, and while they are “thinking deeply” about such matters, the rest of the world moves on, and those they are trying to be connected to have moved on to a different situation or topic. Thus, by the time the child organizes a comment or observation of his own and offers it to the group, he is often seen as mistimed and/or “weird.” The result is oftentimes rejection and/or avoidance by others which negatively impacts the child’s social status as well as his own self-concept.

Such children often have significant difficulties placing things “in perspective.” Thus, they may overreact to a perception of a situation that others may view as insignificant, or they may not respond to situations that others perceive as significant and simply miss the mark in their comments. Such functioning may be seen in children who have a high level of energy or a low level of energy. It may be seen in children who have a high level of frustration tolerance and in children who have a very low threshold for frustration. The resulting reactions of such children often depend upon their capacities in these other areas, but again such reactions are initially fueled by their detailed perceptual orientation. Such children often need help in developing “roadmaps” and coping schemas that lend themselves to helping them place things in a common perspective and move more freely in their social interactions.

As can be seen, a detailed perceptual orientation can significantly impact the gifted child’s speed of task completion, reading comprehension, writing skills, intellectual processing, and sense of self as well as social functioning. It is important to understand

that when such a detailed perceptual orientation is coupled with significant perfectionistic strivings (which are not uncommon with gifted children) significant challenges can arise. In such cases, the internal perfectionistic demands override any external requirements of completing academic work in an expedient manner, and it must be understood that it is the internal perfectionistic demands of gifted children which require satisfaction rather than the demands of the external world. Thus, such children may be seen as slow in their work completion, and without the teacher having a relationship that is based upon an in-depth understanding of the internal workings of the children they teach, they are most likely not to view such children as having gifted characteristics and/or as children who would profit from inclusion in gifted education. Of course, this also raises a concern as to how much gifted education in this country is based simply upon acceleration and assignment of increasing amounts of work rather than enrichment opportunities which allow for the quiet explorations of the gifted mind.

Again, detailed perceptions will be managed and clearly be significantly impacted by the individual's capacity for frustration tolerance, impulse control, planning abilities, social skills, and logical and organizational thinking skills as well as the ability to anticipate consequences and judgment. When such functions of the human being are intact, then the gifted child with a detailed perceptual orientation will function well and move through life gracefully. However, when a detailed perceptual orientation is combined with relative weaknesses in any of the above areas, such children face a range of challenges in self-management and social relationships.

Gifted children who have a detailed perceptual orientation and also struggle with anxiety face additional challenges. Such children typically approach a problem solving, social, or academic task in a detailed manner. However, as soon as they perceive one detail out of place or going awry, they become anxious which begins a vicious cycle. That is, the

anxiety leads to a constriction of thought processes which elevates anxiety even higher which then increases the constriction of thought processes. The cycle continues so that the child is now even less capable of thinking flexibly or globally than they were initially, and he becomes increasingly anxious. Subsequently panic sets in, and the child either withdraws or gives up quickly from situations in order to find relief. The additional danger is that such children may then avoid similar tasks and/or situations in their immediate and distant future.

While other factors may, and do, clearly contribute to a person's overall functioning, the child's immediate perception of a situation or task impacts how he subsequently responds. Thus, underlying some of the negative behavioral manifestations of gifted children in their academic functioning and interactions with others lies a detail oriented perception that if understood would provide a means toward resolution of a wide range of situations. However, to do so requires a clear understanding of how a child's mind works and not all teachers have the time to develop such close relationships with the students in their charge. As such, parents must be able to advocate for their children's needs and explain to the teacher how their child's mind works and how their child may, in fact, benefit from certain accommodations including extended time to take tests and/or the allowance for laptop computers to complete written work. Additional accommodations may include opportunities to discuss written assignments with the teacher prior to completing them and/or the need for writing tutors to help with the organization of a child's work and/or a range of other accommodations that would assist the gifted child's effort at success.

There are additional areas that the functioning of a detailed perceptual orientation may impact. Clearly, in parent-child relationships, a parent-child match that consists of two individuals with global thinking or two with detailed perceptual orientation typically

work well together. However, when a parent has a global perception, and the child has a detailed perception (or vice versa) difficulties may ensue. For example, when a global thinking parent asks a detailed perceptual oriented child to clean his room, the parent typically means a quick process of making sure there're no clothes on the floor, the bed may be made or not, there's no food in the room or trash lying around. However, when the detail oriented child goes to the room, he becomes caught up in organizing details on his desk in a certain way and/or organizing the contents of a drawer in a manner that meets certain underlying perfectionistic requirements. Sometime later, when the parent realizes the child has not returned and goes to check on his progress, or the parent has other plans and wants to move on with the day, the parent may be frustrated with the child and wonder why it looks as if nothing has been completed in the room when, in fact, the child has been hard at work to complete things in a perfectionistic detailed manner.

The opposite is obviously easily imagined as well with the detail oriented parent and the global thinking child. The global thinking child goes up to the room, makes sure there's no trash on floor, throws the dirty clothes into the hamper, walks out of the room and says, "The room is clean." The detailed parent goes into the room and sees a significant amount of things yet undone that the child has never noticed and conflict ensues from that point on. As such, it is important for parents to understand not only how their child's perceptual orientation impacts his academic and social functioning, but it is also important for parents to understand their own perceptual orientation in order to communicate successfully with their child.

Clearly this example extends to the classroom and the importance that teachers understand that within the classroom there is an extreme mixture of perceptual and organizational processes going on with their students. Thus, the challenge for all teachers

is to be able to present material from both a global and a detailed perceptual orientation so that all children may be successful in understanding their work. Mismatches between different types of perceptual orientations then serve to create conflict, misunderstanding and failure to identify and provide service for not only gifted children but other children as well.

At best, it takes the detailed mind longer to problem solve than it does the global thinker. At the extreme end of the continuum detailed thinking significantly negatively impacts a gifted child's confidence, self-esteem, and social relationships as well as his academic work. Further, such detailed perceptual thinking can sadly result in children not being identified as gifted when, in fact, they are extraordinarily creative and able to conceptualize at a much more advanced level than many of their peers if given the opportunity. Clearly, it goes without saying that such children may not perform as well on certain standardized tests as their quick-thinking and global thinking counterparts. Thus, advocating for the needs of gifted children is to advocate for understanding children based on more than their observed behaviors and scores on specific tests. The child is always much more than the sum of his parts.