

# Conceptions of Giftedness

Second Edition

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## School-Based Conception of Giftedness

Tracy L. Cross and Laurence J. Coleman

The development of human potential occurs in a vast array of settings across the world. In the United States, in addition to the options of both public and private schools, parents homeschool their children and send them to academic summer programs, often resulting in able students developing to a point of extraordinary accomplishment. Some talents are typically developed early in life (e.g., piano playing), whereas others manifest much later (e.g., architecture). Some talents are developed entirely outside of school, whereas others are developed in schools to a considerable extent. Some talents are in domains that schools have key roles in developing, others may have no direct relationship to a school's curriculum. Given the limited resources and dominion of schools, we set out to create a conception of giftedness that is situated in schools. It is our belief that a school-based conception of giftedness (SCG) will clarify what talents schools can and cannot be expected to develop. The SCG will allow for clearer communication among educators, administrators, and school boards about the role and responsibilities of our schools in developing talent.

### ADVANCED DEVELOPMENT AND SCHOOL-BASED GIFTEDNESS

In this chapter, advanced development and giftedness within the context of the school are discussed. Our contention is that advanced development is the fundamental concept for understanding giftedness, and we attempt to explain our position by offering a definition, describing the roots of the definition – explaining the changes in our thinking – that have led to a deeper understanding of giftedness and schooling, and proposing a modified definition. We also discuss some implications of the ideas we have proposed.

## **Origins of the SCG**

The foundation of the definition we propose in this chapter originally appeared in the definition by Coleman (1985) and later by Coleman and Cross (2001):

The definition in this text differs from others by proposing a change in the criteria that describe giftedness, accounting for changes in abilities with advancing age in school. The criteria became narrower with increased age. This means that in the early grades, giftedness would appear more in the areas of general ability or specific skills, but as a child moves through the grades, evidence of ability and achievement would manifest within a specific area of study. This is a developmental model that has its roots in the writings of Fliegler (1961), Newland (1976), Renzulli (1977), Feldman (1997), and Simonton (1997).

Preadolescent gifted children have the potential or demonstrated ability in two areas: general cognitive ability and creative ability. Adolescent children have demonstrated ability in abstract thinking, have produced creative works in some worthwhile area, and have demonstrated consistent involvement in activities of either type. (pp. 19–20)

The writing of that definition was based on a particular understanding of giftedness in 1985. The most significant idea was that giftedness does not exist solely within an individual (Feldman, 1997). Individuals in a particular context express giftedness in an area of human endeavor. The context sets the opportunities that are necessary for development to occur. Advanced development occurs when opportunities for learning are available in the environment and are seized by the person. High cognitive ability and creativity are the sources of advanced development in young children as reflected in the many definitions of giftedness. Having ability and creativity may predispose one to develop in an area, but it is insufficient to explain advanced development. Some children who possess both do not perform in a way that demonstrates giftedness in secondary school. If a child is not behaving as if she or he is gifted, does it make sense to continue the designation? In secondary school, giftedness is manifested by consistent interest, creative production, and achievement in an area of the curriculum. Being gifted means moving beyond potential to actual performance. Thus, one might shed the label of giftedness as one ages and does not manifest potential. Furthermore, children who were not considered gifted and begin to perform in secondary school as if they were gifted, should be accorded the label. These thoughts were largely responsible for the earlier definition.

## **School Focus**

While the original conception was continued by Coleman and Cross (2001), a body of new evidence was accumulating that began to change the

philosophical underpinnings of that definition, but not the definition itself. This evidence was not reflected in the 2001 definition. Overall, our basic concern was how to produce a workable definition that made sense within the context of the school, where a significant proportion of the development of giftedness takes place, and to be consistent with what we understood about the development of persons who are gifted. We argue that the school organization and the curriculum should be modified along the lines of talent development to foster advanced development. We would like to see children have opportunities for growing as fast as they want and are able. Our present definition of giftedness is similar to the early definition, but is held together by different conceptual glue. In recent years, rudimentary ideas about giftedness, advanced development, and schooling have become more explicit and the relationship between the concepts better articulated. We begin by defining some terms to lay out the territory.

