## GIFTED EDUCATION PRESS QUARTERLY

10201 YUMA COURT P.O. BOX 1586 MANASSAS, VA 20108 703-369-5017

## "Be careful. Straight trees often have crooked roots." Fortune Cookie "Don't think there are no crocodiles because the water is calm." Malayan Proverb

## WINTER 2014 VOLUME TWENTY-EIGHT, NUMBER ONE

The study of the invention process can help teachers to be more effective in stimulating gifted students' curiosity, imagination, knowledge, dedication to solving problems, and organizing skills. The life stories of America's preeminent inventors offer a rich lore of how they applied all of these characteristics to producing inventions that have changed American culture and society. Such individuals as Thomas Edison, Alexander Graham Bell, Henry Ford, George Westinghouse and the Wright brothers should be as much a part of the gifted curriculum as the traditional subject areas. Of course, the more recent innovators of modern technology such as Bill Gates, Steve Jobs, and the founders of Intel Corporation, Gordon Moore and Robert Noyce, need to be included in biographical studies. As a prelude to a STEM education curriculum for the gifted, the examination of these individuals' lives and inspiration could help gifted students learn more science, technology, engineering and mathematics to solve problems concerned with energy, the environment, medical and health issues, food production, and the like.

Harry T. Roman, my senior STEM author, recently informed me about a beautiful new book which discusses the exemplar of American invention, Thomas Alva Edison. (Harry has been a dedicated communicator of Edison's accomplishments as a docent/special lecturer at the Thomas Edison National Historical Park in West Orange, New Jersey.) This book is Edison and the Rise of Innovation by Leonard DeGraaf with a Foreword by Bill Gates (Sterling Signature Publishing and Copyrighted by the Charles Edison Fund in 2013). The organization, photographs and cultural illustrations are superb. They clearly show the impact of Edison's major inventions upon American society and the world, and how one invention builds upon previous ones. For example, the telegraph was a precursor to the phonograph. In addition, DeGraaf carefully documents the development of Edison's major inventions that changed the world in many new and radical ways: the phonograph (1877-88), electric light bulb (1879) and electric grid transmission (1882), and the motion

## www.giftededpress.com

picture camera and projector (1889-96). By reading this book, gifted students can learn much about some of the keys to successful invention such as: • importance of using highly skilled teams composed of knowledgeable craftsmen, scientists, engineers and technologists • maintaining detailed records of all experiments and applications, both the failures and successes • directed and focused approach to solving problems over long periods of time, and through many frustrating experiences • obtaining financial support from private and public sources, and business entrepreneurs.

The articles is in this issue are as follows:

- •Chapter 1 from *Exam Schools: Inside America's Most Selective Public High Schools* (2012) by Chester E. Finn, Jr. and Jessica A. Hockett. Dr. Finn is president of the Thomas B. Fordham Institute, and Dr. Hockett is a consultant on differentiated instruction. Dr. Finn has an illustrious career through his work in the U.S. Department of Education and as a professor at Vanderbilt University. I thank him and Princeton University Press for permission to reprint this chapter.
- •Dr. Hanna David discusses her counseling of a young gifted adolescent girl who planned to drop out of school. This article illustrates a method of counseling potential dropouts which is effective and humane.
- •Dr. Michelle Trotman Scott discusses the problems and issues of identifying and educating gifted African-American students who may have characteristics similar to ADHD. She presents a useful table which helps to clarify these differences. She is a former teacher and administrator who focuses on the achievement gap, special education over-representation, gifted education under-representation, twice exceptional students, creating culturally responsive classrooms, and increasing family involvement.
- •Dr. Michael E. Walters concludes this issue with a discussion of the importance John Hersey's writings for gifted students.

Maurice D. Fisher, Ph.D., Publisher

## MEMBERS OF NATIONAL ADVISORY PANEL

**Dr. Hanna David**—Tel Aviv University, Israel

**Dr. James Delisle** (Retired) — Kent State University

**Dr. Jerry Flack**—University of Colorado

**Dr. Howard Gardner**—Harvard University

Ms. Dorothy Knopper—Publisher,
Open Space Communications
Mr. James LoGiudice—Bucks
County, Pennsylvania IU No. 22
Dr. Bruce Shore—McGill
University, Montreal, Quebec
Ms. Joan Smutny—Northern Illinois
University

Dr. Colleen Willard-Holt—Dean,
Faculty of Education, Wilfrid Laurier
University, Waterloo, Ontario
Ms. Susan Winebrenner—Consultant,
San Marcos, California
Dr. Ellen Winner—Boston College

**Dr. Echo H. Wu**—Murray State University

## Exam Schools: Inside America's Most Selective Public High Schools (2012)

### Chester E. Finn, Jr. and Jessica A. Hockett

#### Thomas B. Fordham Institute

# Chapter 1 History and Context

The main trajectory of American schooling over the past century has been the gradual widening of access and raising of educational expectations for ever-larger portions of the nation's youthful population.

Though elementary schooling was nearly universal by 1910, just 13.5 percent of that year's adult population (twenty-five and older) had graduated from high school. Fifty years later, the corresponding figure was 41.1 percent. Today, about 87 percent tell the Census Bureau that they are high school graduates.<sup>1</sup>

This striking expansion of secondary schooling in the United States was driven by a quartet of forces, beginning with the human capital demands of a changing economy, which needed ever-more-educated workers for ever-more-sophisticated jobs. Pushing plows, joining nuts to bolts on assembly lines, and stitching garments in attic sweatshops would no longer suffice.

Second was the increasing prosperity that accompanied those more sophisticated jobs, which meant that more families could spare more children from work for more years even as states and towns could afford to pay for more schools and teachers.

Third were social justice and equity considerations, such that educational opportunities once open mostly to able-bodied, middle-class, white males were gradually extended to pretty much everybody.

And finally was the ceaseless quest by many Americans for upward mobility and a better life for their sons and daughters, accompanied by keen awareness that the more education their kids obtained, the better their prospects for advancement. (Collegegoing burgeoned, too, especially after World War II.)

As time passed, we went from propping open the high school's back door to expecting just about everyone to spend three or four years inside and then emerge through the front door with a diploma in hand. In the three decades from 1930 to 1960, the ratio of graduates to 17-year-olds in the U.S. population soared from 29 to 70 percent. (It has since leveled at about 75 percent.) To keep pace with such swelling enrollments, the number of high schools rose, individual schools grew, and the overwhelming majority of them welcomed all comers.

One challenge posed by these expanding opportunities and rising expectations was—and remains—that not all young people want the same thing from high school, bring the same talents and interests with them to the schoolhouse door, or have the same post-graduation goals. Not all are equally prepared for advanced courses, and certainly not all enjoy the same resources and support structures in their lives. Nor can anyone say with certainty—though opinions on this vary widely—how many of the same things society can legitimately ask them all to learn, a dilemma that deepens as children progress farther in school. It's one thing to expect every eight-year-old to learn to read; it's quite another to declare that every sixteen-year-old must master biology, Shakespeare, or Mandarin.

Such complications have long confronted educators and policy makers with difficult quandaries about how to structure and organize high schools and their offerings. It wasn't so hard, back in the old days, to provide a smallish, elite population with the sort of classical education that was expected by a smallish number of elite colleges and universities, primarily on the East Coast. It was, however, a far more difficult challenge to decide what sorts of curricula, instructional programs, standards, and structures are best suited to mass secondary education.

Some educators held that high schools should fit young people for predetermined niches in life, while others insisted that everyone deserved a fair shot at multiple options. Some urged the schools to provide a single core curriculum for all; others declared that

schools must specialize in "academic" or "vocational" (or other) programs; and still others favored multiple tracks within "comprehensive" high schools.

The "comprehensive-with-tracks" version gradually came to dominate the American secondary education scene, particularly after former Harvard president James B. Conant endorsed it in an influential 1959 book. Comprehensive did not mean uniform, however. Educators in the United States (and abroad) have long done battle over this, too. On one hand are those whose top priority is universality and commonality of curriculum, whether for civic ends (we must all learn the same things if we're to hang together as a nation and culture) or for egalitarian reasons (everyone should have access to the same opportunities and nobody deserves a "better" education than anyone else.) On the other hand are those who believe that individual (and sometimes group) differences ought to be recognized, celebrated, and accommodated by an education system committed to furnishing each person the course of study that is best suited to him or her.

By and large, public education has sought to have it both ways, trying to offer equal access to high-quality options but doing so through multiple routes and pathways. Hence our "comprehensive" high schools have nearly always offered multiple curricula tailored for students with differing interests and post-high-school plans. Everyone sat under the same roof but not always in the same classrooms. Most common were the "academic" or "college-prep" track for those aspiring to matriculate to universities; the "vocational" track for those who were headed to work after graduating and had a good idea of the trade they would pursue; and the "general" track for almost everyone else.

But comprehensive-with-tracking was never the sole model for secondary education. Many communities and some states also operated specialized high schools designed for particular missions, needs, or clienteles, particularly in the vocational realm-and often aligned with the human-capital requirements of local employers. Putnam, Connecticut, for example, established a "trade school" in 1915 to develop skilled workers for area textile mills.

Other high schools concentrated on educating exceptional students. These included disabled youngsters, beginning with those who were blind or deaf. (The Missouri School for the Deaf was founded in 1851.) In time, there also emerged magnet schools to foster integration by offering distinctive programs designed to draw youngsters of all races from multiple neighborhoods within the community. And, as we explain below, American education has long included a small number of supercharged high schools aimed at youngsters with uncommon academic talent and/or prior achievement.

