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# Important Issues, Some Rhetoric, and a Few Straw Men: A Response to Comments on “Rethinking Giftedness and Gifted Education”

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## Abstract

In this article, the authors respond to the eight commentaries on “Rethinking Giftedness and Gifted Education: A Proposed Direction Forward Based on Psychological Science” using several themes to organize their response. These themes include ability, developmental trajectories, effort and opportunity, psychosocial factors, eminence, and equity. The authors reaffirm the contention that eminence is an appropriate standard for assigning the gifted label in individuals with well-developed talents.

## Keywords

philosophical/theoretical, definition and/or conception of giftedness/talent, special populations/underserved gifted

Last year, we published an article in which we tried to articulate a unified vision of giftedness and gifted education from the perspective of psychological science (Subotnik, Olszewski-Kubilius, & Worrell, 2011). We are thrilled and honored that *Gifted Child Quarterly* has devoted a special issue to our ideas such a short time after their initial publication, and we are excited to have the opportunity to engage in a conversation about it with such an esteemed and varied group of scholars. We are also appreciative of the opportunity to respond to comments on our article and further clarify positions that we articulated.

As noted by Robinson (2012), the talent development perspective is not new. We stand on the shoulders of several giants in gifted education research. Some of our predecessors' names are familiar to many (e.g., Bloom, 1985; Feldhusen, 1992; Gagné, 1985), and we are certainly mindful of the debt of ideas that we owe to those who preceded us. Nonetheless, we think that there are novel aspects to our talent development approach. First, even though the development of academic talent was a central thesis, we drew on the psychological literature about talent development in a broad range of domains to make our arguments. We also highlighted the importance of and differences among developmental trajectories, both within and across domains of endeavor, as well as the importance of psychosocial skills and the need for psychological strength training in the academic sphere, a practice that is already common in performance domains. Relatedly, we articulated similarities and differences between performance and production domains.

In addition, we put forward the notion of attained eminence as an important goal of gifted education and integrated the literatures on outstanding performance and its multiple predictors (e.g., ability, effort, chance, education) into a comprehensive model applicable across all domains of endeavor. Finally, we summarized the methodological challenges involved in studying gifted and talented youth and put forward a research agenda for the field grounded in psychological science. Importantly, this research agenda is not only focused on the high motivation, high opportunity students who currently populate a majority of our programs for the gifted and talented but also is focused on other groups of students (high motivation, low opportunity; low/undetermined motivation, high opportunity; low/undetermined motivation, low opportunity) with the potential for outstanding achievement, albeit not yet manifested due to psychological or environmental variables.

## Framework for Responding

Some of our ideas did not elicit much response from the commentators, and we interpret this to mean that there is

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some consensus in the field on a number of our arguments. Other ideas elicited considerable controversy and have already stimulated rich conversations on blogs, in publications, and at regional and national conferences; it is our hope that these discussions will result in the refinement of these ideas into policy initiatives for the field. In this issue of *Gifted Child Quarterly*, there are eight commentaries coming from a variety of perspectives (e.g., advocacy, equity, policy, the tension between education and psychology, how students should be educated, the role of psychosocial variables). We were particularly pleased to see commentaries from a psychology researcher (Jung, 2012), who studies decision making with regard to careers and occupation choice, an area that gifted education does not engage with as much as it should, and we are delighted that international scholars were also invited to contribute, as we believe our ideas have resonance beyond the United States. We do regret not having integrated elegant talent development models like Actiotope (Ziegler, 2005) in our original article.

Rather than responding to each of the eight commentaries individually, we have structured our response around themes from the original article: (a) the role of ability, (b) developmental trajectories, (c) effort and opportunity, (d) psychosocial factors, and (e) eminence. We also added a section in response to the contention that our vision does not sufficiently address equity (Grantham, 2012). We apologize in advance as limitations of space, which also restricted the length of the commentaries, constrain the comprehensiveness of our response.