*Giftedness* is an age-specific term that refers to the potential of young persons who are judged to have demonstrated rapid learning compared with their peers. The judgment is made on the basis of some normative standard. Giftedness is normally distributed in the population so that relatively few are very rapid learners.

*Development* is the change in a person that occurs over time, manifesting itself in movement from concrete behavior and thought to abstract, complex behavior and thought. Human development is conceptualized as proceeding through periods that summarize significant changes in that person in myriad areas, such as the social, intellectual, and physical. Development is generated by biological forces and by learning. The latter leads to development, as suggested by Vygotsky (1978). Development is continuous, unconscious at early stages, and volitional at the most advanced stages.

*Context* is a broad term referring to the environment surrounding a person. The environment may be thought of in various ways (e.g., Bronfenbrenner, 1994). Environments can be categorized by terms such as *cultural*, *familial*, and *school-related*. School-related conditions are the focus of this chapter. Environments are not randomly distributed. Some environments are more conducive to some forms of advanced development than others. Impoverished environments generally depress advanced development.

*Creativity* is a term that denotes the production of an original idea or behavior that changes the way others think about or behave in an area of worthwhile human endeavor. The standards for judging creativity extend from the personal to the societal. In our view, the appropriate standard is beyond the personal.

*Domain* refers to areas of human endeavor that are often referred to as talents, fields, or disciplines. A domain is defined by persons who work

in that area, by their recognition of others' work as belonging to that area, and by their ability to distinguish among varying levels of accomplishment. Each domain has its own meanings or rules of operation that are shared by members who possess that talent. The place where giftedness, development, context, and creativity converge is in the domain. Compared with the general population, a relatively small proportion of persons are members of a domain, and within the domain an even smaller number develop to the most advanced levels. Gifted persons are those who learn rapidly in a domain; talented persons are the most advanced in that domain. The change from giftedness to talent is a mark of development within the domain, rather than a chronological point. This difference is promoted by commitment, opportunity, and needs. The most advanced forms of talent are when the person redefines or reconceptualizes the domain and is what we mean by creative.

#### WHAT IS THE ROLE OF SCHOOL IN PROMOTING ADVANCED DEVELOPMENT?

The common school is a societally created context where many domains may be promoted, but typically only a few are. The domains, or talents within domains, that are developed are valued by the parental society and are necessarily restricted because of values and availability of limited resources. The common school gets into peculiar difficulties when dealing with giftedness as advanced development in two ways: the assignment of children to the gifted category and the meaning of creativity.

#### **Who is Gifted?**

In schools, we find instances of children being assigned to the gifted category based on ability scores and not assigned membership based on performance. At first glance, this may seem a trivial difference, but actually two problems appear. We find members of the gifted group who have not shown their ability, except that they have scored well on an ability measure, sitting beside peers who are performing as well as or better than the gifted group. Does assignment of the label make sense in this situation? What message is being sent? Is potential more important than performance?

The second problem that becomes evident is that membership in the gifted group earns placement in special programs whether gifted students perform well or not. Those who perform as well as or better, but had lower ability scores, are not assigned to the special program. Thus, another message is sent: High performance does not get you special programming. In effect, this practice denies appropriate instruction for low-performing gifted children and high-performing children. Neither is being taught at their instructional level. Inappropriate instruction benefits no one unless

you count being excused from regular class a benefit. Based on what is known about advanced development, this situation is contradictory and paradoxical.

### What Is Creative?

A parallel situation to the question of who is really gifted is the problem of using creativity as a criterion for being gifted and/or as a criterion of advanced development. In schools, we find instances of children being considered creative who have done nothing but score well on some measure of creative potential. This designation seems workable in the early grades where novelty in terms of one's own development is the evidence for creativity. At this point in school, there is no conflict between measures of ability and behavior. It is in secondary school that this means of identifying creativity becomes unstable because the standard for judging creativity changes from that of the individual to that of performance in a particular domain, which is the same standard as in the adult world. The discontinuity between measures of creative potential and creativity in a domain produces the odd circumstances we have just shown. What is the message being communicated about the meaning of creativity? We can certainly use different means for identification at different ages, but we need to be able to show a strong connection between child and adult creativity. Such evidence is lacking.

