### Parenting the Gifted

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# The Ongoing Riddle of Which Nurture is Best for What Nature: Parents Promoting Gifted Potential

att Ridley, an Oxford-trained zoologist and science writer whose latest book is *Nature via Nurture: Genes, Experience, and What Makes Us Human* (2003a), wrote such an impressively clear and fascinating piece on "What Makes You Who You Are" that I decided to use it to introduce the continuing pursuit of "What do I do to best promote the gifted potential that I am seeing in my child?"

While I don't often suggest works that don't have the imprimatur of publication in the professional journals and books of our field, this piece by Ridley is not only interestingly presented, but informative and visually clarifying regarding an issue that has boggled scientific minds from Kant and Galton to Pavlov and Freud.

Summarizing his argument in a *Time* magazine article, Ridley (2003b) wrote, "Genes are not static blueprints that dictate our destiny. How they are expressed—where and when they are turned on or off and for how long—is affected by changes in the womb, by the environment and by other factors" (p. 56). Note also that the title of Ridley's book does not use the comparison of nature wrsus nurture, but via nurture, a comparison that conveys succinctly the sense of his article and of my column for this month. According to this view, it is not a question of whether our children's genes (nature) will single-handedly determine their potential for gifted development, but how the complex routes by which our efforts (nurture) and their fortuitous circumstances might work together to activate those genes.

### **A Map Metaphor**

So, let's play with the geneticists' map metaphor, which describes the places and routes available on our individual journeys of life, and apply it to the real time travels in which we often engage:

"Hey, hon, this map indicates we need to take Hannegan Road over to Mt. Baker Highway, and then this should take us directly to Heather Meadows up to the heart of Mt. Baker, a nice straight shot of mountain driving. Remember, we said Mt. Baker is our travel goal this year."

"Yes, but what if, instead, we take that little side jaunt over to explore the neat old steam railroad engine at Sedro Wooley. I'm kind of interested in learning more about the history of railroads in Washington as it applies to the transportation engineering that I'm involved in, and we could still make good time up to the mountain top, our goal for today!"

"Or, better yet, let's just go up to Horseshoe Bend and walk that terrific trail along the Nooksack River past the falls. It's such a beautiful hike, and the scenery makes me feel at one with nature; we can even sit on the rocks and have our picnic lunch at that halfway point as we watch the river tumbling by. Maybe we won't even want to go on up the mountain today."

And so the conversation goes, probably similar to ones you've had on one of your travel days.

I recall the adventures my husband and I had after one of the World Gfted Conferences in Amsterdam, when many of the conference attendees decided they must make diligent use of their time in Europe after the conference by whizzing through all of seven or eight different countries in the week's time they had allotted. We instead decided to meander through Holland for two weeks since that's where we were and pause as different places suggested worthwhile exploring. We felt reinvigorated rather than exhausted, even though we only covered the northwest quadrant of Holland, such a minimal part of the European continent. So, too, we will need to think about not only which resources to make available for our extraordinarily developing children, but also the rate at which we supply or insist that the resources be used.

Use this map and traveling metaphor to think about the extraordinary development we envision for our children and how we might creatively and sensibly help attract ordinary and extraordinary pieces of environment to the development of that potential. Useful to your thinking at this point would be information on the ecological theories of Bronfenbrenner and Lerner regarding how we might envision the host of environments and their convoluting interactions that our children will encounter. A description of these critical environmental factors and how to enhance or impede talent development is clearly presented by Subotnik, Olszewski-Kubilius, and Arnold in Rethinking Gifted Education (2003). These basic ecological ideas are central because they remind prospective teachers that there are a multitude of environmental factors and rich interactions between factors that they (as do you) need to consistently think of as unending possibilities for switching on a hidden talent, supporting an existing one, or even redirecting a natural ability no matter what esoteric nature it might represent.

Subotnik, Olszewski-Kubilius, and Arnold (2003) described Bronfenbænner's system of hierarchical levels or spheres of our environment from the microsystem of child and parent, to the mesosystem of family and school and immediate community, to the macrosystem of cultural and even global options. Further, we are reminded that all this is affected by a chronosystem in which we live. For example, just think about how most of us don't compute mathematical problems with an abacus as once was done, or as was later done with a slide rule, or even with mechanical calculators; instead, can now resort to a tiny handheld computer for instant verification. Lerner, on the other hand, reminds us that we as parents are also affected by our environment, which leads to a reciprocal, dynamic process between the factors that shaped us and those that are shaping our children. We can then see this reciprocal process in the way in which an educated and economically stable family can afford special programs for their children or in how homeless families who must focus on survival rather than enrichment might have to withhold those resources for their children's emerging talents.