## The Role of Ability

In our article, we made several points about ability, including (a) that general and domain-specific abilities are necessary but not sufficient for high achievement across all domains; (b) that these abilities are malleable and develop with appropriate instruction; (c) that we are not yet sure what the ideal balance of general versus domain-specific abilities is, although it is likely that this balance differs by domain; (d) that domain-specific abilities become important at the beginning of a domain trajectory, and the starting point may vary from childhood to adulthood; and (e) that more research is necessary, given the limited state of our knowledge. Several commentators mentioned ability in their articles and most did not disagree with the points we raised. However, two articles engaged with ability more specifically.

## Gifted Versus Talented

Jung (2012) focused on the relationship of ability to achievement, particularly in the context of individuals losing the “gifted” label if they have not achieved substantially at a certain point in adulthood. He suggested that the lack of outstanding achievement can occur inadvertently due to career indecision, or can be due to the complex interactions

of variables that affect ability and choice of career. As a solution, Jung proposed adopting Gagné’s (2004, 2009) framework, which uses “gifted” to signal high ability and “talented” to label outstanding achievement. Although Gagné’s distinction is helpful and brought attention to the pathway between potential and fulfillment of potential, it does not result in a more precise definition of giftedness.

People talk about gifted athletes and talented writers, and the two adjectives are listed as synonyms in dictionaries and thesauri. The gifted label may result in special programming in K-12 settings to help individuals develop their talents, but that is a unique application to childhood only. In fact, even at the high school level, demonstrated academic achievement rather than ability test scores is the main criterion by which students gain access to advanced courses and programs (Freeman, Raffan, & Warwick, 2010; Peters & Mann, 2009). The gifted label does not (a) facilitate admission into degree programs (undergraduate, graduate, professional, performance), (b) lead to being chosen in the draft for a professional sports team or obtaining a tenure track appointment at an academic institution, or (c) help in winning a gold medal in the Olympics or Nobel or Pulitzer prizes.

In the worlds of football, mathematics, gymnastics, ballet, and writing, the signifier of giftedness is outstanding achievement in the domain, regardless of the individual’s ability or potential for achievement. Moreover, separating ability and achievement is in direct contradiction to several points that we want to deliberately emphasize. We contend that in the early stages of talent development, ability is key, but in later stages of the talent development trajectory, giftedness should be attributed on the basis of achievement. Thus, with regard to real life, our contention is descriptive rather than prescriptive and, we believe, appropriate.

## High Ability Psychology Versus Advanced Academics

McBee, McCoach, Peters, and Matthews (2012) contend that there is a schism between high ability psychology and advanced academics. They suggest that the former should be focused on “a theoretically oriented research agenda” whereas the latter should be focused on “an interventionist and developmental research agenda.” We believe that a separation of these two lines of research within gifted education has, in fact, negatively affected our field’s credibility and has hindered our effectiveness in designing program models that truly develop talent in various domains for a diverse range of students. Gifted education has been rightly criticized for its lack of scientific rigor and atheoretical research. There is no surer way for gifted education as a practice area to lose scientific standing as a field of study than to cleave it from its theoretical foundations. We need more research that connects existing theoretical models (e.g., achievement motivation models) to the development of giftedness and talent. How can we study any aspect of learning from the remedial to the

advanced without invoking the models of psychologists such as Bandura, Piaget, Steele, and Vygotsky, among many others (like Leta Stetter Hollingsworth, who, contrary to claims made by McBee et al., was also a psychologist)?

One of our most fundamental arguments in Subotnik et al. (2011) is that psychological variables are critical to talent development, especially to long-term engagement and sustained creative productivity in a field, and our current lack of understanding about how these variables operate impedes our ability to deliberately cultivate them in children and incorporate them into our programming. Thus, we must bring psychological research on high ability to bear on advanced academics if we are to be more successful in moving ability to achievement for gifted individuals. The point of marrying psychology and education is to be more effective at talent development.

A schism between ability and achievement is also not tenable for a field in which the relationship between these two constructs is so fundamental to our practice. Consider that advanced academic achievement is one dependent variable of interest in most research on academic giftedness, including longitudinal investigations such as the Study for Mathematically Precocious Youth, where ability measured decades earlier is the predictor variable. Scholarly interest in cognitive ability was galvanized and is maintained by its bidirectional relationship with achievement across the entire distribution of both of these variables (Binet, Simon, & Kite, 1916; Simonton & Song, 2009). Ability and achievement are so inextricably intertwined that a schism between them is at best improbable, and maybe impossible.

