

Director's Message



Why do some individuals with tremendous intellectual ability make wonderful, creative contributions to society and others who are equally talented, fail to live up to their potential? How does this happen? Trying to understand why some individuals succeed and others do not is the basic question of researchers, like Rena Subotnik, who we interviewed for this issue of *Talent*. She asks, "What does it take to turn raw potential into creative products that benefit humankind? What Dr. Subotnik and other researchers have found is that the actualization of talent is a complicated process that involves many components, family support, school and community programs, mentors, as well as personal characteristics such as intense motivation and drive. Dr. Subotnik's research also indicates that not only are the right ingredients necessary, they must come at the right time in the person's life in order for the mix to work.

At the Center for Talent Development, we strive to meet the needs of young people and provide them with the tools and opportunities they require—at the right time—to reach their full potential. We hope this issue of *Talent* provides you with food for thought and some ideas for talent development in your own life.

Talent Development

Gifted authority Rena Subotnik discusses "elite talent"

CTD: Much of your research has focused on the study of elite performers. Who have you studied and why did you choose these groups?

Rena Subotnik: As a beginning professor at Hunter College I had the opportunity to study graduates of the Hunter College Elementary School, a highly selective school in New York City. Although many people (myself included) thought the graduates would be exceptional achievers, it turned out they weren't. They were generally happy, healthy, and held values and jobs that you would expect given their upper middle class upbringing, but they weren't stellar performers as adults.

I was a graduate of Hunter College Elementary School myself, and my experience mirrored the study outcome. I was doing well professionally but had not made a distinctive contribution. I'm not even sure that was a central aspiration for me at the time. However, the outcome piqued my interest and was the impetus for studying people who were extraordinary and how they got to be that way. I realized that it's hard to predict outstanding performance in adulthood based on an elementary school experience so I looked for a group of highly talented adolescents to learn from.

I acquired access to the 1983 winners of the Westinghouse (now called Intel) Science Talent Search, the most prestigious national science competition. I followed the group for about 13 years — until they were in their mid 30s. As adolescents, the Westinghouse winners worked with scientists in hospitals or

university research labs helping to perform cutting-edge research. With their Westinghouse scholarships, many chose to go to elite universities. When they got there they discovered that science majors were told, "Everyone here is gifted." They were not given access to mentors or to courses that built on their unique experiences in high school. Instead they were herded into large classes designed to weed out students who were not academically prepared for high level science. A majority of the young women and about half the young men in the group ended up pursuing other majors that were more inviting at those universities.

As a result of these discoveries, I wondered whether equally gifted individuals in other domains were encountering the same roadblocks at the same point in their development. I decided to pursue this line of study in a field completely different from science, such as classical music performance. Since then the focus of my research has been on how people in different domains are trained during the transition from adolescence to adulthood.



continued on page 2

WHO SAID THIS?

“IT IS THE MARK OF AN EDUCATED MIND TO BE ABLE TO ENTERTAIN A THOUGHT WITHOUT ACCEPTING IT.”

Answer at www.ctd.northwestern.edu/xxx.ssss.htm

“Elite talent” *continued from page 1*

CTD: What do you mean by “elite talent?” How is this different from giftedness?

Subotnik: Giftedness, unless it has some verbal appendage attached, such as “mathematically gifted,” implies global abilities. I’m interested in domain-specific ability – scientific or artistic, for example.

CTD: What have you learned about the development of elite levels of talent? What are the most important factors involved? What are the key components or parts of the process?

Subotnik: I have been working recently with Linda Jarvin from Tufts University. She and I built our talent development model on the work of others who came before us. From the research literature we know that key factors in talent development are having a talent and the opportunity for instruction. We also know that psycho-social variables such as persistence, intrinsic motivation and drive play a role. What Linda and I have added to the equation is to say that it’s not only important to know what variables are involved in talent development, but also when they are involved. Benjamin Bloom published a highly influential stage model of talent development that guided our thinking, but he didn’t focus much attention on psycho-social variables. Francois Gagné focused on psycho-social variables as catalysts for talent development but didn’t discuss when each of the catalysts plays a key role in the developmental process.

CTD: In your view of talent development, what is the role of creativity and intelligence?

Subotnik: Intelligence is interesting to me as it relates to specific domains. For example, how can one operate intelligently as a composer, scientist, or journalist? Creativity transforms expertise into scholarly productivity or artistry. In other words, you can master a field and be an expert. But in order for you to make a contribution that furthers a field, you need to create something that is original and resonates with people.

