

66

GIFTED STUDENTS

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In one of my courses at Teachers College, I display an overhead transparency on which the following question appears: How long have there been gifted children? Typical answers are “Forever,” “As long as there have been children,” and the like. However, I suggest a more prosaic answer, which, in 2008, is “88 years.”

By claiming there have been gifted children for 88 years, I am being somewhat arbitrary, but also making an important point: The concept of the gifted child is a social construction, not a fact of nature. Gifted children were invented, not discovered. They were invented in the second decade of the 20th century, and the construct received the imprimatur of the educational establishment in 1920 with the publication of *Classroom Problems in the Education of Gifted Children*, the 19th yearbook of the National Society for the Study of Education (NSSE; Henry, 1920). Acknowledgment by the educational establishment that gifted children existed and warranted serious pedagogical consideration marks, for me, the beginning of the field of gifted education and the existence of gifted children themselves.

Before this, there had been studies of “men of genius” (always men) starting with Galton’s *Hereditary Genius* in 1869. However, there was little focus on children. The idea that children could be gifted was, I believe, the result of a technological innovation: the advent of mental testing. It is no coincidence that the father of gifted education in the United States was Lewis M. Terman of Stanford University, who conducted the first major study of gifted children

starting in the 1920s (Terman, 1926–1959), and that the father of mental testing in the United States was the same Lewis M. Terman who, enamored of the work of Binet in France, developed an American version of Binet’s test, the Stanford Binet Intelligence Scale.

The fervor with which psychologists and educators embraced Terman’s and other psychometric tools, believing that these were true measures of intelligence, led to the wholesale testing of countless Americans, from World War I draftees to school children. Test scores were arrayed according to the normal distribution, and, as Foucault (1975/1995) noted, our tendency toward “normalizing judgment” led inevitably to the conclusion that people within a certain IQ range must be normal and that those outside it must not be. Thus, without having done anything but answer a series questions in the manner that psychologists deemed “intelligent,” certain students became “gifted children.” Soon, gifted programs appeared across the country, and researchers initiated studies to learn what gifted children were like.

These studies were typically predicated on the notion that giftedness means high general intelligence and that IQ tests measured this reliably. Thus, the earliest definitions of giftedness in this country were expressed as IQs above a certain cutoff. Soon, however, alternative conceptions of giftedness were proffered, leading to what is referred to as the “expansion of the concept of giftedness” and to considerable confusion as well.

Conceptions of Giftedness

The following scenario is fictional, but it accurately represents what many families have experienced.

One day, the parents of an elementary school student receive a letter informing them that their child has been accepted into the school's gifted program. The child is then placed in the program where, one hopes, educational benefits accrue to her.

Then, as frequently happens in our mobile society, one parent receives an irresistible job offer in another city. The family relocates, the parents proceed to register their child in her new school, and they eagerly await the child's placement into the school's gifted program. However, their wait will be a long one, because, to their consternation, they learn that their child is no longer gifted.

This phenomenon, which I semi-seriously refer to as "geographical giftedness," is understandably vexing to parents. How can a child be gifted in one school and not in another? Isn't *gifted*, well, gifted? The answer to the latter question is no, and the answer to the first has to do with definitions of giftedness. The reason the child in question was "gifted" in one school but not another is that schools use different definitions of giftedness. The child matches the definition in the first school, but not the definition in the second.

The importance of defining giftedness in gifted programs should be apparent: The definition used determines whether certain children will be labeled "gifted." However, there are many definitions of giftedness, and they vary considerably. By choosing a definition, school authorities are essentially conferring giftedness on certain children. Were they to change the definition and faithfully apply it, the membership of the gifted program would change. As capricious and arbitrary as this might seem, this is how things are in gifted education. Educators need to recognize that, in their gifted programs, settling on a definition of giftedness is their most important practical policy.

Once giftedness became unmoored from IQ, definitions multiplied and diverged. I will review some that have had the greatest influence on the field.

The Post-Sputnik Era

The history of American gifted education consists of three periods of proliferation of gifted programs, the first two of which were followed by periods of neglect. The first was sparked by the work of Terman and others in the 1920s and 1930s. By the mid-1950s, however, gifted programs were rare. Then, on October 4, 1957, the Soviet Union launched *Sputnik I*, and something akin to panic ensued. Our Cold War adversary had placed into orbit something whose potential military uses were the object of fevered speculation. Moreover, the sense of military and scientific preeminence that Americans had felt since the end of World War II seemed to vanish instantaneously.

Someone had to take the blame for this national disgrace, and the public educational system was a handy target, criticized for offering "Mickey Mouse courses" and for neglecting gifted students, an untapped national resource that could contribute to the national good. Thus, gifted education reappeared on the educational scene, where it enjoyed a brief, intense period of prominence.