## Developmental Trajectories

The idea that outstanding achievement follows a developmental trajectory that is unique to domains was generally endorsed by all of the respondents, although many of them did not approve of eminence as the end goal, an issue we deal with in a subsequent section. Many of the commentators related these ideas to child-centered approaches and developmentally appropriate activities, invoking a variety of theorists such as Bronfenbrenner and Vygotsky. Jung (2012) notes that this notion fits well with the models of career development and opines that for extremely advanced students, career counseling and education would have to start at a very young age. Jung proposes that we explore a transitional stage within talent development on how a career decision is made, an intriguing addition. Intensive education and training is almost always appropriate for prodigies in music and mathematics, and perhaps career counseling as well, although it is not clear what type and quality of career counseling is provided to outstanding achievers who are not prodigies. Ziegler, Stoeger, and Vialle (2012) encourage our field to pursue research on pathways to excellence, expertise, or eminence rather than focusing overly on identification of individuals.

Makel and Putallaz (2012) offer a thoughtful list of questions for us and raised an idealistic point that should be standard practice. They suggest that the chief goal of gifted education and regular education should be the same: “to ensure that all students receive the education appropriate for them at any given time by maximizing the match between individual students’ educational experiences with their individual educational needs.” Ironically, this is the goal that is the basis for special education—a free and appropriate public education, a goal only applied to students who are below average in academic functioning.

We definitely support the idea of an optimal education match for all students, but implementing such a policy with gifted students will require special programming for these students, including separating students into groups according to domain of expertise or achievement, adjusting their pace of instruction, and providing special classes and programs to respond to individual differences in ability, as noted in the quotation by Julian Stanley cited by Makel et al. (2012). More important, the arena of gifted education and talent development extends beyond the school day to informal education offered by clubs, museums, summer programs, and competitions. We also argue that it extends beyond the precollegiate years to university, graduate and professional training, and beyond.

## Effort and Opportunity

In Subotnik et al. (2011), we argued that effort is not only a central ingredient in outstanding achievement, but it is fundamental to moving along the developmental trajectory from ability to expertise to eminence. We also pointed out that effort and opportunity (sans ability) are considered the sine qua non of outstanding accomplishments by several contemporary writers (e.g., Gladwell, 2008; Syed, 2010). Interestingly, effort was mentioned only in the commentary on psychosocial skills (Rinn, 2012). Rinn claimed that intrinsic motivation promotes effort, but we would argue that a variety of other constructs also promote effort, including extrinsic motivation, interest, and passion. We maintain that effort is an essential ingredient in translating ability or potential into achievement, and we challenge the field to pay more attention to this variable and its contributions to singular accomplishments.

The concept of opportunity received considerable attention in the commentaries. McBee et al. (2012) argue that “chance by definition is idiosyncratic and fundamentally unpredictable. If chance plays a large role in the development of eminence, then eminence too will be idiosyncratic and unpredictable, and therefore poor fodder for scientific inquiry.” According to the literature on chance that we present in our article, the issue of importance is how individuals are prepared to respond to chance factors. Those who are prepared to step into new opportunities or to be resilient in response to setbacks due to chance will be most successful.

This preparedness can be taught explicitly and would contribute to the likelihood that one would take opportunities that come along.

Jung (2012) reported that as in other areas, gifted students have more access to career information, although it is not clear if this access is due to the label or to the achievement outcomes that frequently come with the label, and Plucker (2012) contends that describing gifted education in terms of equality of opportunity is more palatable to policy makers. However, Grantham (2012) was less sanguine about our discussion of opportunity, especially with regard to our discussion based on low and high motivation and low and high opportunity. He suggested that our description of students in the high motivation/high opportunity quadrant as the “best ‘bang for the buck’” (Subotnik et al., 2011, p. 36) could be interpreted as supporting “academic triage” and saying that gifted education is only “for White middle class students.”