CTD: Is the development of elite levels of talent applicable to non-performance domains such as science, math or writing?

Subotnik: The trajectory of talent development is similar regardless of the domain, but each domain has distinctive starting points. For example, math talent

tends to show up early; philosophy talent appears much later – but the same variables are involved.

CTD: What can parents and teachers learn from your research that could help their gifted students succeed?

Subotnik: That key variables in talent development change in importance over time. Let’s look at the variable of parental pressure or support. Some children are innately motivated. Others may need parental pressure to do homework or other forms of practice because the act of practicing may not be intrinsically interesting. For example, until you reach a certain level of proficiency, playing the violin or speaking a language just isn’t all that rewarding. But once students are over the basic skills hump, pressure becomes decreasingly effective. Parental involvement needs to take the form of providing space to work, getting materials, mentors, courses, etc.

Second, it’s very important to expose talented students to teachers who excel in the child’s area of expertise. This too should be done in stages – as children progress, they need different types of excellent teachers because they need different types of instruction at each stage in their development. According to Benjamin Bloom the first teacher nurtures the young person’s love of the field. A second teacher guides in the development of expert skills and knowledge. A third helps with professional contacts and insider knowledge.

The third point I’d want parents to take away is that over time psycho-social variables play an increasingly central role in talent development. Parents should model persistence, resilience, and good social skills for their children. Talented children need to learn how to deal with failure and be graceful in success. They must understand that setbacks are part of the growth process and that they shouldn’t fall apart when it happens. Bumps in the road are part of the game of life. ●

Resources

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Rena F. Subotnik began her position as Director of the Center for Psychology in the Schools and Education at the American Psychological Association (APA) in January 2002. Before she came to APA, Dr. Subotnik was Professor of Education at Hunter College, where she coordinated the secondary education program and served as research and curriculum liaison to the Hunter College laboratory schools (grades PK-12). From 1983 to 1996, Dr. Subotnik conducted a longitudinal study of Westinghouse (now Intel) Science Talent Search winners.

FUN AND GAMES

Answers are at www.ctd.northwestern.edu/xxxxx.hhhh.sss.xxxx.htm.

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A CTD Alumna's Story

Carrie Messenger wasn't identified as gifted at a young age. In fact, she was late to read. "I had memorized my favorite stories," she says, looking back on that time now, "and so I just recited them to myself. I saw no need to learn how to read." But once Messenger realized that if she could decipher the words on a page, that knowledge would open to her every story ever written, she rarely lifted her eyes from the written page.

But Messenger didn't just want to read. She wanted to write her own stories, too. She says that almost as soon as she could draw the letters of the alphabet, she was writing stories and reading them aloud to the kids in the Evanston, Illinois, neighborhood where she grew up.

Talent development begins at a very young age and is influenced by a wide variety of people, events, and experiences. In Messenger's case, her parents were a significant source of support and encouragement—helping her develop her talent without pushing her. During Messenger's early years, they let her go at her own speed but provided her with enriching experiences.

School provided a new set of opportunities and challenges to Messenger's talent development. Elementary school offered her the chance to work at her own pace and provided her with the creative stimulation that she needed, as did her later years at Evanston Township High School. But she was frustrated in middle school. As a Midwest Academic Talent Search participant, her family had received a Center for Talent Development (CTD) Summer Program flyer. Messenger's parents offered attendance at a sports camp or three weeks of intense academics. Messenger opted to study American history. "It was taught with an American Studies slant, so as we learned history, we were studying art and literature at the same time. During the Civil War unit, we looked at political cartoons and Matthew Brady's photographs. When we covered the 1920s, we read F. Scott Fitzgerald's story 'Berenice Bobs Her Hair.' We had a formal debate over Frederick Jackson Turner's

frontier thesis. As an Evanstonian who adored Chicago, I took the side of the city over the frontier, but many of my rural Midwestern classmates defended Turner to the end. It was a truly amazing intellectual experience," she says about her introduction to Center for Talent Development. Messenger returned to CTD the next summer to study literary analysis. "I still have every book from that course. It was the first time I read *Wuthering Heights*, the first time I read a Eudora Welty short story, the first time I read a Keats poem."