The 47th NSSE Yearbook

Post-Sputnik definitions of giftedness still frequently included IQ but often were more inclusive. Writing in the 47th NSSE Yearbook, Havighurst, Hersey, Meister, Cornog, and Terman (1958) wrote:

We devote this yearbook not to the 2 or 5 percent with the highest intelligence quotients, but to the 20 percent with promise of exceptionally good performance in a variety of areas. (p. 19)

In the same yearbook, Witty offered a definition of giftedness that broke free of IQ altogether:

We have recommended that our definition of giftedness be expanded and that we consider gifted any child whose performance, in a potentially valuable line of human activity, is consistently remarkable. (p. 62)

Getzels and Jackson and the Creatively Gifted Child

That same year, Getzels and Jackson (1958) published a brief description of research they had completed in a "Midwestern private school" where they claimed to have identified a previously neglected population of gifted children (and, in the post-Sputnik era, a valuable national resource): children who, although not high in IQ, were high in creativity. According to the authors, compared to "High IQ/Low Creativity" students, the "Low IQ/High Creativity" students were just as gifted: "despite a difference of twenty-three points between the *mean* I.Q.'s of the two groups, they were *equally superior* in school achievement to the student population as a whole" (p. 76, italics in the original). This was an extremely influential article that received considerable attention in the popular press due to the public's reawakened interest in gifted students. The creatively gifted, as a population separate from the intellectually gifted, entered the gifted education fold, where they remain. Interestingly, in a book published by Getzels and Jackson 4 years later, it was revealed that the "Midwestern private school" was the University of Chicago's Laboratory School and that the "Low IQ/High Creativity" group had a mean IQ of 127.

From the Marland Report to the Present Day

The Marland (USOE) Definition

As happened with the first wave of interest in gifted education, the post-Sputnik fervor abated, and by the end

of the 1960s, many fewer gifted programs existed. However, in the early 1970s, gifted education was revived. Just as parents of students with disabilities had become more militant and won educational rights for their children, parents who believed their children required gifted programs started pressing school authorities to establish them. But the greatest impetus for growth of the field came from the federal government.

The year 1972 saw the publication of *Education of the Gifted and Talented: Report to Congress*, better known in gifted education as the Marland Report, after the Commissioner of Education, Sidney Marland. The report revealed that very few gifted students were being so identified and few of those were receiving a differentiated education. However, the Marland Report is best known for the its definition of giftedness:

Gifted and talented children are those identified by professionally qualified persons who by virtue of outstanding abilities, are capable of high performance. . . .

Children capable of high performance include those with demonstrated achievement and/or potential ability in any of the following areas, singly or in combination:

1. general intellectual ability
2. specific academic aptitude
3. creative or productive thinking
4. leadership ability
5. visual or performing arts
6. psychomotor ability.

It can be assumed that utilization of these criteria for identification of the gifted and talented will encompass a minimum of 3 to 5% of the school population. (Marland, 1972, p. 2)

Many aspects of this definition have been influential in the field of gifted education, but its most prominent feature is the list of six areas in which children can be gifted, “singly or in combination.” The notion that giftedness takes many, varied forms, has a common-sense appeal, and the definition was reprinted in many school district gifted program handbooks. But however much this concept may square with reality, using this definition as a basis for a gifted program is highly, even prohibitively, problematic.

Gifted programs typically involve a formal identification process, differentiated curriculum, and teachers who are familiar with pedagogy for gifted students. Imagine being an administrator charged with the task of developing a gifted program in a school district in which the Marland definition has been adopted and being required to base each component of the program faithfully on this definition.

Consider the process of identifying students for the program. One would need to develop multiple forms of identification: IQ tests, among other things, to assess

“General Intellectual Ability,” formal and informal assessments in each subject area for “Specific Academic Aptitude,” perhaps portfolios and teacher recommendations for “Creative or Productive Ability,” and so forth through the six areas. Identifying all students encompassed by this definition would be so time consuming that there would be little time actually to implement a gifted program. Definitions like this one are useful for heuristic purposes; for practical purposes they are disastrous.

Renzulli's Three-Ring Conception

In 1978, Joseph Renzulli published an article containing a definition that challenged conventional thinking about giftedness. For one thing, Renzulli argued that giftedness is “a state, not a trait,” sometimes one is gifted, sometimes not. Even today, after 3 decades of Renzulli's profound influence, most gifted programs do not operate under this assumption. Usually, children are identified as gifted once in their school careers and stay in the program as long as it runs, suggesting that giftedness is a stable trait of the individual. Pre-Renzulli, that was the consensus, maybe a unanimous belief. Renzulli disagreed, arguing that giftedness comes about in circumstances when three traits are present, two of which are not stable.