In both of our examples about giftedness and creativity, the situation is similar. Signs of potential are used for purposes of identification, and those signs have limited connection to later behavior. Having a group with unrealized potential is unacceptable because students are supposed to perform near their potential. The typical reply to this situation is to assert that the child has some problem that is inhibiting his or her development or the context is the source of the limiting factors. Hence, the school needs to fix the problem.

We find this reply unsettling on several fronts. It presumes that the ability measure has high predictive power in terms of later advanced development, and unrealized potential is a consequence of malevolent uncontrollable forces, inside or outside the child. Both views are unhelpful in terms of fostering advanced development. Further, a false connection is established between identification based on ability and outcomes based on performance in domains. We believe these explanations are inadequate and irrelevant to advanced development and miss key points about advanced development and the context of school. Unrealized potential makes no sense as we move to the higher levels of development because the highest levels of development require commitment to the domain.

This incorrect notion about the match between ability and performance gets educators into strange arguments and illustrates the confusion

about giftedness and advanced development. Furthermore, it ignores what we know about advanced development. The entire situation is exacerbated by the fact that the school personnel who work in one context for advanced development misunderstand domains and are wedded to a model of schooling that is antithetical to the encouragement of advanced development.

#### MISUNDERSTANDING DOMAINS

The subjects that are most promoted in schools are domains in themselves. For example, mathematics, reading, writing, music, and art are both subjects and domains. Most significantly, they also serve as foundations for other domains that operate outside the common school. For example, math is related to architecture as a domain, reading to law, and art to sculpture. Other school-based domains are also fostered, such as football, auto mechanics, and civics, but these domains are self-contained and do not spread readily to advanced development in other domains. The former we will call foundational domains and the latter, performance domains.

Foundational domains and performance domains are typically identified differently in schools, although it does not have to be that way. The foundational domains are determined by a test of ability and/or achievement. The performance domain is based usually on achievement and/or performance. We find a mismatch between ability and performance within the foundational domains, but rarely in the performance domains. Significantly, for the foundational domains, the mismatch is less likely to happen when achievement rather than ability is the basis of the identification.

The present assessment situation between the domain types does not mean that foundational domains must be assessed differently from performance domains. When achievement measures are used with foundational domains, assessment issues in terms of identification and outcomes become the same; that is, performance is the key. The transfer power of foundational domains remains the same, even when the assessment changes. When foundational domains are treated as performance domains, advanced development can be placed in a more sensible manner in the context of the school. Dropping the use of ability measures would be an antidote to the present situation. Advanced behavior in terms of identification and outcomes would be more closely associated. In this manner, we would solve the ability, creativity, and performance discontinuity by keeping advanced development under the mantle of domains.

#### MODELS OF SCHOOLING

The problem created by lack of recognition about the difference between the two types of domains is fed by the conflict between two models of

schooling and their relationship to advanced development. The talent/multiple abilities model of schooling competes with the whole child model of schooling for resources and the promotion of giftedness (Coleman, 1985; Coleman & Cross, 2001). The models conceive of goals, the role of the student, and schooling in opposite ways. These differences have profound effects on advanced development.

The dominant model of schooling, the whole child model, promotes ideas that do not match what we know about advanced development in a domain. In the whole child model, advanced development is honored in the mission statements of schools, but demonstration of advanced development by students is met with uneasiness, suspicion, even hostility in some cases. A contrary situation occurs in the talent/multiple abilities model, in which advanced development is welcomed and nurtured. The whole child model presumes that children should be relatively well balanced in their achievement and interests. The standard for advanced development is derived from averaging estimates of peers' performance at particular age/grade levels. A peer-based standard is preferred over a domain-based standard. The whole child model is concerned more about remediating holes and deficiencies in development than worrying about missed opportunities for advanced development. The fear is that leaving imbalances alone will end in serious future problems for the learner.