Of course, this was not our intention, nor do we think that we even imply this. Indeed, in the same diagram, we suggest that students with high motivation and low opportunity are our “most important societal responsibility,” and those with low opportunity and low or undetermined motivation are not only the “greatest challenge to society” but also “worthy of investment in opportunity” (Subotnik et al., 2011, p. 36). Our point is to emphasize the importance of increasing both within school and outside of school opportunities for more students, especially for students who are currently underrepresented in gifted programs. We believe these opportunities need to be made available beginning in early childhood but also continuously so as to catch children whose abilities emerge later.

The National Football League (NFL), the National Basketball Association (NBA), and Major League Baseball (MLB) are the end results of the nation’s most successful talent development programs, although we do not frequently think of these in relation to gifted and talented education programs. In the domains represented by these franchises, there is no shortage of outstanding minority performers. The task for our field is to learn how to create similar outcomes for academic domains, a goal that is likely related to psychosocial factors (which we discuss in the next section) and broad cultivation of the belief that academic fields are open and accessible to these students.

## Psychosocial Factors

Robinson (2012) reminds us that psychosocial variables were identified as key constructs several decades ago (see Flanagan, 1962), but Rinn (2012) is the only commentator who engaged substantively with our notion of psychosocial factors. Rinn agrees that factors such as task commitment, persistence, passion, and social skills are important in supporting outstanding achievement. She also raises several critically important questions. First, the field needs more psychometrically sound measures of these constructs. Second, the field needs to understand what quantity of a

construct such as math self-concept is sufficient at each stage of development and level of talent. More generally, researchers need to identify the most important psychosocial variables for different domains and across developmental trajectories. Another point made by Rinn involves the definition of psychosocial coaching and what it looks like in music versus physics, and with children versus adolescents. We also agree with Rinn that psychosocial coaching can and should involve more individuals than listed in Subotnik et al. (2011). Psychosocial factors are an important research frontier in furthering the understanding of giftedness and the development of gifted performers and producers.

## Eminence

Undoubtedly, the most controversial proposition that we put forward is the contention that “eminence should be the goal of gifted education” (Subotnik et al., 2011, p. 40). Embraced in two commentaries (Jung, 2012; Ziegler et al., 2012), acknowledged in one (Plucker, 2012) as appropriate in a time of accountability, and repudiated in the rest, our comments on eminence have generated the greatest number of responses in this special issue. According to Jung (2012), organizational psychology supports the notion that gifted individuals may have a need to live up to their potential, and have high self-expectations and aspirations, as well as experience substantial pressures from family and society (p. 191). Ziegler et al. (2012) argue that focusing on eminence as an outcome would ensure that researchers and evaluators in gifted education seek stronger educational effects to replace the current, rather weak outcomes currently reported for gifted programs.

We begin with the premise that “outstanding performance is almost always judged relative to others in one’s peer group” (Subotnik et al., 2011, p. 40). In K-12 education, we identify somewhere between 2% and 10% of the student population to participate in gifted education programs, depending on the district and the resources available. Seventy-four percent of students who enter high school complete their diploma and about 72% of high school graduates enroll in college; however, only 30% of adults have a bachelor’s degree (Aud, Fox, & KewalRamani, 2010). If we go beyond the bachelor’s degree, the percentages shrink even further. According to the 2011 U.S. Census, approximately 3% of the population has a doctoral or professional degree. Of course, we could consider all of these individuals gifted compared with the general population, but within their subfields (e.g., MDs, DDSs, PhDs in physics), do we consider all of these individuals gifted? The answer is no.

Let us turn to sport where the atmosphere is even more rarefied. In contrast to the world of school and academe, which lacks well-defined, developmental sequences of excellence benchmarks, the performance domains have invested much money and effort to establish recognized standards for excellence at every level. The NFL has fewer than



2,000 players, MLB has fewer than 1,000 players, and the NBA has fewer than 500. Again, compared with the general population they are all quite gifted in their domains, but compared with their peers, how many do we consider gifted and how many do we consider outstanding within their elite groups? In basketball, the recent contributions of Jeremy Lin do not begin to compare with the contributions of Michael Jordan and Kobe Bryant, nor do the performances of the latter two diminish Lin's recent contributions. McBee et al. (2012) are correct: Giftedness, by definition, is rare. Moreover, it requires a substantial personal and societal investment to develop. However, in groups of individuals with well-developed and rarefied talents, by definition those at the apex of the talent development trajectory, eminence is an appropriate marker of giftedness. Given this framing of giftedness as eminence in well-developed talents, we now turn to some of the specific statements in the commentaries.