Being with other students with similar interests and values was also critical to Messenger's talent development, she says. "Suddenly I was in a situation where admitting that I liked to read was a good thing," which was a change from her early school experiences where she didn't like raising her hand because she didn't want kids to know she was "smart."

Messenger had another epiphany that year. She discovered that she wasn't the smartest student in the class. She says that coming to terms with that realization at that age was crucial to her growth. "I realized that I was great in some things and only good in others but that it was okay I wasn't at the top of the class in everything. That taste of reality helped me determine who I was and what I wanted to do."

These CTD experiences broadened Messenger's horizons and taught her a lot about herself as a learner—helping her understand what she wanted for herself and inspiring her to keep taking advantage of opportunities. Another critical influence was the instructors she had. Messenger explains, "I had really good teachers. They gave a lot of creative assignments—chances to write and explore ideas—that's why it was so important to be in those classes."

She continued the accelerated educational pace she had established at the

Evanston schools and CTD when she enrolled at Yale University in New Haven, Connecticut. Following graduation, Messenger lived in Moldova for two years as a Peace Corps volunteer before earning an MFA from the University of Iowa Writers' Workshop. She's now pursuing her PhD at the University of Illinois at Chicago with a focus on creative writing.

In 2003, Messenger returned to CTD to teach, determined to provide students



Carrie Messenger (????) with her CTD class.

"I also know that interacting with other really bright students was the most important factor in my talent development."

with the same life-altering experiences that she had. "At CTD I found teachers who were not just interested in whether I could write well but what I had to say," she explains. "I also know that interacting with other really bright students was the most important factor in my talent development. My greatest pleasure in teaching at CTD is to listen to my teenage students have the kind of discussions I would expect in a college seminar. Every session, they inspire me, but above all, they inspire each other." Is it any surprise that students in Messenger's classes are allotted extra time to discuss and debate with each other?

In looking back at all of her experiences, Messenger believes it is important to give students the opportunity to take risks in a safe environment, because if they are not willing to try new things and are afraid of not being perfect, they will have a gap in their learning. In her experience, people learn and grow through challenges and successes and with the support and encouragement of intellectual peers and mentors. ●

NEWS, DATES & OTHER IMPORTANT CTD INFORMATION

Michael Clay Thompson Seminar! Come hear this renowned author, teacher and empowering practitioner and presenter. Whether you teach third graders or high school students don't miss this chance to hear Thompson discuss the value of vocabulary in your curriculum and the most effective ways to incorporate the study of words into your classroom teaching every day. Saturday, September 15, 2007. 9am to 3pm. \$100 for the day (includes lunch). More information at: 847-491-3782.

Gifted LearningLinks online distance-learning fall sessions start September 1, 2007.

Sign up for Midwest Academic Talent Search (MATS). Above-grade-level testing program for students in grades 3 to 9. Online registration available starting September 5. Sign up early to make sure you get the site of your choice.

Great Opportunity!

Create a challenging learning environment for a wide range of student abilities by

completing a Gifted Master's Degree OR Advanced Teaching Certificate program at Northwestern University's School of Education and Social Policy. Check out www.sesp.northwestern.edu/msed for more information or call 847-467-1458.

MATS DVD available!

Need a visual aid for a parent meeting? Just want to know more about Midwest Academic Talent Search (MATS)? CTD now has a DVD that explains the entire MATS process and its benefits. All your questions will be answered in 15 minutes via interviews with parents, students, gifted coordinators and program administrators. They're so popular that we're into our second printing. Want a copy? Send your contact information to ctd@northwestern.edu, write "MATS DVD" in the subject line and we'll put one in the mail - free of charge.



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Center for Talent Development at Northwestern University is an accredited learning center and research facility serving the gifted community. Through the Midwest Academic Talent Search and other programs, CTD has assisted more than 350,000 families. Offering a variety of learning alternatives for the gifted student, CTD provides school-year programs such as Saturday Enrichment Program, Gifted LearningLinks distance learning, Civic Education Project, and Project EXCITE, as well as summer academic programs (Leapfrog, Apogee, Spectrum, and Equinox), informational conferences for families and educators, scholarships, and graduate courses on gifted education. Led by nationally recognized scholar Paula Olszewski-Kubilius, Ph.D., the Center also conducts and publishes academic research on gifted students, particularly in the areas of accelerated learning and special populations of gifted learners. CTD is accredited as a special function school for the gifted by North Central Association of Colleges and Schools.



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