The three traits are above-average ability, creativity, and task commitment. It is the first of these that, like the “state-not-a-trait” assertion, challenged orthodoxy in gifted education. Most gifted programs required high test scores for entrance and identified 1–5% of students as gifted. Renzulli would have none of that. He meant “above-average” literally. He argues that the group of students in the 80th–94th percentile of the ability distribution will produce more creative and productive adults than will the top 5%. Thus, in his “Revolving Door Identification Model” (Renzulli, Reis, & Smith, 1981), a candidate pool is constituted consisting of students in the top 10, 15, even 20% of the school in ability. When these students possess the two other traits posited in the definition, they become gifted.

Sometimes, students in the pool become creative in response to a problem, or challenge, and if they pursue a solution doggedly to completion, they demonstrate the third ring, “task commitment.” But creativity and task commitment come and go; when they go, so does giftedness. Marland's and Renzulli's definitions have been the most influential since Terman's time, changing the nature and composition of gifted programs and altering the discourse around the concept of giftedness.

Space limitations and consideration for readers' patience preclude my discussing more definitions here. Definitions of giftedness, as crucial as they are, are only the starting point. Once the target population has been defined, students constituting population, the school's gifted students, must be found, leading us to the issue of identifying gifted students.

Identification Issues and Practices

Why Identification Is So Difficult

Assessment and Labeling

In this field, nothing is as vexing as identifying students for a gifted program. Identification invariably involves some form of assessment, including testing and teacher judgment, that leads to placing some students in the program and excluding others. Whether intended or not, some students are labeled “gifted,” and the rest are implicitly labeled “not gifted.”

Some students are indifferent, or purport to be, with respect to placement in a gifted program. Others are not. Feelings may be hurt, self-esteem diminished, friendships strained. In addition, there are parents who exaggerate the importance of placement in a gifted program, thinking that exclusion dooms the child’s (or their) hopes for a Harvard degree and a successful life.

Others resent the school’s failure to recognize their gifted child. Some undertake vigorous lobbying campaigns on behalf of their unjustly unidentified gifted children, making numerous telephone calls to administrators who, the parents believe, can correct this injustice. I have spoken with many teachers who were convinced that certain students had been placed in their district’s gifted program because of parental pressure. Building principals have numerous responsibilities; one of the most onerous is fielding long, angry telephone calls from parents. Sometimes, the easiest solution to a persistent parent is simply to place the child in the program.

Equity

Racial and socioeconomic inequalities in the identification of gifted students have been a constant throughout the field’s history (see, e.g., Borland, 2003, 2004; Borland & Wright, 1994, 2001; Ford & Harris, 1999). With regard to socioeconomic inequity—which, of course, is related to racial and ethnic inequity—the National Educational Longitudinal Study of eighth-grade gifted programs (1991) revealed that students whose families’ socioeconomic status places them in the top quartile of the population are about five times more likely to be in such programs than are students from the bottom quartile.

Despite decades of efforts to eliminate racial and socioeconomic imbalances, gifted programs continue to serve a disproportionately high percentage of White middle- and upper-middle-class children while underserving poor children and children of color. This has always been regarded in the field as wrong and remediable, but its persistence tempts one to question just how tractable the problem is (see Borland & Wright, 2001). Nonetheless, although we cannot, as a field, eliminate structural inequities in society, we can address practices that exacerbate the problem. For example, we could question our conceptions of giftedness,

which, like conceptions of intelligence, reflect the positionality of the individuals who create them—usually White middle-class academics. But more problematic are traditional identification practices, also rooted in the values of the White middle class.

For example, IQ tests have traditionally played a major role in identifying gifted students. Although few in the field of gifted education advocate using them as Terman and others did, such tests are still widely used in the schools to identify gifted students. Standardized tests can play an important role in identifying gifted students. However, because standardized tests reflect the values and interests of the academics who created them, unless we also use nontraditional methods for identification (Borland & Wright, 1994), inequities will be inevitable.

Identification Practice: Traditional Approaches

Sources of Data for Identification

As noted above, traditional approaches to identification are heavily test driven, with IQ and achievement tests playing the greatest role. Teacher recommendations also loom large in typical practice. Forms for teachers to use to rate students can be purchased ready-made or can be developed locally, and they invariably yield a numerical score of dubious quality.

Using the Data

Once various sources of data have been tapped—for example, an aptitude test score, a verbal achievement test score, a mathematical achievement test score, and a teacher rating—they are often placed on a matrix, which assigns points to certain scores. IQs over 140 may be worth 5 points; IQs between 130 and 139, 4 points; and so forth. These are then totaled, producing a final score.