Returning to our traveling map metaphor, the questions we ask of our map are numerous, and we begin to see their relevance for how we might manage or manipulate the journey of our children through life. What is the most direct route to get to the specific destination we or they think so desirable—

not Mt. Baker this time, but a medical career, life as an astronaut, or becoming a child care specialist? Are there some side routes (as in exploring Nooksook Falls or the steam engine) where our children might experience different, but relevant adventures? Would some of the side routes intriguingly reveal or lead to critical discoveries about things most important to our children for their future, as in horse camp this summer, a shadowing experience with a scientist, or even a summer of great daydreaming at a summer cottage? Does it really matter whether we reach that original destination we thought so attractive from the tour books, if in fact we find something else more compelling as we venture along our way?

We may find through these adventures that a child has an acute intensity and sense of observation of insects, along with artistic ability focused on animals, which can lead him or her to become an incredible biologist/naturalist/illustrator or even give joy for the moment. As my 5-year-old granddaughter said in thanking me for a dragonfly book, "I like it because I like bugs." How many of us have laid out our travel map with precision and perhaps even made reservations ahead for the stops we will make for exploration, discovery, recreation, and revitalization, that is, just plain laundry and food gathering, and then found that serendipitous resources were guiding the journey more effectively than we had envisioned? Or, in the case of a child's development, that available options may be guiding our child to an unplanned, fortuitous type and level of talent development?

## Wise Planning of Specific Resources and Diverse Possibilities

However, in applying this metaphor to the journey for our children's lives, we

may need to resort to a modicum of dreaming to realign our thinking about what we need to do to lead our children in their extraordinary individual development, that is, to think about diversity in possibilities. Once upon a time, people believed that our human development was all about how those basic determiners of human attributes, our genes, laid out a unique path for our development. We still need to be open to the possibilities for such a path. For example, Olszewski-Kubilius and Limburg-Weber (2003) explored how parents can recognize and develop the young child's talents. However, these authors remind us that we need to "help your child to find his or her own identity" (p. 13), referring to guidance that opens doors, but does not shove the child through them. Haensly and Lee (2000) examined gifted potential as it might look in young children from diverse backgrounds, suggesting that parents must use their observational skills sensitively to look creatively at possibilities of gifts outside of the ordinary box. Thus, while we might now forgo the idea of only one best path for our children's gifted development, wise judgment suggests we also envision and prepare for diverse possibilities.

Though our now-changing thinking that development of one's potential is no longer only about the environment in which one happens to be conceived and remains to grow and develop, we need to consider multiple environments that might enhance opportunities for our children. In this thinking mode, as stated earlier, Subotnik, Oszewski-Kubilius, and Arnold (2003) revisited the idea that there are choices of environmental factors that can ideally enhance or impede talent development. Fortunately, our optimism as primary educators in the past often led us to believe that, since there was only a limited amount of control over each child's genetic heritage, we would just have to focus on making the best possible use of whatever environment we could provide.

This proved to be a productive focus, and I am especially reminded of this idea as one of my sons affirms how he and his wife are firmly convinced that their task is to provide every avenue possible to unlocking and nurturing whatever elusive potential their son may possess. This son was born with a genetic syndrome that, while medical science doesn't yet know much about it, moderate past experience predicts that it may very well result in limiting and even disabling potential. Nevertheless, their positive attitude has already nurtured a 4-year-old who is incredibly alert to the world around him, especially to people; adept at problem solving and the use of computers; and confident in approaching all obstacles, despite his currently limited ability to express vocally what is so obviously occurring for him mentally. Since we don't know with certainty the complex genetic-environmental possibilities for this syndrome, which is due to an absent gene-segment, nor the unknowns that are not being turned on, these parents refuse to be limited by what previous findings on other children have suggested might occur. They are determined to continue to pursue all options to promote his potential so that, no matter what scenario he finds himself in, he will be able to take advantage of chance occurrences that come his way.