Robinson (2012) argues that eminence will be a "tough sell" to school boards who will see that outcome as "irrelevant." First, every school and school community proudly displays information about renowned alumni. Second, the outcomes expected from the talent development model would vary by developmental level, with demonstrated potential appropriate in the earlier grades and demonstrated achievement in the higher grades. In fact, school boards are deeply immersed in accountability policies (see Plucker, 2012), to which current gifted programs are not always subject—but perhaps should be. As Ziegler et al. (2012) point out, thus far, gifted education has not been able to demonstrate significant value added. Third, in a small number of domains such as violin and chess, young people have pushed the boundaries of their field to the degree that they might be called eminent without the intervention of schools.

A still harder sell to the public would be to argue that an acceptable outcome of investing in a gifted program would be to develop successful parents, as argued by Makel et al. (2012). The implication of this argument is that all adults who were gifted as children are still gifted as adults, no matter what they choose to do. Furthermore, all individuals who become parents (whether formerly identified gifted children or not) should aspire to be successful parents for the sake of their children. You cannot say the same for those with potential gifts in the arts, sciences, or other domains; people are free to develop their domain-specific talents to whatever level they choose or not at all, with little consequence for others. Yet only those whose contributions make our collective lives more healthy, beautiful, or interesting will be regarded as gifted adults by society. In the same vein, Makel et al. (2012) ask "how can a school evaluate its curriculum when success cannot be assessed for several decades (a time frame necessary to assess whether eminence is achieved)."

Both these arguments are straw men. The notion that K-12 programs should be judged on their production of eminent individuals is an argument that we neither made nor support. Instead, we argue that gifted education should be

held accountable for providing the content, skill, and services for those individuals who have the talent and the commitment to pursue outstanding achievement. A talent development trajectory includes identification for potential in the early stages, demonstrated achievement in the middle stages, and outstanding performance or creative productivity in adulthood. Eminence is intended to be at the far end of a trajectory of talent development, almost always in adulthood, and is based on a comparison to other individuals with fully developed, outstanding talents.

Similarly, we never suggested that second grade teachers should be judged on their ability to singlehandedly produce eminent individuals several decades hence, but rather we argue that the system should focus on developing talent to the next level—from potential, to achievement, to eminence. We acknowledged that the field is not on solid ground predicting which children will become experts or eminent in the future in all domains, and suggested that we need further research on how we move from ability to expertise and expertise to eminence, and how to integrate that knowledge into practice. We certainly have models in performance arenas such as sport and music to look at for inspiration. What needs to be sold to school boards is the notion of appropriate instruction and educational opportunities for their students with potential in the earlier grades, be that Algebra 1 for fourth graders, or dual enrollment in college for high achieving, talented middle and high school students. As we emphasized in our monograph, if we focus on eminence as the long-term goal in adulthood and give students programming that enables them to continue toward that path in secondary school and beyond if they so choose, we will necessarily prepare many more students for meaningful careers as experts in their fields. Thus, using Borland's (2012) terminology, we would argue that giftedness as national resource is related to giftedness as special education (which we interpret as optimal educational opportunities for all students in school settings), and both of these perspectives are important.

According to Ziegler et al. (2012), focusing on eminence could lead to better integration of gifted education research into an array of other scholarly literatures, such as those on expertise and innovation. Indeed, as a result of our focus on highly developed talent and eminence, the three authors have enjoyed growing relationships with scholars in the sport and music expertise literature, as well as the STEM innovation literature.