#### **How to Educate Smart Kids?**

One source of the complexity of American secondary education is the reality that kids differ greatly in their strengths and abilities as well as in their levels of motivation and background experiences. Some come to high school quicker, keener, and more motivated than others—whether due to economic advantage, parental prodding, excellent teaching, genetic good fortune, or other factors.

We've devised a variety of approaches to educating such high potential and high-performing students at the secondary level. Numerous options have been created within regular high schools via tracking, streaming, and special programs or course sequences. "Honors" tracks and Advanced Placement (AP) classes have provided additional opportunities for challenge and, in the case of AP, the chance to earn college credit. In some places, secondary pupils can also take courses at a local university, sometimes during the summer, sometimes online, sometimes as part of the regular school day. Early-entrance-to-college programs invite qualified teens to augment (or, in some cases, replace) their high school diploma with an associate's or bachelor's degree. Some high-potential middle schoolers gain opportunities for summer study on university campuses through programs such as Duke's Talent Identification Program and Johns Hopkins's Center for Talented Youth. And myriad extracurricular activities and competitions (e.g., Scholastic Bowl, Intel Science Talent Search) are intended to develop and reward academic promise beyond the classroom setting.

A less common approach to educating academically talented high schoolers has been to create entirely separate schools for them within the public-education system. These may be thought of as "whole-school" versions of the "honors track" —and are the focus of this book.

#### The Early Days

Some selective schools have been around for a long time (though not always with the admissions procedures that characterize them today). New York's original Townsend Harris High School (profiled in chapter 10) was founded in 1848. Louisville's Central High

School (profiled in chapter 6) opened its doors—to "children of the African race"—in 1870. San Francisco's Lowell High School also began in the late nineteenth century. Worcester, Massachusetts, opened a citywide secondary program for children with advanced intellectual abilities in 1901. And the great-granddaddy of them all, the Boston Latin School, proudly traces its ancestry to 1635 and is recognized as our country's first public school. (Five of its former students signed the Declaration of Independence.)

Other schools were founded—or restarted or revamped—specifically to identify and serve youngsters of unusual ability, and in short order found it necessary to develop processes to screen and select among their would-be students. Cincinnati's Walnut Hills dates its selectivity and "classical" focus to 1919. The Bronx High School of Science was launched (for boys only) in 1938. New Orleans's Benjamin Franklin High School (profiled in chapter 9) started in the Sputnik year of 1957. The North Carolina School of Mathematics and Science opened in 1980 as a state-sponsored residential high school for exceptionally talented juniors and seniors-and inspired a dozen similar schools in other states. (In chapter 4, we profile one of these, the Illinois Mathematics and Science Academy.)

The number of such schools has never been large and, by our count, is only about 165 today, with the majority having begun in the relatively recent past. Of the 58 that supplied founding dates to us, only 13 existed before World War II and another 21 launched between Pearl Harbor and 1990. Surprisingly, half the schools for which we have this information are creations of the past two decades.

These schools arose in their different eras from a quintet of distinct yet overlapping challenges and policy objectives. Most straightforward was the desire to provide a self-contained, high-powered college-prep education for able youngsters, usually within a single community but sometimes on a county or regional basis, occasionally statewide. This impulse sometimes arose within the public-education system itself, such as a district superintendent or school board member particularly concerned with the acceleration or enrichment of gifted students. Elsewhere it emerged from government or civic and business leaders or from agitated parents concerned about educational opportunities for their own progeny.

Some universities chose to foster and occasionally to launch such schools, sometimes as "laboratories" for their own scholars and trainees, sometimes to accommodate faculty children, sometimes as a service to surrounding communities.

Philanthropic initiatives played a role, too, such as the Gates Foundation—funded effort to create specialized and distinctive "small high schools" and "early college" models to serve disadvantaged students, as well as the occasional benefactor (e.g., Nevada's Davidson Institute) with a keen interest in the education of exceptionally able youngsters.

A fourth driver of the establishment of such schools was the country's effort to desegregate—and integrate—its public-education system. Some of this was court ordered or sanctioned, while some was pushed by civil rights enforcers and activists or stimulated by federal "magnet school" dollars.

Finally, there were economic imperatives, particularly the need to strengthen the workforce, meet the human-capital requirements of a modernizing economy (e.g., STEM schools, which focus on science, technology, engineering, and mathematics), or develop individuals to work on the cutting edge of future innovation, invention, and scientific advancement. Though most such economy-boosting impulses were local, some came from the state level, often from governors keen to develop particular regions, strengthen the workforce, retain talent, or polish their states' reputations as places that took education and human capital seriously.

To the likely surprise of some readers, with rare exceptions (mainly in Louisiana), the schools we examine in these pages are *not* charter schools.<sup>2</sup> Although they're "schools of choice," they are operated in more top-down fashion by districts, states, or sometimes universities rather than as freestanding and self-propelled institutions under their states' charter laws. Perhaps they would be better off as charters, considering the ways that many are constrained by the larger systems of which they're part. But a central tenet of the charter movement holds that schools should not select among their applicants. If demand exceeds supply, charters in almost every state are obligated to use lotteries to determine which youngsters end up enrolling in them. This is not just a matter of doctrine among charter advocates but also a prerequisite for specialized federal start-up financing. As a result, some charter schools are academically high powered and some are high achieving. But almost none are academically selective.

The schools we're focused on are academically selective (though not all are high achieving). But they're all public schools, paid for and operated by governmental agencies and free to their attendees. Private schools—almost all of which are selective in various ways—don't qualify for our list. That does not, however, mean the public schools that do qualify are available to every youngster who might benefit from them.

In the early days, virtually all these schools had similar curricula—whatever courses and sequences the leading colleges of the time expected of their applicants, much as one would find at private prep schools like Andover or Deerfield. But they differed (from each other and over time) in how they defined eligibility and handled admissions. (We discuss today's admissions scene in chapter 3 as well as in parts II and III of this book.) Townsend Harris High School—originally a direct feeder into the City College of New York—began using entrance exams in the early 1930s and by 1940 was admitting fewer than one in six of its applicants. Stuyvesant, on the other hand, began in 1904 as a "manual training" school for boys but swiftly became known for its excellence in math and science and turned into a selective-admission academic high school by 1920. (It commenced entrance testing around the same time as Townsend Harris.)

Academic criteria aside, these early schools were typically limited to boys, and few welcomed black students (though a small number in the segregated south enrolled black youngsters exclusively).<sup>3</sup> They were rare in small-town and rural America, uncommon in suburbia, and almost unheard of in very poor communities. Some cities (and states) created options of this sort while others had none at all. (San Francisco did, Los Angeles didn't.)

As for wealth, one didn't have to pay money to enroll in such schools. Yet even where special-admission public high schools existed, they were not always within easy reach of poor families. That situation is better today: our data indicate that they enroll almost as large a proportion of low-income youngsters as are found in American public secondary education generally (table 3.4). But that does not necessarily mean that every individual school is easily accessible to low-income families.

For these schools to be realistic options for children, parents need sufficient means to transport their youngsters across town each day and must not need them urgently to earn money, learn a useful trade, or help around the house. Moreover, to qualify for supercharged high schools, students must generally attend solid primary and junior high (or middle) schools. It also helps if their homes and neighborhoods are amply supplied with books, periodicals, and intellectually active people. That's true today-and has been since the beginning.

#### Can We Be Equal and Excellent, Too?

That was the question posed by Carnegie Corporation president (and future Health, Education, and Welfare secretary) John W. Gardner in his influential 1961 book *Excellence*, and it still speaks to competing policy priorities in American education and the extent to which we value (or deplore) the kinds of schools described in these pages.

But Gardner was not the first to probe this quandary. American democracy has always contained an inherent tension-some say a contradiction-between the pursuit of greater equality and uniformity for all and the quest to maximize individual achievement and prosperity via competition and diversity.

This tension has emerged repeatedly in U.S. education policy over the past half century, often framed as a competition between "quality" and "equality" (or "equity"). Educators and policy makers love to declare that we can do both without sacrificing either, and occasionally the dual objectives do get fused. Academically oriented "magnet" programs meant to foster integration by appealing to parents of every race who want an enriched or accelerated education program for their kids are one example. Today's move to widen access to AP courses and encourage more poor and minority youngsters to enroll in them is another.

Still, successful attempts to realize both ideals are rare. In the real world of limited resources and energies, most of our policy priorities and programs have tended to emphasize one mission or the other-and to shift between them as perceived needs and external catalysts changed.

Not surprisingly, academically oriented, selective-entry schools for high-achieving youngsters have generally enjoyed greater favor when "quality" has been in the ascendancy. But not always.

Sputnik-induced alarm about the country's intellectual prowess and technical competence gave a boost to such schools (as well as to honors and Advanced Placement programs within comprehensive high schools) in the late 1950s, but within a decade the education-policy pendulum was swinging toward egalitarianism. The Supreme Court first nudged it in that direction with 1954's *Brown v. Board of Education of Topeka* decision. Then Lyndon Johnson's "Great Society," with its civil rights, anti-poverty, and federal-aid-to-education programs, gave a strong shove to widen opportunities for low-income kids, take extra measures to prepare them for school, and compensate for the educational deficits of home and neighborhood.

Not long thereafter came the Bilingual Education Act (1968), Title IX of the Higher Education Act (1972), congressional passage of the Equal Rights Amendment (1972), the Women's Educational Equity Act (1974) and the Education for All Handicapped Children Act (1975), as well as ever-sterner efforts to integrate the schools (Judge Arthur Garrity's infamous Boston busing decree was handed down in 1974) and to back the growing pile of civil rights protections with federal enforcement muscle.