The many problems with this approach include the question as to what the final score represents psychometrically—it is an apples-and-oranges amalgam of things that should not be added together. Also, the standard error of measurement is widely ignored. Psychometricians know that there is no significant difference between IQs of 140 and 139. Yet, in gifted education, we blithely assign different point values on an identification matrix to the two equivalent scores and set inflexible cutoff scores for entrance to a program. A student who scores 140 on an IQ test gets in; a student who scores 139 does not, violating basic principles taught to every student who takes Tests and Measurements 101, which would include most educators.

Another problem is that identification is usually a quick-and-dirty undertaking. One or more test scores from a single sitting and one teacher recommendation are all that many programs use. However, identification should be a process, not an event. By this I mean that identification data should be collected over a period of

time, preferably years, with input from a number of teachers. Children change. Tracing their development through their school careers up to the point when placement occurs allows schools to make better decisions about placements that significantly affect children who are, and are not, selected.

Alternative Approaches

Largely in response to the racial and socioeconomic imbalance found in most gifted programs, a number of alternative approaches to identification have been developed, especially over the past decade and a half.

Multidimensional Assessment

Writers have advocated multicriterial approaches to the identification for some time (e.g., Baldwin, 1978). Recent concern over inequities in the field has revived efforts to include multiple indicators of giftedness more sensitive to today's diverse student population. Moreover, instead of simply adding together scores on a matrix, computing a "giftedness index," and identifying students who exceed a cutoff, some programs use a more clinical approach that involves examining each indicator separately.

Research on this approach is promising (e.g., Borland & Wright, 1994, 2001). In Project Synergy at Teachers College (Borland, 1994; Borland, Schnur, & Wright, 2000), we used this approach to identify potentially gifted kindergarten students in underresourced schools in Central Harlem. Of the first cohort of students, 5 (out of approximately 100 kindergarteners) in one of the lowest-ranked New York City schools, were placed in a school for gifted students 2 years after identification, and, according to every indicator, their placements were successful (Borland, Schnur, & Wright, 2000).

Portfolio Assessment

A related approach involves using portfolios, collections of student work, as part or the totality of the identification process (see, e.g., Coleman, 1994; Wright & Borland, 1993). Numerous studies report successful outcomes, suggesting the validity and effectiveness of this approach.

Dynamic Assessment

Dynamic assessment is based on Vygotsky's (1978) concept of the zone of proximal development (ZPD), the gap between what a child can do alone and what that child can do with the assistance, or scaffolding, of another person, usually an adult. Dynamic assessment represents an attempt to assess the ZPD by testing, teaching, and retesting. Research (e.g., Bolig & Day, 1993; Borland & Wright, 1994; Kirschenbaum, 1998) suggests that dynamic assessment has considerable potential for identifying gifted

students, especially students from traditionally underrepresented groups.

Performance- or Curriculum-Based Assessment and Observation

Observation has long been used in early childhood education, employing it to help identify gifted students has been advocated by various authors (Baum, Owen, & Oreck, 1996; Borland & Wright, 1994). Observation plays a central role in *performance-based* or *curriculum-based assessment*, a process whereby students are observed responding to problem solving or curricular tasks, especially those that could be considered enrichment. The data from Project Synergy (Borland, Schnur, & Wright, 2000; Borland & Wright, 1994) support the validity of this approach, as do those from DISCOVER (Maker, Nielson, & Rogers, 1994; Sarouphim, 1999).

Newer and Less Traditional Psychometric Instruments

Some recently developed standardized tests (and some older ones that have been used less frequently than they might) are thought to be more sensitive to expressions of giftedness in our diverse school population. The Naglieri Nonverbal Ability Test (NNAT; Naglieri, 1996), owing to its nonverbal format, is thought by some to be useful in identifying gifted students from "minority" backgrounds. Naglieri and Ford (2003) found that this test identified similar percentages of White, African American, and Latino students as gifted (see also Naglieri, Booth, & Winsler, 2004; Shaunessy, Karnes, & Cobb, 2004). However, critiques by Lohman (2003, 2005) challenged these findings. Moreover, as Anastasi and Urbina (1997) wrote, "a growing body of evidence suggests that nonlanguage tests may be more culturally loaded than language tests" (p. 344).

If we are serious about addressing inequities in gifted education, we need to recognize that identification is the area where we can do the most to ameliorate the problem. We cannot change society in a wholesale manner; however, we *can* do a better job of identifying gifted children who fall outside the traditional White middle- and upper-middle-class mainstream.

Curriculum

This issue of curriculum is at the very heart of our field. The only legitimate reason for having gifted programs is to address a failure of our educational system that results in students of high ability not receiving an education that is challenging, rigorous, and suited to their educational needs. Too many students with high levels of achievement and academic aptitude waste too much of their time in classrooms where teachers "teach to the middle," and, when time allows, devote extra time and effort to students who are struggling.

