Educating the Gifted

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The very subject of giftedness is fraught with contradiction and controversy. On the one hand, we often encounter misunderstanding, envy, and perceived elitism—and on the other, admiration, dependency, and respect. Little wonder that our K–12 education system has not yet determined how best to nurture extraordinary individuals so that they can become extraordinary contributors to society—and feel rewarded in doing so. Unfortunately, it is not simply the gifted who are underserved by most of our nation's 14,000 public school systems; that group is just more acutely neglected, along with the economically less fortunate, than the nation's student population as a whole.

Greater focus has recently been placed on underprepared students who enter our public schools only to be passed from grade to grade, often condemned to join the one third of their classmates who drop out before receiving a high-school diploma. But this altogether warranted attention to the ill-prepared—a group that no doubt includes gifted members itself—is generally not reflected in the treatment of gifted students as a group, perhaps based on the assumption that the latter are capable of fending for themselves. But when schools tailor their curriculum, counseling, and mentoring solely to the median student, they in effect waste some of our nation's most important potential resources.

And this matters. A few years ago the National Academies, Engineering and Medicine conducted a study of the ability of Americans to compete for quality jobs in the globalized economy. The conclusion of its report, generally referred to as the "Gathering Storm" report after the first line in its title, was that as a nation we are becoming increasingly less competitive. We live in an economy about which Francis Cairncross, writing in The Economist, peremptively declared, "Distance is Dead" . . . and indeed it is. We no longer compete for jobs and customers with our neighbors down the street; we now compete with our neighbors all around the globe. Further, many of these individuals are highly talented, and nearly all are intensely motivated.

The membership of the Academies' study group included university presidents, CEOs, former presidential appointees, Nobel Laureates, and a state superintendent of schools. Their unanimous conclusion was that if America is to compete in the emerging world market, it will have to excel in innovation. Further, the group's report noted that much of this innovation will have to take place in the fields of science and engineering. Various studies have indicated that between 50 and 85 percent of the growth in the nation's GDP over the past 50 years or so is attributable to advancements in these fields. Further, while only four percent of the U.S. workforce is comprised of scientists and engineers, these individuals disproportionately create jobs for the other 96 percent. As but one example, it has been stated that during one recent year when some 700 engineers were working on developing and manufacturing the Apple iPod, 14,000 additional jobs were provided in the United States and nearly 28,000 were provided for a highly disparate group of workers abroad. The former president of CalTech observed that one truly excellent scientist is more valuable than 1,000 very good scientists. Indeed, it seems unlikely that 1,000 average scientists could have produced the General Theory of Relativity, no matter how much time they were allocated. Nor could 1,000 average writers have created Shakespeare's works. Nor could 1,000 composers have created Beethoven's music.

A nation's standard of living depends heavily upon the ability of its citizens to compete for quality jobs. This includes jobs that produce the taxes that provide national security and counterterrorism and make available clean, affordable, and sustainable energy. The well-being of our society as a whole depends disproportionately upon success in recognizing and nurturing those individuals who can take a major leadership role in creating, innovating, and generally thinking out of the box.

In fact, the highest-priority recommendation of the Gathering Storm report was to "fix" the nation's public schools, for youths of all abilities—the gifted, the average, and the less gifted. Unfortunately, the Shakespares, Einsteins, Michael Jordans, and Warren Buffetts of the world are exceedingly rare—magnifying the importance of providing a nurturing environment to prepare, encourage, and benefit from the talents of such individuals. With more targeted research to identify talent, with greater opportunities, and with additional training, we can enhance our nation's pool of high-potential individuals. In the corporate world, successful firms devote an enormous amount of attention to preparing future leaders. Fortune 100 firms with over 100,000 employees consider themselves fortunate to have three good candidates to be the next CEO. Undoubtedly, some of the explanation for this phenomenon is attributable to a failure to recognize appropriately talented individuals.

So how are we doing at recognizing and educating promising young persons—and how do we maximize the opportunity they are afforded to contribute to society? In The Programme for International Student Assessment ("PISA") science and mathematics tests, America's "top" students most recently ranked in 13th and 30th place, respectively, relative to their counterparts in other nations. Some say this is because America seeks to educate a higher proportion of its overall population; however, America ranks in 20th place in the fraction of its youth receiving high-school diplomas. Similarly, as Subotnik, Oliszewski-Kubilius, and Worrell note in the following monograph, the percentage of U.S. white students scoring at the advanced level in mathematics placed them in 25th place as compared with all students in other countries—irrespective of their ethnic backgrounds.

Subotnik et al. have devoted significant effort to surveying the current status of research on giftedness and gifted education and offer recommendations for applying scientific methods to understanding these and other challenging issues. In fact, their survey suggests that abilities can be enhanced through development, that different talents develop at different rates and must be addressed accordingly, and that young people need psychological strength training to help them succeed. My own experience from years of dealing directly with people possessing all degrees of talent has shown me that by far the best indicator of future accomplishment is, not surprisingly, past accomplishment. But this metric only applies if there have indeed been opportunities for past accomplishment; and cases are legion in which the most unexpected individuals, confronted with a major challenge, rise brilliantly to the occasion.

Subotnik et al. argue that ability is developed by motivation. I would go so far as to say that motivation will nearly always beat mere ability. How else can one explain, for example, a football game wherein one team is 30 points behind at half-time and goes on to win—all with the same basic players on the field? Did they become that much more "gifted" during half-time?

In any case, it is the combination of motivation and ability, and the pursuit of targeted opportunities, that is nearly unbeatable—and that is what the following
insightful monograph is all about.