As more money and energy went into advancing equity in American K-12 (and higher) education, less was devoted to the pursuit of excellence, which is likely why few new selective-admission schools (other than magnets designed for racial integration) were launched between the mid-1960s and mid-1980s. In fact, some of those that already existed came under attack for their "elitism." Boston Latin was swept into Garrity's ruling that the public schools of Boston were segregated, and, as part of the remedy, that city's school committee instituted a 35 percent "setaside" for minority students within the ancient school's exam-based admissions process. So strong was the push to open up admissions to Bronx Science, Stuyvesant, and other selective high schools in New York City that a pair of alarmed lawmakers from the Bronx pushed through the state legislature in 1971 a measure shielding these schools from any tampering with their test-score-driven admissions process.

In 1983, however, the United States was declared a "nation at risk" by a blue-ribbon commission, owing to the slipshod quality of its schools and the inadequate preparation of their graduates. The panel stressed the danger that this posed to "American prosperity, security, and civility." In its wake, attention began to shift back to educational "excellence"—mostly to higher standards and stronger achievement for all children in all schools, but also to the possibility of additional attention and opportunity being paid to exceptionally talented or high achieving youngsters.

Although the National Association of Gifted Children (NAGC) dates to 1954—the same year as the *Brown* decision—and the U. S. Office of Education (now Department of Education) launched a small "gifted and talented" unit in 1974, the first major policy-level recognition that these kids, too, might deserve special attention was Congress's passage in 1988 (five years after *A Nation at Risk*) of the "Jacob Javits Gifted and Talented Students Education Act," named in memory of the late senator from New York. That law defined (and today still defines) its target population as "Students, children, or youth who give evidence of high achievement capability in areas such as intellectual, creative, artistic, or leadership capacity, or in specific academic fields, and who need services and activities not ordinarily provided by the school in order to fully develop those capabilities." The foremost intent of this legislation was to help underserved populations deserving of such attention to gain access to advanced programs and schools that provided them.

While the federal program was never large (indeed, was "zero funded" by Congress in 2011), nor did it underwrite the actual operation of "G and T" classes or activities at the state or local level, it did lend a measure of legitimacy to such programs, which launched or expanded in many communities. Often politically vulnerable and fiscally fragile, yet fiercely sought out by determined parents seeking to enroll their children in them, gifted-and-talented programs in the early and middle grades were joined by widening honors and AP options in many high schools, as well as (after 1978) the International Baccalaureate (IB) program.<sup>8</sup>

In 1993, a panel headed by Pat O'Connell Ross concluded that the nation, having failed to develop its most talented students to their fullest potential, faced a "quiet crisis." That report, *National Excellence: A Case for Developing America's Talent*, recommended tougher academic standards, beefed-up teacher training, and increased access to higher level learning opportunities and early childhood education for all students, particularly minorities and the disadvantaged. It cannot be entirely coincidental that half the selective high schools for which we have founding dates were created in the wake of this report and the Javits Act, as well as *A Nation at Risk*.

#### **Recent Reform Priorities**

Over the past two decades, the excellence/equity balance has been tugged in both directions by a pair of newer reform strategies, which turned out to have quite different implications for academically selective high schools: the push for standards, testing, and accountability on the one hand, and accelerating efforts to widen school choice on the other.

"Standards-based" reform got underway in the 1980s as state leaders realized that the first step toward improving achievement was to specify the desired outcomes of their schools, that is, to spell out the skills and knowledge in various subjects that students should acquire at various points along the path to graduation. The next step was to develop assessments aligned with those academic expectations, in order to gauge how well schools and their pupils were doing at reaching the desired ends. In most jurisdictions, some sort of "accountability" system was then put in place to prod educators and students to strive toward those standards, reward them if they succeeded, and embarrass, intervene in, or "punish" them if they faltered.

By the mid-1990s, the federal government had become a major player on the standards-based reform stage, creating its own requirements and incentives for states to develop academic expectations, tests, and accountability regimens and its own cascade of interventions and corrective actions. This culminated in 2002's No Child Left Behind (NCLB) Act, which demanded that states (at least those seeking federal dollars, which turned out to be all of them) undertake to get every child to "proficiency" in math and reading within twelve years. No other level of achievement would count in determining whether a school was making "adequate yearly progress (AYP)," nor did any other subjects matter (except, in a minor way, science). This gave districts (in their budgeting) and teachers (in their allocation of classroom effort) powerful incentives to concentrate on lower-achieving pupils and schools.

Though one could fairly claim that NCLB sought to pursue both equity (by reducing achievement gaps) and quality (by boosting overall academic performance), the ways in which it pursued them turned out to pose unique problems for selective high schools. Because almost every state defined "proficiency" at a low level, which many kids in these schools were already well above, and because no academic achievement other than proficiency counted in determining a school's (or district's) fate in the NCLB-driven accountability system, high-performing schools and students were essentially sidelined.

NCLB also pushed against district-level selective schools by encouraging the distribution of high-achieving students among all schools in order to enhance their performance. Trying to fulfill the demands of this federal statute, a district would have little reason to create or sustain a selective high school that concentrated high achievers in one place if that heightened the risk of other schools not making AYP.

And although a lively argument rages as to whether NCLB's sharp focus on reading and math has narrowed the curriculum that's actually delivered by U.S. schools, there can be little doubt that contemporary accountability systems that reward performance only in two subjects provide little incentive for schools or teachers to pay equal attention to such other subjects as literature, writing, history, science, art, music, and technology. For selective high schools, this has raised the possibility that entering 9th graders might be underprepared for such courses owing to neglect of these subjects in the earlier grades. (As the school profiles in part II suggest, however, those we visited were striving not to retreat from providing a deep and comprehensive curriculum for their students, while keeping the academic-aspiration and curricular ceilings high enough to create growth opportunities for the very sharpest among them. In practice, Advanced Placement courses and exams were more apt to function as these schools' "NCLB.")

The second big reform strategy that consumed American K-12 education in the past twenty years was, on its face, better suited to selective high schools: the move to strengthen both quality and equity in K-12 education by creating new school options and widening the choices available to more youngsters, especially those from disadvantaged and minority backgrounds, and to recognize that individual differences, needs, and preferences deserve differing responses from an education system that had long focused on fitting everyone into a few standard offerings.

While the emergence of more and better choices was surely a boon to students and parents, however, it wasn't invariably a plus for preexisting schools of choice. As kids got greater freedom to choose their schools, they could access more alternatives. Private schools came within range of more families that previously could not afford them, at least in the (slowly) growing number of states and cities with voucher or tax-credit programs. And a new supply of public schools emerged in the form of five thousand-plus charters, many of them specialized in various ways. Some (as in Milwaukee) may be termed "spontaneous," instigated by market forces. Others (as in New York City) were purposeful creations by school-system leaders bent on furnishing the children of their communities with more good options. At the same time, more neighborhood high schools concluded that they, too, needed to create special programs and "schools within schools" in order successfully to attract pupils and resources in this quickening marketplace.

Because every selective high school on our list is a "school of choice," one might fairly suppose that mounting support for choice—and for customizing education to the interests and circumstances of individual pupils—would also benefit these schools and their students. Certainly the widening acceptance of choice lends legitimacy to leaving one's neighborhood for a different school that might better meet one's needs, and the policies associated with a burgeoning choice movement make such moves easier.

But even as the schools on our list continue to have more applicants than they can accommodate—often many, many more—some of their leaders have begun to fret that their advantage within the education marketplace and their distinctiveness within the high school universe are diminishing as more quality alternatives emerge and become accessible to more youngsters. Others worry that letting students choose their schools will lead to "creaming" and resegregation along racial or other lines, and that selective schools are particularly apt to have that effect by taking the highest-performing students (and their test scores) and leaving the most challenging or least motivated (or worst parented) behind.

Despite their new competitors, their internal hand-wringing, and their external critics, however—and in the face of whichever direction the excellence and equity winds are blowing—selective public high schools continue to operate and in many cases to enjoy reputations as the best high schools in the land. Their numbers are small, but communities that have such schools often display them with pride to firms considering where to locate and to persnickety families judging where to educate their daughters and sons. The schools maintain support at the policy and political levels, not only because of the ardor of their alumni/ae and the determination of parents whose children benefit directly from them, but also because many are positioned as keys to America's prosperity and security. Their presence eases anxiety about international competitiveness, about developing intellectual leadership for the future, and about doing right by our "best and brightest" young people.

But how well grounded are such assumptions and opinions? Do these high schools deserve their lofty reputations? What really happens inside them? Who teaches in their classrooms? What are their students like, and how did they get chosen among myriad applicants? How different is their curriculum from what one finds in high-performing schools that admit everybody? How do they function within the larger public education system? Selective high schools bear some resemblance to fine automobiles: prestigious in their way, admired by many, cherished by some, envied by others—but with few people understanding what goes on under their hoods. That's what we set out to learn. First, though, we had to find them.