This is understandable, both in the context of the No Child Left Behind era and with respect to the ethics of the triage in which teachers must engage. If a teacher has some time and energy left over from teaching to the majority in the middle, it is not difficult to understand why he/she would focus on students who are struggling with concepts and skills they will need to succeed in life instead of on students who clearly have achieved mastery and are “merely” bored. This not only a smart strategy at a time when superintendents, principals, and teachers are held accountable for students’ performance on tests; it is the right thing to do. However, this leaves a small number of students—students who, like every other student in our schools, deserve an education—effectively unserved. In short, gifted education exists to provide gifted students with a differentiated curriculum so that they can receive a free, appropriate public education.

Differentiated Curriculum for Gifted Students

Traditionally, the phrase “differentiated curriculum for gifted students” has been used to describe the essential goal of this field. However, differentiation is easy: Identified students can periodically meet with a gifted education teacher and do something different from what other students are doing, in other words, participate in a pullout enrichment program for gifted students. Too often, however, these programs raise significant questions about curriculum.

Defensible Differentiated Curriculum for Gifted Students

Many educators have pointed out that we have little, perhaps no, evidence that enrichment is an effective means for providing an appropriate education for gifted students. This may be because too often what passes for curriculum in gifted programs is trivial, unchallenging, and educationally indefensible. In these programs, there is little evidence of a *defensible* differentiated curriculum.

Sometimes this is the result of a singular focus within the program on developing thinking skills, divorced from any meaningful content. There is no evidence to suggest that content-free approaches to developing thinking skills are effective, and a number of writers within the field (e.g., Borland, 1996; Renzulli, 1978; Sawyer, 1988) have argued that the field should not be so dependent on them.

Even when enrichment does have a content base, the result can be what Stanley (1979) called “irrelevant academic enrichment,” enrichment activities based on the assumption that gifted students in a particular setting are a monolithic group, all of whom require the same enrichment topics and activities at the same time. However, gifted students are gifted in different areas and have different educational needs; one-size-fits-all enrichment will not do.

What makes a differentiated curriculum defensible? The answer to that question is elusive, but some elements

that would help make a curriculum more defensible can be suggested. First, there should be a rationale, even a scope and sequence, for the curriculum. Unfortunately, the content and activities in many gifted programs follow no carefully considered plan. Teachers are left alone to create curriculum materials on topics of their choosing, a state of affairs we would not tolerate in any other aspect of American education.

Second, what happens in the gifted program should be appropriate for the students the program serves. It should challenge the students, and the students should actually be learning, not going through the motions of pretending to learn something they already know, as too often happens in heterogeneous classrooms. This may seem obvious, but it is not always the reality in gifted programs.

Third, what constitutes the curriculum in the gifted program should not be something that all students could do, would like to do, would benefit from, but are excluded from. I remember an irate mother of a boy in a public school in Brooklyn stating that her son was not in the gifted program, having missed placement by 1 point on the matrix. She understood that the gifted program existed to teach children critical thinking and creative thinking. “What does this mean that my son is learning?” she asked. “Uncritical thinking? Uncreative thinking?”

I also remember evaluating a gifted program in New York state where students were treated to four weekend-long trips to historical sites in the eastern United States, funded by the regular school budget. In both of these examples, students in the gifted program were doing things that all children could do, would want to do, and would benefit from. This is educationally and ethically unsound.

There has to be a justification for implementing activities in the gifted program from which other children are excluded. If the curriculum is right for gifted students but too challenging for other students, then there is a warrant for its use exclusively in the gifted program. This is a criterion, however, that is rarely met. However, another justification depends not on what non-identified children *can* do but what they *should* do. Students who are in the process of mastering important skills and concepts, and those who are having difficulties mastering them, do not need an enrichment program. They need to master the basic skills in the core curriculum so that they are not denied opportunities that can affect the quality of their lives. Only those students who have quickly and easily mastered the core—or who had it mastered before instruction began—should participate in an alternative program.

Defensible differentiated curriculum for gifted students is difficult to define a priori. One is reminded of Justice Potter Stewart’s statement that he could not define obscenity but knew it when he saw it. The same is true of defensible differentiated curriculum for gifted students: It is difficult to pin down in the abstract, but it can be recognized in those few instances where it exists.

A New Paradigm for Gifted Education

An appreciable number of people in the field are rethinking the basic axioms and practices that have held sway since the Marland Report, and, as a result, there have been challenges to the status quo in gifted education. Earlier, I (Borland, 1996) proposed that we think about the possibility of gifted education without gifted programs. Subsequently, I (Borland, 2003) argued that the concept of the gifted child is logically incoherent, has prompted questionable educational practices, and has served to perpetuate, even widen, the gulf between the wealthier and poorer members of our society. I suggested that we go even further and try conceiving of gifted education without gifted children.