Finally, just because eminence is rare does not make it a goal that we should write off as unattainable without investigation. How often have we lamented as a field—much as we do in this article—about the lack of resources and appropriate educational programs and opportunities for the youth that all of us are trying to serve? Using eminence in the later stages of talent development implies holding programs accountable for offering guidance on how to be successful in a domain, much like most graduate schools are expected to

prepare a certain number of scholars who will be among the ranks of the most cited and influential, and conservatories are expected to prepare a number of recording artists who can earn a living making beautiful music.

## Equity

One definition of equity is fairness, and in psychology, equity theory contends that individuals compare benefits received to their inputs such as effort and education (VandenBos, 2007). Based on this definition of equity, we reject the notion that our vision of gifted education is “devoid of an equity vision” (Grantham, 2012). Indeed, just as outstanding achievement and eminence are not based on a single deed, but on a lifetime of effortful contributions, so too is a commitment to equity. Over the years, concerns about equity have been important and visible aspects of all of our research agendas (e.g., Horowitz, Subotnik, & Matthews, 2009; Lee, Olszewski-Kubilius, & Peternel, 2009; Olszewski-Kubilius, 2006; Subotnik, 1996; Subotnik, Robinson, Callahan, & Gubbins, 2012; VanTassel-Baska, Olszewski-Kubilius, & Kulieke, 1994; Worrell, 2003, 2007; Worrell, Szarko, & Gabelko, 2001).

And equity is an important aspect of the Subotnik et al. (2011) monograph. Grantham seems to be suggesting that the framework put forth in our article is not appropriate or not applicable to the talent development of linguistically and culturally diverse gifted students. We disagree and think that the view of talent development we have advanced offers the potential for even greater success in addressing the equity issues that plague the field of gifted education (and education in the United States in general) for the following reasons. First, the talent development framework proposed emphasizes the role of increased within and outside of school opportunities, which have to be provided, and psychosocial skills, which can be cultivated, two key ingredients that together can make a significant impact on the number of students who are identified and served and successful in talent development programs.

Second, because our framework is developmental, potential—rather than demonstrated achievement—is emphasized in the early stages of talent development and for students who have had fewer opportunities to learn. Specifically, we suggest that more children be given challenging learning opportunities and their responses be monitored as a means of mining for academic talent that is not readily discerned on tests. Our framework includes an increased emphasis on creating the circumstances for talent to emerge for more students as a prelude to identification. Third, because we emphasize looking for evidence of exceptional domain-specific abilities rather than only general ability, more children are likely to be identified. Fourth, our framework puts a greater emphasis on the deliberate development of psychosocial skills such as mindset and resiliency, which we believe will increase the likelihood of success for all students with demonstrated potential, but

especially students from marginalized groups who face obstacles such as negative stereotypes and stigma.

Achievement and excellence gaps are real, but gifted program models such as Project Excite (Lee et al., 2009), which are built around a talent development framework such as the one delineated in Subotnik et al., offer viable solutions to this national problem. Our emphasis on delving more deeply into the psychological factors that affect performance and on deliberately cultivating those so as to facilitate students' success, if taken seriously by the field and acted on, would greatly enhance the likelihood that more culturally and linguistically diverse gifted students would realize their dreams, including attainment of eminence. If we can get minority students to believe that their input in effort and education would pay off in production domains in the same way that many believe that inputs in effort and practice pays off in performance domains, we will have made a highly significant contribution to increasing their representation in programs for the gifted and talented, and it will result in eminent African Americans, Latinos, and Native Americans in numbers that are at least parallel to their Asian American and European American peers.

## Conclusion

In Subotnik et al. (2011), we put forward ideas to stimulate discussions in the field. We freely admit that some of these ideas are speculative and in need of empirical investigation. We also admit, as indicated by both Makel et al. (2012), and Ziegler et al. (2012), that our definition is not precise, but the lack of precision is deliberate. Thus, we pose the following questions for the field. Should school-based programs use the same definitions of giftedness as the talent search programs? Can eminence in psychology be judged similarly to eminence in mathematics, when the latter has the Field medal and the Nobel Prize and the former does not? More to the point, should we as researchers in gifted education not hold ourselves to the same standard to which we want to hold our best and brightest—that is, aiming for the stars?

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