#### **Notes**

- 1. How to reconcile such a high percentage of high school graduates in the adult population when we know that the national high school graduation rate hovers around 75 percent? Because the Census Bureau counts GED certificates and other "equivalency" credentials; because some people get their high school diplomas late; and because not everybody is truthful and precise when answering these census questions about their level of education.
- 2. Besides several such schools in Louisiana, we found one in Delaware and one in Michigan.
- 3. One of the interesting exceptions, Louisville's Central High School, is profiled in chapter 6. Other "academic" high schools aimed at African-American youngsters, such as the District of Columbia's famous Dunbar High School, gave up their exclusivity—both academic and racial—as desegregation and Conant-style comprehensiveness arrived at approximately the same time.
- 4. Data on the growth (and intermittent shrinkage) of the Advanced Placement program also speak to diminished emphasis on "excellence" during this period. In AP: A Critical Examination of the Advanced Placement Program (Cambridge, MA: Harvard Education Press, 2010), Philip Sadler notes that the 1960s saw a steady increase in AP participation rates, while the 1970s saw a decrease.
- 5. The "setaside" ended in 1997 in the aftermath of other litigation charging that it caused "reverse discrimination."
- 6. <a href="http://www.city-journal.org/html/9">http://www.city-journal.org/html/9</a> 2 how gothams elite.html.
- 7. The lack of congressional urgency on this front is indicated by the fact that sixteen years elapsed (before enactment of the Javits Act) after a major 1972 report by then-commissioner of education Sidney Marland declaring that gifted students needed special consideration within the K-12 system. The lack of current federal attention to this need is evidenced by the facts that Congress zero-funded the Javits program in 2011 and the program's remnants are now housed deep and invisibly within the Education Department.
- 8. A recent illustration of the perils facing "gifted education" programs in times of fiscal stress or ascendant egalitarianism: early in 2009, the California legislature agreed to let the state's public schools divert dollars previously earmarked for gifted children (and a number of other categorical programs) into "any educational purpose." The amounts involved weren't large, only \$44 million in state funding for gifted education. But just a year later, the state's legislative analyst found that more than two-thirds of the districts he surveyed had indeed shifted resources away from the education of gifted children. <a href="http://www.lao.ca.gov/reports/2010/edu/educ survey/educ survey/educ
- 9. Available at <a href="http://bit.ly/16PLgVg">http://bit.ly/16PLgVg</a>.

## **Dropout Prevention of a Gifted Youth: Case Study**

#### Hanna David Tel Aviv University Israel

A report by John M. Bridgeland, John J. Dilulio and Karen Burke Morison of Civic Enterprises on "the Silent Epidemic" (Toppo, 2006) had stated that "Dropouts say their schools expected too little of them." The report found that "Most Dropouts Leave School Due to Boredom, Lack of Encouragement":

Commissioned by the Bill & Melinda Gates Foundation, the report, *The Silent Epidemic: Perspectives of High School Dropouts*, found that nearly 50 percent of 470 dropouts surveyed said they left school because their classes were boring and not relevant to their lives or career aspirations... (ibid).

Though these statistics do not deal with gifted students, it is quite clear that if "ordinary" students suffer from boredom in school, and their level of suffering is high enough to make them leave, the problem of lack of interest among gifted students is likely much more severe, and subsequently – the risk of dropping out as a result of it.

## Some of the Main Reasons for Dropping Out of School

In addition to boredom, there are other reasons for dropping out of school, and some sub-populations are at a higher risk of dropout. Renzulli & Park (2000) indicated that "many gifted dropouts were from low socio-economic status families and minority racial groups" (p. 261). Zabloski (2010) conducted his study on 7 rural students who were gifted; his implicit assumption was that rural students were a higher dropout risk than their urban peers. Kaskaloglu (2010) had searched 58 data sources, 16 of which had sufficient data to be coded, which yielded 21 independent samples and 1025 identified subjects. His meta-analysis exposed some reasons for leaving school, and the role of gender and race in taking this step. A vast part of studies dealt with gifted disabled students (e.g., Baum et al., 2001; Bisland, 2005; Brody, & Mills, 1997; Cline, & Hegeman, 2001; Johnsen, & Corn, 1989; Karnes et al., 2004; Kaufmann, & Castellanos, 2000; Krochak, & Ryan, 2007; Olenchak, 1994). Some concentrated on the problems of dropping out (e.g., Bear et al., 2006; David, 2011a, b; Kortering, & Braziel, 1998) and focused on the role of disability in school dropouts. The case study about to be discussed is about a girl who belonged to the upper middle class, was identified as gifted at age 7, was offered gifted education and suffered from no learning disability. Thus, her dropout risk was not due to any of the more common reasons for dropping out among the gifted, as stated in the literature.

#### How Come Gifted Dropouts Exist At All? Some Research on Dropping Out Among the Gifted

The gifted do experience some potentially stressful challenges which other children do not share. These usually come from people's attitude to them and from inappropriate education – two overlapping and interacting factors which present as follows [...] (Freeman, 2005, p. 247).

Freeman (ibid) is absolutely right regarding her main assumption: that giftedness per sé is not – and should not – be a problem or cause a problem for any child, as has been shown since the Terman studies (Burks et al., 1930; Holahan, 1988; Janos, 1987; Oden, 1968; Seagoe, 1975; Sears, 1977, 1984; Sears & Barbee, 1975; Terman, 1925, 1930, 1954a, 1954b, 1959; Terman & Oden, 1935, 1947, 1951, 1954) and up to our days (e.g., Freeman, 2001; Hitchfield, 1973). However, a negative attitude towards a gifted child is double-edged. In some cases, as Freeman (**ibid**) explains, focusing on "giftedness," on the child's high abilities, puts too much stress on her, and might interfere with normal growing processes – thus damaging the child's well-being. But this happens quite often when the child's giftedness is not recognized. While they know that they are gifted, they have special education needs and are "starving" for friends with whom they can talk, discuss interesting things, and explore new areas. As a result they feel a huge level of frustration because they have "asynchronous" development (Neihart, 1999; Rivero, 2012). They should feel "at home" in school, on the playground, during afternoon activities, and even at home. However, this feeling of frustration is partially a result of the "neural plasticity" of many gifted children (Kalbfleisch, 2009) or "the trajectory of change in the thickness of the cerebral cortex" (Shaw et al., 2006).

Many studies have stated that the dropout rate among the gifted is as high as 20% (Davis & Rimm, 1997; Rimm, 2003; Seeley, 2003; Wood, 2010). Matthew (2009) suggests that the real rate is much lower than the alleged 20%. He re-frames the concept of "gifted

dropout" by placing it in the sequence of underachievement among the gifted, a known and well-studied phenomenon. He also stresses the fact that both terms: "gifted" and "dropout" are far from being well-defined.

In the following case study the term "gifted" will be defined according to the Israeli Ministry of Education, namely, "belonging to percentile 98.5 of the local population based upon giftedness examinations taken in grade 2" (David, 2011c); and "dropout" will be, "stopped attending school while still at the age for compulsory education."

## The Story of Aliza

One of main reasons that a gifted child might not be able to develop a sense of belonging, become popular socially and sometimes not even make friends has to do with the fact that being gifted is also being different in many aspects from most other same-age children. The story of Aliza, the 18-year old gifted girl I first met 4 years ago, will illustrate some of the problems and difficulties she had to go through simply because what was offered to her – academically and socially – did not fit her needs. The school program was too easy, too boring, and too slow. The teachers were mostly neither educated nor emotionally able to relate to her, the other children in her class were not interested in the subjects that were in the center of her life, and her deep, philosophical way of thinking was something she had to hide, as she could not find anybody – an adult or another adolescent – to share it with.

## **Aliza's Family**

Aliza's family lived in a medium-size city at the center of Israel. As in most cases of families meeting with me for counseling (David, 2010), Aliza's parents were both professionals with graduate degrees. The father worked in the private sector, and was thus always pre-occupied with obligations. The mother, though working in the private sector, was highly devoted to her work and took her work home many times. In addition, both parents felt they had to leave their telephones open around the clock; the father did not want to miss job offers due to not being available, and the mother, a high-ranking health officer, felt the responsibility of her position could not be transferred to anyone else. Aliza had an older brother and a younger sister, but she was not particularly close to either of them before our intervention started.

Aliza's parents asked to meet me because their daughter had notified them that she was not going to attend school any more. At the age of 14, she was a 9<sup>th</sup> grader in a junior high school located close to her home. In trying to understand when the problem had first occurred, I found out that since the beginning of junior high school, when she was just 12, Aliza's school attendance declined every year. While in grade 7 she either had a headache or faked one about once a week; by grade 9 she hardly made it to school two days in a row. She took all the examinations of which she had knowledge. Because of her meager school attendance and lack of steady connections with her peers, it happened quite often that she had not been informed about a future examination, and thus missed it. As a result, in spite of doing very well on the examinations she did take, her school reports were poor. They rather reflected the bad opinion most teachers had about her: "too many absences," "too many missing examinations," and "a serious problem with homework" were the main reasons for her low grades. When speaking with her she always said there was only one solution to her problem: to leave school and take the matriculation examinations privately. However, at age 14, because of the law of compulsory education, she was still obliged to attend school regularly. Aliza's parents were very concerned about the possibility of her dropping out. Thus they took her threat seriously: "I am not taking this any longer. I would rather transfer to homeschooling."

Aliza had been identified as gifted at age 8 by the national system (David, 2008a). However, this did not help her get access to a suitable educational constellation. She had left the morning enrichment program in grade 6, as many other Israeli children do (David, 2011, 2012a, in press), and at age 14 she practically had no company of young adolescents who were interested in mathematics, or were as well-read both in Hebrew and English.

Aliza, who had already tried several psychological interventions before, did not feel anything could help her because she "just hated to attend school," and thus, "no psychologist could make her feel differently." The result of each of these interventions was that Aliza held more steadfastly to her attitude. She perceived all professionals she met as a part of the "system" she hated and felt strongly that she did not belong.

As I have already explained (David, 2010), the origin of one of the main difficulties I have to deal with most children – even when the child is under the age of 8, and in ALL cases of 12-year-olds – lies in the fact that they have already experienced more than one disappointment in their treatment. That is why I have adopted a rule usually practiced by clinical psychologists and psychiatrists – taking full responsibility for the mental and educational situation of the child or adolescent for unlimited time, and promising

both the parents and their child that I was not going to leave them, but rather wait for them to leave me. I always say, "You should perceive the moment when you feel I am unneeded as a happy one. For me it is a professional success." I used these exact words both in my intake meeting with the parents and in the first one with Aliza.