It is time to problematize the construct of the gifted child. Problematizing means looking at something that we take for granted and trying to see it in a new way. As Susan Gallagher (1999) wrote, “we need to recognize how our taken-for-granted way of thinking from within the discipline’s meaning-making system impacts the educational process in perhaps unintended ways” (p. 69). That gifted children exist is a, probably *the*, foundational idea in the gifted education field. However, I do not think that the construct is needed to achieve the major goal of gifted education: providing an appropriate education for students of high academic ability.

Actually, to abandon the construct of the gifted child and to proceed accordingly—which would involve ceasing to identify certain children as gifted and doing away with gifted programs—would truly constitute a paradigm shift, to borrow an overused and frequently misused term from Thomas Kuhn’s seminal book, *The Structure of Scientific Revolutions* (1962/1996). Kuhn explained how “normal science,” “research firmly based upon one or more past scientific achievements, achievements that some particular scientific community acknowledges for a time as supplying the foundation for its further practice” (p. 10), changes over time. Why, Kuhn asks, do scientists working today believe different things, ask different questions, and proceed in methodologically differently ways from their colleagues in, say, the early 19th century, especially because these differences are not completely attributable to technological advances and the accretion of knowledge?

Kuhn’s explanation relies on the concept of the *paradigm*. A paradigm is the complex of theories and practices that constitutes the prevailing worldview and the accepted modus operandi of scientists. It is what is distilled in textbooks as scientific truth and the scientific method.

A paradigm allows normal science to proceed; Kuhn argues that a paradigm is necessary for scientific inquiry. Inevitably, however, inquiry yields data that are inconsistent with the prevailing paradigm. Often, this leads to modifications of principles and theories that alter but do not undermine the paradigm. However, it has always been the case that eventually the paradigm cannot accommodate the accumulation of data unpredicted by and contrary to its fundamental bases. At that point, the paradigm has to

give way to a new one that can account for and explain new knowledge.

To change gifted education as profoundly as some advocate, something equivalent to a paradigm shift in gifted education will be required. I do not underestimate the difficulty that would entail or the resistance it would engender. It would require rethinking beliefs that have guided the field for nearly a century and the practices that result from those beliefs.

Our normal practice derives from paradigm that Hurn (1993) identified as the “functional paradigm,” a paradigm that governs much social and educational thought today. Under the terms of this paradigm, modern Western society is viewed as meritocratic (roles are achieved or earned, not ascribed or inherited), highly reliant on expertise and rational knowledge, and making steady, if imperfect, progress in ameliorating social inequality. Schools are responsible for “the production of cognitive skills, *the sorting and selection of talents*” (Hurn, 1993, p. 47; emphasis added).

One can locate the traditional verities of the field of gifted education within this paradigm. Our field has at its heart a belief in the existence of a distinct population of school children, exceptional children with unusual merit, whose special educational needs must be addressed in the service of social justice and as a way of advancing the common good through the production of human capital, which is consistent with the functionalist paradigm.

The difficulty is that both the general paradigm and its specific realization in the field of gifted education are open to serious criticism. Hurn exposed similar weaknesses in the functional paradigm as a general framework for educational practice. If his arguments are valid, there are data discrepant with the reigning paradigm that cannot be accommodated within it, signaling, perhaps, the need for, or the inevitable advent of, a paradigm shift.

If something as radical as a paradigm shift in gifted education appears unlikely, the same might be said of maintaining the status quo. Normal practice in the field of gifted education—which consists of sorting students on the basis of some being identified as gifted and then temporarily removing them from their heterogeneous classes to receive enrichment and then return to join their nonidentified peers—has held sway in this field since the publication of the Marland Report almost 30 years ago. The model has come under criticism from many from outside the field and, increasingly, from some within. Moreover, it has produced very little with respect to demonstrable positive educational results.

There appear to be three possible courses of action for professionals in the field of gifted education with respect to the traditional model. One is to cling to it steadfastly, ignoring or deflecting criticism and hoping for the return of a more congenial zeitgeist. I think this is unrealistic and ignores substantive changes in how educators think about diversity, grouping, exceptionality, and related issues. The notion of exceptionalities, such as giftedness, being rooted in medical or psychometric necessity instead of historical

and sociocultural forces is increasingly under attack (see, e.g., Franklin, 1987; Sleeter, 1987). It would require an unusually struthious stance on our part to think this all will go away and we will return to the halcyon days of proliferating pullout programs.