In this vein of thinking, scientists have begun recently to discover and emphasize the intricate connection and interplay between our nature (genetic blueprint) and our nurture (the specifics of the ways in which the environment interacts on those genetic map points). We might then assume that Bill Gates did not become the fantastically wealthy technological wizard he is simply because he inherited such a unique set of genes. More complexly, he developed a rich number of specific abilities, supported fortuitously by the environment into which he was born and the continuing guidance of parents and teachers in a setting richly endowed with available resources that he sensibly and may have even wisely chosen to apply. We might also realizethat accused East Coast sniper John Lee Malvo did not become the decadent criminal he currently stands accused of being simply because his genetic blueprint was flawed, nor only because he endured such a dysfunctional youth. Instead, a complex set of interacting circumstances brought him into contact with questionable resources that he chose to assimilate. Perhaps it was because he sensed a lack of options or was influenced by negative human interactions—a convoluting path for the genetic heritage he brought with him—with his resources perhaps even turning off genes important to a more positive development. Thus, in fact, we have to consider just how parents, family, and society became the "promoters" and "enhancers" of Gates' and Malvo's biologically installed individual maps for each of their unique developmental paths.

On yet another plane, other authors have examined how much and what kind of help a child might need in developing exceptional abilities in different domains in and beyond school-based contexts. In Early Gifts: Recognizing and Nurturing Children's Talents, Olszewski-Kubilius and Limburg-Weber (2003) emphasized what parents might do beyond school options, rather than depending entirely upon school programs. Further, in Moving Into the Forcefield of Life: Hope-Filled Invitations, Barbara Myers (2003) focused on how we need to manage pre-K and kindergaren introductions for our children to ensure that the environment is right for their genetically influenced abilities and that the timing of experiences is right for optimal influence. There is much to give us optimism for our guidance task in all of this array.

### Summary

In this column, I have tried to emphasize that knowledge of genetic manipulations and brain development may well be the clearest way to understand just how potential is unlocked. These factors can show us what part we as parents might play in making sure our offspring are prepared to take advantage of the unlocking. Unlocking, then, is the crux of the situation.

Currently, the science of nature and nurture has begun to explore and find evidence that genes are not static blueprints and that how they are expressed depends on the environment: nurture (i.e., what caregivers provide and do) and place (i.e., the unique confluence of the individual child's specific genetic inheritance as it meets with environmental variations). Thus, it is up to us as parents to make sure our children are ready for the chance and planned events of placement in particular environments. These ideas have risen and been advanced by the human genome project, whose proponents now assure us that specific genes for specific attributes are distributed in specific ways across our biological map for development. However, as yet, they are not able to predict all the possible dynamic mechanics for turning on and off still unknown alternatives to energize those genes.

We each become who we are and what we can do as the result of a very complex array of DNA (visually portrayed in the Ridley article) interacting with a complex set of dynamically convoluting planned, chance, and coincidental environmental events. So, too, when we focus on the gifted or extraordinary abilities in our developing children, we need to look at how we might approach their unique development and what part we might best play in identifying, releasing, and supporting their individual array of potentials.

The genetic map our children have had transmitted through us as parents is not an immutable, "set in marble" single plan of directions for getting to a preset destination. We won't even be able to identify that ultimate destination until our child arrives at it. Thus, the question "Is my child gifted?" requires a prescient frame of mind about "nature via nurture." Do the possibilities of a child's map include alternate routes to the same destination or perhaps to several different destinations? Or, is the map an available collection of places along the way to multiple endpoints, depending on the choices made for or imposed on the child by chance and coincidence along the route? Will a child be most fulfilled or happiest hurriedly touring all of Europe, or thoroughly exploring just one corner of Holland? Perhaps potential and actual diversity of outcometaking Frost's less-traveled road—is what makes each of us as individuals destined to fill a unique place in the grand scheme of human endeavor.

Given the genes these children inherit, what kind of environment will provide the most beneficial or nurturing medium for those genes to develop? We as parents and caregivers of children care deeply about the amazing and extraordinary abilities we see emerging on a daily basis, and we constantly search for wisdom on how to respond with the nurturance we provide. Our potential to alter the way those genes are expressed in our children—with new and sometimes surprising conclusions about nature, nurture, and the complex confluences in environmental factors—has been emerging from the research on genetic mapping and brain development. These are exciting times for us as we learn that our children are not simply an equation we initiated, one with only one correct or possible outcome. I hope you will find time to search out some of the resources suggested here and use them to guide

your child without predetermining what the goal will be.

Please don't mistake guidance for predetermination, however. You know when you have imposed your own idea of what their goal should be instead of giving them advice based on the wisdom you have gained from living a life. Your task will be to teach them how to be wise decision makers. Beyond that, prepare them to use their open minds and welldeveloped skills to take advantage of all the chance and coincidental opportunities that come their way on that journey toward maximizing their potential. @CT

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