#### Success Criteria of an Intervention

As I have stated (David, 2010), intervention by my definition is successful when:

- 1. The intervention comes to a "natural" end. At that point I am sure the child and the parents do not need me anymore, and in many cases the child or adolescent expresses this feeling aloud;
- 2. The child/adolescent has not only solved the problem he had started the counseling with, but also feels mentally stronger, and has higher self-confidence. They also feel more prepared for the challenges to come, as well as for the difficulties and conflicts they will have to deal with during the growing and developing process to come (ibid, p. 12).

Let us see how we accomplished these goals.

### The Beginning of the Intervention with Aliza

I cannot conceal that I hesitated before deciding upon starting the intervention with Aliza. At age 14 most girls have already framed their life priorities, have their world view designed, and their flexibility to change is quite often difficult. I usually do not take cases which I consider as "low prospects" for success, mostly when the parents come to me seeking help for their adolescent children, while the children do not feel they either a need or want any help.

In Aliza's case I had a very good impression from the parents regarding their commitment to the intervention, their belief in its success, their promise to do anything within their power to have their daughter attend all scheduled meetings with me, and even their willingness to read any relevant materials I was to supply them. In spite of all these, I told the parents that if after the first meeting with Aliza, I was not persuaded that she was willing to start the long, exhausting process of finding a solution to her problem, it would be better to give up rather than do the impossible – namely, solving a teenager's problem without her active participation.

## The First Meeting with Aliza

Aliza was a thin, middle-height very good looking 14-year old girl. The most impressive features in her face were her large-opened green eyes expressing both curiosity and intelligence. Right after introducing myself I asked Aliza if she could define in just a few sentences the purpose of our meeting. She said, "I do not want to go to school. My parents want me to, and you are to decide." I smiled and said that I was not to serve as a judge and determine who was to win, but rather find a solution that everybody could live with. She immediately said, "And if there is no such solution?" I answered, "I cannot be 100% sure there is such a solution, but if you tell me now you do not believe your problem can be solved – we shall tell your parents that and save them a lot of money, time and energy." Aliza thought a minute, and then said, "I like your straight approach. I think I can trust you – you are not like all others who had tried to make me 'understand' I was wrong. Neither do you promise me I was to like your solution, but rather that I would be able to live with it. So let us start."

We concluded our meeting after Aliza had promised to wait four weeks without any more discussions about leaving school, but rather try to attend at least 4 days a week, and make an effort to be present in all future examinations. We invited Aliza's parents to the first meeting in the next month. Aliza would attend 4 more meetings with me during which we would explore all possibilities for her to continue her education.

#### The Meeting with Aliza and Her Parents

The 100-minute meeting with Aliza and her parents was very intensive, as in spite of everybody's good will, it was hard for both the parents and Aliza to put aside all old accusations and claims of "unwillingness to understand." However, I told them time and again that we had to accomplish something very important, and thus everything else should wait. Since not attending school in Israel is not only an educational matter but a violation of the law, we had to prevent intervention by the authorities. Aliza immediately said,

"What about homeschooling?" and I answered that since 1994 The Israeli Ministry of Education allowed, in exceptional cases, this possibility (e.g., Heller-Degani, 2003; Homeschooling, 2006). However, there had not been any documented precedent of homeschooling for the gifted, so the "regular" forms for homeschooling had to be filed, with no mention of Aliza's giftedness; the concept of "homeschooling due to giftedness" was simply not recognized in Israel.

At the end of the meeting Aliza agreed to continue attending school until the end of the year in order not to receive the "dropout" title, which had the potential of harming her future, especially regarding the compulsory army service. In addition, her parents promised her that under no circumstances were they to force her to go back to her old school in grade 10.

## The Next 4 Meetings: Exploring All Educational Possibilities

During the next month I met Aliza once a week. She was always on time at my office; she always wanted the meeting to continue beyond the 50 minutes. I did not have to stimulate her to talk; Aliza was very open, very verbal. I realized that her main problem was not the low level and the far too slow pace of learning, but rather the feeling of not belonging, not being a part of what was going on in the classroom. She defined it very accurately, "if the girls speak about movie stars and shopping, and the boys about football and basketball, how can I fit in?" It did not take me too long to understand that Aliza's well-being was going to be harmed if she stayed in that school. However, she could not leave in the middle of the year, since homeschooling arrangements in Israel must be completed no later than during the summer preceding the next school-year.

## The Intervention with Aliza until the Beginning of the Next School-Year

My weekly meetings with Aliza, meetings she was devoted to and continued never to miss, strengthed her so that when she "went out" into the world without the protection and guidance of a public school or a group of peers she belonged to. She was to be strong enough and determined enough to realize her gifts. Aliza found many new areas of interest, some new acquaintances and even a new friend in the extra-curricular activities she started to participate in – the mathematics course at the Weitzman Institute, and the chemistry course at Tel Aviv University. During the following summer she attended a 2-week science camp where she felt, for the first time in her life, that other adolescents her age were interested in the same subjects. In her exact words, "nerds were the majority and everybody seemed to be happy being one."

My main work with Aliza was to help her realize the fact still applied that she was identified as gifted at age 8; namely, that she could be anything she wanted to, and her social isolation was not her fault. No discussion would have been successful had it not been accompanied with practicing social connections – something she was getting better and better at during the courses she took with young people who shared her interests.

Another important area Aliza made a huge improvement in was starting to take care of her appearance. When I first met her she used to hide her good figure under her too-large jeans and shapeless blouses. After finding people with whom she could talk, she shyly asked me, "What do you think about the way I look? My father always says I do not look like a girl at all." This gave me an opportunity to help her understand that developing a good taste in clothes did not necessarily mean being shallow, and slowly but surely she realized it was fun to go shopping with her sister or her mother. I never thought she was to become the "life of the party," but understanding the importance of social skills helped her exercise a special effort, and become better in this aspect as time passed.

## **Aliza Starts Homeschooling**

Writing the application for home schooling was quite complicated, but Aliza's parents and I managed to accomplish it, hand it to the Ministry of Education and get the approval. However, while the program in the application included the subject-matters of grade 10, Aliza's aim was to finish all high-school subjects needed in order to take the matriculation examinations. Thus, all teachers listed in the application form were carefully chosen, making sure they were all capable not just to teach grade 10 mathematics or literature, but rather everything needed for the matriculation examinations.

During that year Aliza took in the winter, spring and summer terms all subjects for the minimal matriculation certification. In Israel the requirements for studying sciences at the university are comparatively low, due to low demand to these subjects, so Aliza was allowed to start studying mathematics and physics at Tel Aviv University in the autumn of the next school year, at age 16 as a

"special status student." That meant she had to take the subject area tests during the first undergraduate year, and receive at least 80 (the equivalent of "B") in all courses she registered in. She worked very hard and managed both.

## **Epilogue, or the Next 2 Years**

I continued meeting Aliza during the next 2 years, watching her developing into a beautiful, sophisticated, self-confident young woman. Being a full-time student at the university at age 16 is not so rare in Israel, especially in mathematics (David, 2008c, 2012b). But the number of girls choosing this option is extremely low (ibid), and thus one of the main challenges Aliza had to succeed in was to make friends among her male peers. She did make one female friend as well – an 18-year old girl who studied math and physics in the academic reserve track (2013), and thus was much younger than the average Israeli student.

Aliza needed counseling regarding many subjects that seemed small, such as how to approach a professor when she had to ask him a question, or what to do when she found out she did not return a book on time to the library. But the most important thing was that she had a feeling that everything was possible: her self-value had increased with every academic or social success, even very minor ones, and her relationship with her parents and her siblings, "was never better, because now I am happy."

#### **Endnote**

<sup>1</sup> The minimal units required for eligibility for the matriculation certificate are 20. However, in order to study in a high prestige institute or in a department with high demand, a larger number is required as well as high level math and English: "In addition to the minimal requirements for being entitled to a matriculation certificate, students who wish to be accepted to one of the 5 Israeli universities need to succeed at the 3-point level in the mathematics matriculation exam, as well as at being examined in English and at least in one more subject at the 4-point level" (David, 2008b).

#### References

The academic reserve (2013). Published by Israeli Defense Forces.

- Baum, S.M., Cooper, C.R., & Neu, T.W. (2001). Dual differentiation: An approach for meeting the curricular needs of gifted students with learning disabilities. *Psychology in the Schools, 38*(5), 477-490.
- Bear, G.G., Kortering, L.J., & Braziel, P. (2006). School completers and noncompleters with learning disabilities: Similarities in academic achievement and perceptions of self and teachers. *Remedial and Special Education*, *27*(5), 293-300.
- Bisland, A. (2005). Using learning-strategies instruction with students who are gifted and learning disabled. In S.K. Johnsen, & J. Kendrick, (Eds.), *Teaching gifted students with disabilities* (pp. 161-178). Waco: TX: Prufrock.
- Brody, L.E., & Mills, C.J. (1997). *Gifted* Children with *Learning Disabilities*: A Review of the Issues. *Journal of learning Disabilities*, 30(3), 282-296.
- Burks, B.S., Jensen, D.W., & Terman, L.M. (1930). The promise of youth: Volume 3: Genetic studies of genius. Stanford, California: Stanford University Press.
- Cline, S., & Hegeman, K. (2001). Gifted Children With Disabilities. (overcoming stereotypes) Gifted Child Today, 24(3), 16-24.
- David, H. (2008a). Integration or separate classes for the gifted? The Israeli view. *Australasian Journal of Gifted Education, 17*(1), 40-47.
- David, H. (2008b). Educational gaps between Jews and Arabs in Israel. Al-Nibras, Articles in Education, Science & Society, 4, 35-53.
- David, H. (2008c). The Mathematics Acceleration Program of the Tel Aviv University (1970-1999). In R. Leikin (ed.), *Proceedings of the 5th International Conference* Creativity in Mathematics and the Education of Gifted Students (pp. 427-429). Haifa, Israel, February 24-28, 2008.
- David, H. (2010). Gifted Case Studies. In A. İşsman & Z. Kaya (eds.), International Conference on New Horizons in Education: Proceedings book (pp. 7-23). Famagusta, Cyprus, 23<sup>rd</sup>-25<sup>th</sup> June 2010.
- David, H. (2011a). A gifted child with ADHD: Case study. In *The gifted child in the Periphery: Studies in nurturing and teaching* (pp. 53-67) (Hebrew). Retrieved on February 24 2013 from <a href="http://www.hebpsy.net/articles.asp?t=0&id=2616">http://www.hebpsy.net/articles.asp?t=0&id=2616</a>
- David, H. (2011b). A 3-fold label and its influence on the crystallization of the self of a gifted disabled child after learnt dextralization. In *The gifted child in the Periphery: Studies in nurturing and teaching* (pp. 143-179) (Hebrew). Retrieved on February 24 2013 from <a href="http://www.hebpsy.net/articles.asp?t=0&id=2616">http://www.hebpsy.net/articles.asp?t=0&id=2616</a>
- David, H. (2011c). Introduction. In *The gifted child in the Periphery: Studies in nurturing and teaching* (pp. 7-20). Retrieved on February 24 2013 from <a href="http://www.hebpsy.net/articles.asp?t=0&id=2616">http://www.hebpsy.net/articles.asp?t=0&id=2616</a>