A second possibility when a paradigm is threatened by discrepant findings is to modify, but not to abandon, the paradigm to accommodate the data that do not fit. This strategy can be seen in some recent writing in the field, including some of mine (Borland, 1994; Borland & Wright, 1994) in which proposals to remedy the field's most egregious failings, such as the chronic underrepresentation of poor children and children of color, have been advanced. However, the problems persist, and in another paper (Borland & Wright, 2001), we contemplated the possibility, rooted in Isaiah Berlin's notion of value pluralism (see Berlin, 1990), that there is no attainable reality in which we can reconcile such indisputable goods as educational equity and differentiated programs for students who need them. There may be no way to tinker with the paradigm and its derivative normal practice so that such things as effective education and equitable education can coexist with gifted education.

The third possibility is fundamental change: abandoning the construct of the gifted child, calling off our efforts to identify the "truly gifted," and meeting the needs of students typically identified as gifted in heterogeneous classrooms through differentiated instruction (e.g., Tomlinson, 1999). As radical as this may seem to some, it may be the only choice facing the field if, as I suspect, the prevailing paradigm comes to be seen either as something held on to by a progressively smaller band of retrograde gifted education stalwarts or as a framework in which indispensable educational, social, and moral goods cannot coexist.

References and Further Readings

- Anastasi, A., & Urbina, S. (1997). *Psychological testing*. Upper Saddle River, NJ: Prentice Hall.
- Baldwin, A. Y. (1978). The Baldwin identification matrix. In A. Baldwin, G. Gear, & L. Lucito (Eds.), *Educational planning for the gifted: Overcoming cultural, geographic, and socioeconomic barriers* (pp. 33–36). Reston, VA: Council for Exceptional Children.
- Baum, S. M., Owen, S. V., & Oreck, B. A. (1996). Talent beyond words: Identification of potential talent in dance and music in elementary students. *Gifted Child Quarterly*, 40, 93–101.
- Berlin, I. (1990). *The crooked timber of humanity: Chapters in the history of ideas*. (H. Hardy, Ed.). Princeton, NJ: Princeton University Press.
- Bolig, E. E., & Day, J. D. (1993). Dynamic assessment and giftedness: The promise of assessing training responsiveness. *Roeper Review*, 16, 110–113.
- Borland, J. H. (1994). Identifying and educating young economically disadvantaged urban children: The lessons of Project Synergy. In N. Colangelo, S. G. Assouline, & D. L. Ambrosio (Eds.), *Talent development: Proceedings of the second biennial Wallace conference on talent development* (pp. 151–172). Dayton, OH: Ohio Psychology Press.
- Borland, J. H. (1996). Gifted education and the threat of irrelevance. *Journal for the Education of the Gifted*, 19, 129–147.
- Borland, J. H. (2003). The death of giftedness. In J. H. Borland (Ed.), *Rethinking gifted education* (pp. 105–124). New York: Teachers College Press.
- Borland, J. H. (2004). *Issues and practices in the identification and education of gifted students from under-represented groups*. Storrs, CT: National Research Center on the Gifted and Talented.
- Borland, J. H., Schnur, R., & Wright, L. (2000). Economically disadvantaged students in a school for the academically gifted: A postpositivist inquiry into individual and family adjustment. *Gifted Child Quarterly*, 44, 13–32.
- Borland, J. H., & Wright, L. (1994). Identifying young, potentially gifted, economically disadvantaged students. *Gifted Child Quarterly*, 38, 164–171.
- Borland, J. H., & Wright, L. (2001). Identifying and educating poor and under-represented gifted students. In K. A. Heller, F. J. Mönks, R. J. Sternberg, & R. F. Subotnik (Eds.), *International handbook of research and development of giftedness and talent* (pp. 587–594). Oxford: Pergamon.
- Coleman, L. J. (1994). Portfolio assessment: A key to identifying hidden talents and empowering teachers of young children. *Gifted Child Quarterly*, 38, 65–69.
- Ford, D. Y., & Harris, J. J., III. (1999). *Multicultural gifted education*. New York: Teachers College Press.
- Foucault, M. (1995). *Discipline and punish: The birth of the prison* (A. Sheridan, Trans.). New York: Vintage. (Original work published 1975)
- Franklin, B. M. (1987). The first crusade for learning disabilities: The movement for the education of backward children. In T. Popkewitz (Ed.), *The formation of school subjects: The struggle for creating an American institution* (pp. 190–209). London: Falmer.
- Gallagher, S. (1999). An exchange of gazes. In J. L. Kinchloe, S. R. Steinberg, & L. E. Vilverde (Eds.), *Rethinking intelligence* (pp. 69–84). New York: Routledge.
- Galton, F. (1869). *Hereditary genius*. London: Macmillan.
- Getzels, J. W., & Jackson, P. W. (1958). The meaning of "giftedness"—an examination of an expending concept. *Phi Delta Kappan*, 40, 75–77.
- Havighurst, R. J., Hersey, J., Meister, M., Cornog, W. H., & Terman, L. M. (1958). The importance of education for the gifted. In N. B. Henry (Ed.), *Education of the gifted. The forty-seventh yearbook of the National Society for the Study of Education* (pp. 3–20). Chicago: University of Chicago Press.
- Henry, T. S. (1920). *Classroom problems in the education of gifted children. The nineteenth yearbook of the National Society for the Study of Education (Part II)*. Chicago: University of Chicago Press.
- Hurn, C. J. (1993). *The limits and possibilities of schooling. An introduction to the sociology of education*. Boston: Allyn & Bacon.
- Kirschenbaum, R. J. (1998). Dynamic assessment and its use with underserved gifted and talented populations. *Gifted Child Quarterly*, 42, 140–147.
- Kuhn, T. S. (1962/1996). *The structure of scientific revolutions*. Chicago: University of Chicago Press. (Original work published 1962)