- David, H. (2012a). Response to the letter of Shlomit Rachmel, the Director of the Division for Gifted and Outstanding Students, The Ministry of Education, Israel, on my article: Ethical issues in educating and counseling the gifted. *Gifted Education Press Quarterly*, 26(3), 7-13]. *Gifted Education Press Quarterly*, 26(4), 19-20.
- David, H. (2012b). Ethical issues in educating and counseling the gifted. Gifted Education Press Quarterly, 26(3), 7-13.
- David, H. (in press). The Arab gifted child in Israel.
- Davis, G.A., & Rimm, B.S. (1997). Education of the gifted and talented. Needham Heights, MA: Allyn and Bacon.
- Freeman, J. (2001). Gifted children growing up. London: David Fulton Publishers.
- Freeman, J. (2005). Counseling the gifted and talented. Gifted Education International, 19(3), 245-252.
- Heller-Degani, C. (2003). Homeschooling in Israel: Beginnings and trends. Tel Aviv: Ramot (Hebrew).
- Hitchfield, E. (1973). In search of promise: A long-term national study of able children and their families. London: Schocken Books.
- Holahan, C.K. (1988). Relation of life goals at age 70 to activity participation and health and psychological well-being among Terman's gifted men and women. *Psychology and Aging, 3*(3), 286-291.
- Homeschooling (2006). Hed Ha'Chinuch [=The Echo of Education], July-August, 20-27 (Hebrew).
- Janos, P. (1987). A fifty year follow-up of Terman's youngest college students and IQ-matched age mates. *Gifted Child Quarterly,* 31(2), 55-58.
- Johnsen, S.K., & Corn, A.L. (1989). The past, present and future of education for gifted children with sensory and/or physical disabilities. *Roeper Review*, *12*(1), 13–23.
- Kalbfleisch, M.L. (2009). The Neural Plasticity of Giftedness. In L. Shavanina (ed.), *International Handbook on Giftedness* (pp. 275-293). Dordrecht: Springer Netherlands.
- Karnes, F.A., Shaunessy, E., & Bisland, A. (2004). Gifted students with disabilities: Are we finding them? *Gifted Child Today, 27*(4), 16-21.
- Kaskaloglu, E. (2010). Factors Behind Gifted Dropouts. LAP Lambert Academic Publishing Saarbrücken: Germany.
- Kaufmann, F.A., & Castellanos, F.X. (2000). Attention-deficit/hyperactivity disorder in gifted students. In K.A. Heller, F.J. Monks, R.J. Sternberg, & R.F. Subotnik (Eds.), *International handbook of giftedness and talent* (2<sup>nd</sup> Ed., pp. 621-632). Amsterdam: Elsevier.
- Kortering, L.J., & Braziel, P.M. (1998). School Dropout among Youth with and without Learning Disabilities. *Career Development for Exceptional Individuals*, 21, 61-74.
- Krochak, L.A., & Ryan, T.G. (2007). The challenge of identifying gifted/learning disabled students. *International Journal of special Education*, 22(3), 44-53.
- Matthews, M.S. (2009). Gifted learners who drop out: Prevalence and prevention. In: L.V. Shavinina (ed.), *International Handbook on Giftedness* (pp. 527-536). Dordrecht: Springer Netherlands.
- Neihart, M. (1999). The impact of giftedness on psychological well-being. Roeper Review, 22(1), 10-17.
- Oden, M.H. (1968). The fulfillment of promise: 40-year follow-up of the Terman gifted group. *Genetic Psychology Monographs, 77*, 2-92
- Olenchak, F.R. (1994). Talent development: Accommodating the social and emotional needs of secondary gifted/learning disabled students. *Journal of Secondary Gifted Education*, *5*(3), 40-52.
- Renzulli, J.S., & Park, S. (2000). Gifted dropouts: The who and the why. Gifted Child Quarterly, 44(4), 261–271.
- Rimm, S. (2003). Underachievement: A national epidemic. *In* N. Colangelo & G.A. Davis (Eds.), Handbook of gifted education (3<sup>rd</sup> ed.) (pp. 424-443). Needham Heights, MA: Allyn and Bacon.
- Rivero, L. (24.1.2012). Many Ages at Once. The science behind the asynchronous development of gifted children. Retrieved on 3 December 2012 from Psychology Today: <a href="http://www.psychologytoday.com/blog/creative-synthesis/201201/many-ages-once">http://www.psychologytoday.com/blog/creative-synthesis/201201/many-ages-once</a>
- Seagoe, M.V. (1975). Terman and the gifted. Los Altos, CA: W. Kaufmann.
- Sears, R.R. (1977). Sources of life satisfaction of the Terman gifted men. American Psychologist, 32, 119-128.
- Sears, R.R. (1984). The Terman gifted children study. In S.A. Mednick, M. Hanway, & K.M. Finello (Eds.), *Handbook of longitudinal research. Volume 1: Birth and childhood cohorts.* New York, NY: Praeger.
- Sears, P.S. & Barbee, A.H. (1975). Career and life satisfaction among Terman's gifted women. In J. Stanley, W. George & Solano (Eds.) The gifted and creative: A fifty-year perspective. Baltimore, MD: Johns Hopkins University Press.
- Seeley, S. (2003). High-risk gifted leners. In N. Colangelo & G.A. Davis (Eds.), Handbook of gifted education (3<sup>rd</sup> ed.) (pp. 444-454). Needham Heights, MA: Allyn and Bacon.
- Shaw, P., Greenstein, D., Lerch, J., Clasen, L., Lenroot, R., Gogtay, N., Evans, A., Rapoport, J., & Giedd, J. (2006). Intellectual ability and cortical development in children and adolescents. *Nature*. 440, (30 March), 676-679.
- Terman, L.M. (1925). Mental and physical traits of a thousand gifted children. *Genetic studies of genius,* vols. 1 & 2. Stanford: Stanford UP.
- Terman, L.M. (1930). The promise of youth. *Genetic studies of genius*, vol. 3. Stanford: Stanford University Press.

- Terman. L.M. (1954a). The discovery and encouragement of exceptional talent. American Psychologist, 9, 221-230.
- Terman, L.M. (1954b). Scientists and non-scientists in a group of 800 gifted men. Psychological Monographs, 68(7), 1-44.
- Terman, L.M. (1959). The gifted group at mid-life. Genetic studies of genius, vol. 5. Stanford: Stanford University Press.
- Terman, L.M. & Oden, M.H. (1935). The promise of youth. *Genetic studies of genius*, vol. 3. Stanford: Stanford University Press.
- Terman, L.M. & Oden, M.H. (1947). Genetic studies of genius. vol. 4: The Gifted Child Grows Up: Twenty-five years' follow-up of a superior group. Stanford: Stanford University Press.
- Terman, L.M., & Oden, M.H. (1951). The Stanford studies of the gifted. P. Witty (Ed.), *The gifted child* (pp. 20-46). Boston: D.C. Heath.
- Terman, L.M. & Oden, M.H. (1954). Major Issues in the Education of Gifted Children. *Journal of Teacher Education*, *5*(3), 230-232. Toppo, Greg (3/1/2006) Dropouts say their schools expected too little of them. Retrieved on 19 February 2013 from USA Today: http://usatoday30.usatoday.com/news/education/2006-03-01-dropouts-expectations x.htm
- Wood, S. (2010). Best Practices in Counseling the Gifted in Schools: What's Really Happening? Gifted Child Quarterly, 54, 42-58.
- Zabloski, J. (2010). Gifted dropouts: A phenomenological study. Doctoral dissertation, Liberty University, Lynchburg, VA...

## Increasing the Identification of African-American Gifted Children with Dual Exceptionalities

## Michelle Trotman Scott, Ph.D. Department of Clinical and Professional Studies University of West Georgia

African-American (AA) children are underrepresented in academic tracks, high ability groups and academic programs at all educational levels. They are also over-represented among high school and college dropouts as well as in special education and the lowest ability groups and tracks. Furthermore, when an African-American child has dual exceptionalities, the education delivered may not be conducive to their needs. Due to so many of these children being over-identified as needing special education but identified as gifted, they are highly likely to fall through the proverbial cracks – to have their gifts and talents wasted. This article will discuss factors that affect the under-identification of African-American children with dual exceptionalities, more specifically, Attention Deficit Hyper-Activity Disorder (ADHD)\* and giftedness, and make recommendations to provide children with the support needed to achieve a successful and fulfilling academic experience.

#### **Gifted and Talented**

Children or youth who demonstrate the capability of high achievement (via assessment evidence), and who need additional services or activities in addition to the services provided within the school setting to fully develop those capabilities, are identified as gifted and/or talented (NCLB, 2001). Some children possess an outstanding gift or talent and are capable of high performance, but also have been identified as having a disability (Weinfeld, Barnes-Robinson, Jeweler, & Shevitz, 2006). However, when a child exhibits characteristics that a teacher may not think is a 'good fit' for the gifted education classroom, may overlook the evidence provided, and focus on the areas that he or she deems as deficient. Furthermore, when cultural differences are taken into account, many behaviors and characteristics are misunderstood and lead to the under-identification and even the misidentification of children.

Children who have been identified as gifted usually think differently than others and may have problems meeting or passing district, state and/or national competency tests. Some have a difficult time organizing things, including their thoughts, feelings and materials and are emotionally intense. They have to deal with being different and have a difficult time conforming to the test based norms. Some gifted children are excitable and have a high energy level, while others are sensitive, passionate, and committed to people, issues, and ideas. Many are very perceptive and internalize the feelings of others within themselves. They are able to find the meaning of things which may be foreign to others. They seek and tell the truth but often are able to understand why others 'just don't get it.' They are highly motivated to achieve their goals and have the strength and will to achieve tasks that may seem to be impossible to reach. In essence, these children are not the children with potential but are those whose potential has come to fruition.

#### Culture

Many African-American students exhibit characteristics that can be misinterpreted by teachers who have not received adequate cultural competency training. Wade Boykin's research describes African-American cultural styles (1994, 2011). Trotman Scott and Ford (2010), and Ford (2010, 2011) describe these styles in depth. These particular styles are developed as a child is nurtured within a particular familial and communal context. When individuals are placed in situations different than what they are accustomed (i.e., another culture), they may have difficulties making the necessary social, behavioral, and cultural adjustments to be successful. Schools are one setting where these cultural styles may be misunderstood. I have identified common characteristics of African-American and gifted children as well as characteristics used to describe students who are being assessed for ADHD. The comparison of the commonalities will reveal how a lack of cultural competence and understanding could (and can) lead to the underrepresentation of African-American children with dual exceptionalities. Many of the characteristics of African-American children are similar to the characteristics of giftedness and ADHD. Like all other racial groups (e.g., Hispanics, Asians, Whites, Native Americans), African-Americans have a culture. As Boykin has shown in numerous studies, many African-American students are highly sensitive to rhythm and harmony, desire to move or be physically engaged (verve, movement oriented), and prefer oral modes of communication. Oral tradition includes enjoying the use of elaborate and exaggerated language, storytelling and telling jokes. African-American cultural styles include the students seeking and developing distinctive personalities that denote a uniqueness of personal style, which is a form of creativity. Just as important, many consider present events more important than anticipating the future. This may contribute to impulsiveness and a desire for immediate gratification.

Some African-American students, especially males, also have a high level of energy and enjoy action that is energetic and lively. This can be misinterpreted as hyperactive. African-American students also have a strong commitment to social connectedness and bonds – they are very social, extraverted and people oriented. This can contribute to their looking socially immature and needy rather than independent. Ironically, many of the characteristics can be interpreted in a negative fashion, especially by those who are pessimists or by those who are not culturally sensitive, reducing the likelihood of these students being recommended and/or identified for the gifted and talented program, while increasing their chances of being (mis)referred for special education evaluation.

Some characteristics of ADHD are similar to those of gifted and African-American children. However, if children are being viewed in a deficient manner (Ford & Trotman, 2001), their behaviors will only seem to conflict with traditional academic environments. More specifically, students with inattentive ADHD behaviors often do not give close attention to details or make careless mistakes in schoolwork, have trouble keeping attention on tasks or play activities, do not seem to listen when spoken to directly, do not follow instructions and fail to finish schoolwork, chores, or duties in the workplace (not due to oppositional behavior or failure to understand instructions), have trouble organizing activities, avoid, dislike, or don't want to do things that take a lot of mental effort for a long period of time (such as schoolwork or homework), lose things needed for tasks and activities (e.g., toys, school assignments, pencils, books, or tools), are often easily distracted and are often forgetful in daily activities. Those who are diagnosed as being hyperactive often fidget with hands or feet or squirm in their seat, get up from their seat when remaining in the seat is expected and required by teachers, run about or climb when and where it is not appropriate (adolescents or adults may feel very restless), have trouble playing or enjoying leisure activities quietly, are often "on the go" or often act as if "driven by a motor," and talk excessively. Children who are impulsive often blurt out answers before questions have been finished, have trouble waiting one's turn, and interrupt or intrude on others (e.g., butt into conversations or games) (American Psychiatric Association, 2000). Unfortunately, behaviors that persist in this manner will undoubtedly lead to academic failure. Teachers' fear of failure will cause many of them to focus on the areas of weakness and not give an equal amount of attention to any strength the student may have. Both needs must be addressed so that African-American children with gifts and talents and ADHD are able to reach their potential.

## A Merger

Unfortunately, many teachers are not familiar with the characteristics of African-American children. However, they are familiar with the characteristics of ADHD and are more likely to recommend that parents take their child to the pediatrician for ADHD assessment than to recommend the child for gifted education assessment. The following table provides a comparison of similarities between the characteristics of ADHD, African-American children, and gifted children.

Afrocentric Cultural Styles	Gifted	ADHD
Verve - a high level of energy and	High energy level.	Often "on the go" or often act as if
they tend to enjoy action that is		"driven by a motor."
energetic and lively.	Excitability.	
		Often interrupt or intrude on
		others (e.g., butts into
		conversations or games).
		Often have trouble waiting one's turn.
		Often blurt out answers before questions have been finished.
Social Time Perspective – here and	Difficult time organizing things,	Often forgetful in daily activities.
now is what matters the most.	including thoughts, feelings and	Often forgettar in daily activities.
What is taking place must be	materials	Often do not give close attention
relevant, meaningful, and		to details; make careless mistakes
engaging. Time is social and		in schoolwork, work, or other
personal. In other words, little else		activities.
matters at the time.		
Communalism - strong	Committed to people, issues, and	Socially dependent and needy.
commitment to social and family	ideas.	
connectedness and bonds.		Dislike independent work. Prefer
	Extraverted, social,	to work with others; prefer to help
	interdependent.	others.
	Empathetic.	
Affect - often sensitive to	Perceptive.	Very emotional and sensitive.
emotional cues and feelings. They		
have a tendency to know when	Insightful.	Impulsive.
others devalue and do not		
particularly care for them.	Intuitive.	Immediate gratification, short-term goals.
Movement - desire to move and	Coordinated.	Often run about or climb when and
be physically engaged.	oos. amatea.	where it is not viewed as
be privatedily engaged.	Tactile.	appropriate (adolescents or adults
Harmony - high sensitivity to	Tactile.	may feel very restless).
rhythm and movement.	Kinesthetic.	, ,,
, and movement.	Kinestiletic.	Often fidget with hands or feet, or
	Strong in visual and ranforms:	squirm in seat.
	Strong in visual and performing	
	arts.	Often get up from seat when remaining in seat is expected.
Oral Tradition - prefer oral modes	Enjoy speaking.	Often talk excessively; talkative.
of communication. They also enjoy	Lijoy speaking.	Offer talk excessively, talkative.
the use of elaborate and	Strong oral skiller linguistically	Plunt direct forthright
exaggerated language, storytelling	Strong oral skills; linguistically intelligent.	Blunt, direct, forthright.
and telling jokes	micingent.	Drafar to speak wathout the a country
	Dick up languages with case	Prefer to speak rather than write.
	Pick up languages with ease.	

Afrocentric Cultural Styles	Gifted	ADHD
Expressive Individualism - Often	Creative.	Expressive, demonstrative.
seek and develop distinctive		
personalities that denote a	Dare to be different.	Unique, clever, innovative in
uniqueness of personal style		personal style.
	Independent.	
		Create own rules; resist following
		rules.
		Resourceful.

This table illustrates how characteristics of African-American children can often be mistaken for behaviors indicative of children with ADHD. The table also shows how the characteristics of the same children can be viewed in a positive (non-deficit) light and lead to a recommendation for gifted and talented services. If teachers increase their cultural awareness and become culturally competent, they will come to the realization that they possess the ability to cultivate the gifts and talents within their classroom, more specifically African-American children.

## **Culturally Responsive Teaching Strategies for Teachers to Consider and Implement**

African-American children with and without ADHD can perform at a higher level if they are taught in a way that caters to their strengths and will decrease their weaknesses. There are several strategies that appeal to AA/ADHD children; parents should ask teachers to consider kinesthetic/tactile strategies, frequent breaks and timers, cooperative learning strategies, and alternative presentation modalities (oral evaluations, speeches, simulations, plays, skits) as a means to enrich the learning experiences of AA/ADHD children.

Kinesthetic/tactile strategies will cater to AA/ADHD children because these strategies allow them to take frequent breaks and enable them to be mobile and engage in hands-on activities. Another way that teachers can provide frequent breaks during instruction and independent work is to allow students to work in 'chunks' of time, as measured through the use of timers.

The use of cooperative activities will allow African-American children with ADHD to tap into their area of communalism. This is especially important since many African-American children possess a strong commitment to social connectedness and bonds. Also, the use of alternative presentation modalities (other than lecturing) will be helpful when teaching information. Using a variety of methods will increase that likelihood that ALL children will be able to learn information in a manner that will cater to their areas of strength.