- Lohman, D. F. (2003). *A review of the Naglieri Nonverbal Aptitude Test™ (NNAT™) and Form 6 of the Cognitive Abilities Test™ (CogAT®) Revised: 9/1/2003*. Retrieved May 19, 2006, from http://faculty.education.uiowa.edu/dlohman/pdf/NNAT_vs_CogAT6_revised2.pdf
- Lohman, D. F. (2005). Review of Naglieri and Ford (2003): Does the Naglieri Nonverbal Ability Test identify equal proportions of high-scoring White, Black and Hispanic Students? *Gifted Child Quarterly*, 49, 19–28.
- Maker, C. J., Nielson, A. B., & Rogers, J. A. (1994). Giftedness, diversity, and problem solving: Multiple intelligences and diversity in educational settings. *Exceptional Children*, 27, 4–19.
- Marland, S. P. (1972). *Education of the gifted and talented. Report to Congress*. Washington, DC: U.S. Government Printing Office.
- Naglieri, J. A. (1996). *Naglieri Nonverbal Ability Test*. San Antonio, TX: The Psychological Corporation.
- Naglieri, J. A., Booth, A. L., & Winsler, A. (2004). Comparison of Hispanic children with and without limited English proficiency on the Naglieri Nonverbal Ability Test. *Psychological Assessment*, 16, 81.
- Naglieri, J. A., & Ford, D. Y. (2003). Addressing underrepresentation of gifted minority children using the Naglieri Nonverbal Ability Test (NNAT). *Gifted Child Quarterly*, 47, 155–161.
- Renzulli, J. S. (1978). What makes giftedness? *Phi Delta Kappan*, 60, 180–184, 261.
- Renzulli, J. S., Reis, S. M., & Smith L. H. (1981). *The revolving door identification model*. Mansfield Center, CT: Creative Learning Press.
- Sarouphim, K. M. (1999). DISCOVER: A promising alternative assessment for the identification of gifted minorities. *Gifted Child Quarterly*, 43, 244–251.
- Sawyer, R. N. (1988). In defense of academic rigor. *Journal for the Education of the Gifted*, 11, 5–19.
- Shaunnessy, E., Karnes, F. A., & Cobb, Y. (2004). Assessing potentially gifted students from lower socioeconomic status with nonverbal measures of intelligence. *Perceptual and Motor Skills*, 98, 1129.
- Sleeter, C. E. (1987). Why is there learning disabilities? A critical analysis of the birth of the field in its social context. In T. Popkewitz (Ed.), *The formation of school subjects: The struggle for creating an American institution* (pp. 210–237). London: Falmer.
- Stanley, J. C. (1979). The study and facilitation of talent for mathematics. In A. H. Passow (Ed.), *The gifted and talented: Their education and development* (pp. 169–185). Chicago: University of Chicago Press.
- Terman, L. M. (1925–1959). *Genetic studies of genius*. Stanford, CA: Stanford University Press.
- Tomlinson, C. A. (1999). *The differentiated classroom: Responding to the needs of all learners*. Washington, DC: Association for Supervision and Curriculum Development.
- U.S. Department of Education. (1991). *National educational longitudinal study 88. Final report: Gifted and talented education programs for eighth grade public school students*. Washington, DC: Author.
- Vygotsky, L. (1978). *Mind in society*. Cambridge, MA: Harvard University Press.
- Witty, P. A. (1958). Who are the gifted? In N. B. Henry (Ed.), *Education of the gifted. The forty-seventh yearbook of the National Society for the Study of Education* (pp. 41–63). Chicago: University of Chicago Press.
- Wright, L., & Borland, J. H. (1993). Using early childhood developmental portfolios in the identification and education of young economically disadvantaged potentially gifted students. *Roeper Review*, 15, 205–210.