\*Students who have been identified as having ADHD have been diagnosed by a trained professional. The criteria presented in this article can be considered only as a guide for pinpointing students who may have problems attending to tasks, and not a means to diagnose your child.

#### References

- American Psychiatric Association (2000). *Diagnostic and statistical manual of mental disorders* (4<sup>th</sup> ed). Washington DC: American Psychiatric Association.
- Boykin, A. (1994). Afrocultural expression and its implications for schooling. In E.R. Hollins, J.E. King, & W.C. Hayman (Eds.). *Teaching diverse populations: Formulating a knowledge base* (pp. 243-256). Albany: State University of New York Press.
- Boykin, W., & Noguera, P. (2011). *Creating the opportunity to learn: Moving form research to practice to close the achievement gap.*Washington, DC: ASCD.
- Ford, D.Y., & Frazier Trotman, M. (2001). Teachers of gifted students: Suggested multicultural characteristics and competencies. *Roeper Review*, *23*(4), 235 239.
- Ford, D.Y. (2010). *Reversing underachievement among gifted Black students: Theory, Research and Practice* (2<sup>nd</sup> ed.). Waco, TX: Prufrock Press.
- Ford, D.Y. (2011). *Multicultural gifted education: Rationale, models, strategies, and resources* (2<sup>nd</sup> ed.). Waco, TX: Prufrock Press.

No Child Left Behind Act, 20 U.S.C. § 9101 (2001).

Trotman Scott, M., & Ford, D.Y. (2011). Preparing teachers to work with students with disabilities and gifts and talents. In A. Ball & C. Tyson (Eds.), *Studying diversity in teacher education* (pp. 199 – 215). Washington, DC: American Educational ResearchnAssociation.

Weinfeld, R.L., Barnes-Robinson, L., Jeweler, S. & Roffman Shevitz, B. (2006). *Smart kids with learning difficulties: Overcoming obstacles and realizing potential*. Waco, TX: Prufrock Press.

## John Hersey (1914-93): An Authentic Core Curriculum for the Gifted

## Michael E. Walters Center for the Study of the Humanities in the Schools

"What a wonder of documentation! The archive contains all sorts of rich things, mostly intensely moving, simple, personal writings: diaries, novels, notebooks, account books, minutes of meetings, collections of letters, plays, poems, short stories, sketches, musical compositions; as well as a great mass of official records, mostly from the *Judenrat*, every single page of which tells a human story, dry as the intent may have been. . . . "
Editor's Prologue (p. 5), *The Wall* (1950, Vintage) by John Hersey.

The above quote is related to the sensibilities of gifted students. It describes the sources that John Hersey used to transcribe the experiences of the Jewish occupants of the Warsaw Ghetto into a coherent and powerful fictional work. This is why individuals such as Hersey should be included in an authentic core curriculum for these students.

His personal journey in life is the raison d'être for his literary achievements. He spent his childhood growing up in pre-World War Two China since his parents were there as Christian missionaries. Three important cultural figures in the United States were children in that same environment. Besides Hersey, there were Pearl Buck, Nobel Prize winner in literature (*The Good Earth*, 1931), and Henry Luce (founder and publisher of Time, Life and Fortune magazines). These individuals understood the conditions of nationalism, social revolution, poverty and violence – elements that would be major forces in the twentieth century and in Hersey's books.

He was essentially a journalist. However, his journalism was based upon personal observations of major historical events. He wrote books about both the Pacific and European campaigns of World War Two, e.g., *Into the Valley* (1943) about Guadalcanal; *A Bell for Adano* (1944) about the Italian campaign; *Hiroshim*a (1946) which was an account of the destruction of the nuclear blast; and *The War Lover* (1959) which described the United States Air Force bombing of Nazi Germany. His journalism was not derived from today's cut and paste word processing, but rather it was a result of observing the agony of suffering humanity.

Hersey's masterpiece is *The Wall*, published in 1950 shortly after the end of World War Two. In 1940-43, the Nazis forced Polish Jews into a walled ghetto in Warsaw for the purpose of de-humanizing and destroying their physical, psychological and social attributes. The population consisted of over 400,000 inhabitants crammed into an area of 1.3 square miles. Jewish resistance fighters rose against the Nazis and held them off for an entire month. Hersey's book is one of the best accounts of the Jewish holocaust and is based upon the social historian Noach Levinson's archives, who had buried seventeen iron boxes and small packets of crucial information in the Ghetto's rubble. (Levinson wrote over 4,000,000 words in Yiddish, the folk language of Eastern European Jews.) After these archives were brought into purview, the Polish government translated them into Polish and they were subsequently translated into the English language. It is important to realize that the memory of the Jewish martyrs was communicated to the world because of a multitude of translated archives. Hersey made the daily experiences of the Warsaw Ghetto so real that it seems inconceivable he wasn't there himself.

The National Association for Gifted Children (NAGC) has issued a statement which is critical of the common core curriculum as applied to the gifted. In part it says: "Although the CCSS [Common Core State Standards] are considered to be more rigorous than most current state standards, they fall short in meeting the specific needs of gifted learners, and if held strictly to the standard, could actually limit learning. To overcome this pitfall, it is imperative that gifted educators create a full range of supports for high-ability learners through differentiated curriculum, instruction, and assessments" (NAGC Web Site, 2013).

The core curriculum appears to be geared to achieving certain test results, but gifted students need another type of curriculum. Hersey dealt with the human condition – not with factoids. This is why they should read his books as part of an authentic core curriculum. In his wonderful book of interviews with great authors, **Words Still Count with Me** (1995), Herbert Mitgang gave a special tribute to John Hersey. He said: "In war and peace Hersey's large themes reflected his hope for mankind. Among his colleagues he was a shining example of courage and conscience, a beau ideal" (p. 167).

#### References

Hersey, John (1943). Into the Valley. New York: Knopf.

Hersey, John (1944). A Bell for Adano. New York: Vintage.

Hersey, John (1946). Hiroshima. New York: Vintage.

Hersey, John (1950). The Wall. New York: Vintage.

Hersey, John (1959). The War Lover. New York: Random House.

Mitgang, Herbert (1995). Words Still Count with Me: A Chronicle of Literary Conversations. New York: Norton.

National Association for Gifted Children (2013). Common Core State Standards and Gifted Education.

http://www.nagc.org/commoncorestatestandards.aspx

\*\*\*\*\*\*

Please see our STEM Matrix of FIFTEEN Books for the Gifted from Gifted Education Press! <u>CLICK HERE</u>. I would appreciate your sharing this link with colleagues in the Gifted, STEM, Technology, Science, Math, Career Education, and Language Arts/English areas. Thank you, M. D. Fisher Publisher

Announcing our Latest Book (Order PDF Copies via PayPal - http://bit.ly/bwObhi)

STEM to STEAM Education for Gifted Students: Using Specific Communication Arts Lessons with Nanotechnology, Solar, Biomass, Robotics, & Other STEM Topics (ISBN 0-910609-63-2) by Harry T. Roman & Robert E. Myers. COST: \$27.00 Including P&H. <a href="http://bit.lv/143Cm7i">http://bit.lv/143Cm7i</a>

Additional Books in Our STEM Series by Harry T. Roman (Order PDF Copies via PayPal - http://bit.ly/bwObhi)

*STEM Robotics in the Gifted Classroom: Meet ROBO-MAN! Upper Elementary through Secondary Levels* (ISBN 0-910609-61-6). COST: \$22.00 Including P&H. <a href="http://bit.lv/GSwhit">http://bit.lv/GSwhit</a>

STEM—Science, Technology, Engineering and Mathematics Education for Gifted Students: Designing a Powerful Approach to Real-World Problem Solving for Gifted Students in Middle and High School Grades (ISBN 0-910609-60-8). COST: \$22.00 Including P&H. <a href="http://bit.ly/h0lqa0">http://bit.ly/h0lqa0</a>

STEAM Education for Gifted Students! Upper Elementary Through Secondary Levels: Combining Communication and Language Arts with Science, Technology, Engineering and Mathematics (ISBN 0910609624). COST: \$22.00 Including P&H. http://amzn.to/UJ20Kb

Energizing Your Gifted Students' Creative Thinking & Imagination: Using Design Principles, Team Activities, and Invention Strategies: A Complete Lesson Guide for Upper Elementary and Middle School Levels (ISBN 0-910609-57-8). COST: \$22.00 Including P&H. <a href="http://bit.ly/bb20R2">http://bit.ly/bb20R2</a>

Solar Power, Fuel Cells, Wind Power and Other Important Environmental Studies for Upper Elementary and Middle School Gifted Students and Their Teachers: A Technology, Problem-Solving and Invention Guide (ISBN 0-910609-54-3). COST: \$22.00 Including P&H. <a href="http://bit.ly/ahUdjQ">http://bit.ly/ahUdjQ</a>

#### By Judy Micheletti

SNIBBLES: REALLY Creative Problem Solving Lessons and Mind-Stimulating Exercises for Gifted Students and Their Teachers, Ages 5 through Really Old! (ISBN 0-910609-50-0) by Judy Micheletti Teacher of Gifted Students Berwick, Pennsylvania. COST: \$19.80 Including P&H. <a href="http://bit.ly/9mCe3C">http://bit.ly/9mCe3C</a>

#### **By Robert E. Myers**

Golden Quills: Creative Thinking and Writing Lessons for Middle-School Gifted Students (ISBN 0-910609-56-X) by R. E. Myers, Ed.D. Creative Learning Consultant Healdsburg, California. COST: \$22.00 Including P&H. <a href="http://bit.ly/c6XboL">http://bit.ly/c6XboL</a>