The talent/multiple abilities model presumes that the goal of education is to maximize advanced development. For those talents that are identifiable during the school years, students are encouraged to learn rapidly, and being highly motivated in the strength area is expected. Lack of development is traced to ineffective teaching rather than learner deficiencies. The standard for development is gauged against the growth in the domain or talent area itself. The norm in this instance is the pattern of development of the domain. Lack of opportunity in areas not related to the domain is viewed as minor; learners will deal with that later by themselves. Balanced development is not actively pursued because it is presumed to be irrelevant to advanced development.

The influence of the whole child model distorts the school-based context and promotes contradictory policies and practices that work against advanced development. One example of the manifestation of this is the disconnection between ability and performance discussed earlier. That detachment raises the issue of whether there is a point at which claims of high potential ability make little sense. We believe there is. In our view, by secondary school, one should be demonstrating an engagement in a domain. Without that commitment, advanced development is unlikely because deliberate engagement is necessary. Holding on to potential as the precursor for advanced development is no longer viable because the individual must take a role in his or her own development.

So, to summarize our position, our assertion about advanced development and school-based giftedness begins with the recognition that giftedness does not exist solely within an individual. Individual actors in a domain in a particular context express giftedness. The context sets the conditions needed for advanced development to occur. The individual's growth has a trajectory and associated antecedent conditions. Development occurs when opportunities for learning are available in the environment and the person seizes on those opportunities. Having ability may predispose one to develop in an area, but ability is insufficient to explain advanced development. Being gifted means moving beyond potential to long-term activity within the domain. As one advances to the edge of a domain, creativity becomes a driving force in the birth of the highest levels of a domain. The student moves into more circumscribed contexts where others who share a commitment to the domain are located. The interactions in those more specialized contexts propel development to the highest levels. However, advanced development is fragile, and many forces may subvert reaching the highest levels.

Our thinking leads us to propose a reworked definition. Giftedness in school is an age-related phenomenon. Young children and preadolescent children who are gifted show high general cognitive ability, either through potential (ability), actions (performance), or rapid learning in school-related domains. By secondary school, gifted children should be demonstrating advanced development in a foundational domain or have produced creative works in some societally valued area and have demonstrated consistent engagement in activities associated with either type. If these attributes are not evident, then the child is no longer gifted in terms of the school's curriculum.

## IMPLICATIONS

### **The Distribution of Advanced Development**

Our new thinking means a reinterpretation of other ideas associated with giftedness and school. Much of advanced development, if not all, is learned. Limited evidence suggests this might not be so for all domains (Winner, 1996), but for many domains the evidence suggests that inborn ability is not necessary. Although potential to be gifted may be normally distributed, advanced development is not. Opportunity and commitment are the keys. Both are contextually linked. The environment presents the former; the latter is personal. Environments that are unresponsive to rapid learning, have inadequate resources relevant to a domain, and provide no models for development inhibit advanced development. Impoverished environments have the most pervasive negative effect. These contextual features of the environment are out of the control of young persons. Interest

across domains is not normally distributed. Some contexts promote the development of the individual more than others. Unless an interest becomes a passionate activity, the most advanced development is unlikely to happen because of the energy that must be directed to mastering and creating new levels of the domain.

### **The Meaning of Advanced Development**

Advanced development is quite ordinary in the sense that most people are capable of it. Development advances in all domains. What is less common is that some persons continue to develop beyond where most people slow down or stop. Recognizing that some actions or thoughts are out of the ordinary means the person does something that either happens earlier than is expected or is original in terms of its related domain. As one attains or creates the upper levels of a domain, fewer persons may be able to recognize it. Knowledge at the highest level of development requires deep understanding of the domain.

### **The Power of the Context**

An ongoing concern of the field of gifted education has been underachieving gifted students. The philosophical underpinning of this concern originally was giftedness as an entity. Gifted people are born that way, so if they do not rise to the expectations of ability measures, they are determined to be underachievers. Our school-based conception of giftedness changes the issues surrounding underachievers. Because of the change in criteria from potential to achievement within domains, over time, the likelihood of a gifted student demonstrating rapid learning and/or expertise in a domain greatly diminishes. In many domains, the student's once-demonstrated potential would be akin to missing one's ship. And, as we stated earlier, "unrealized potential makes no sense as we move to the higher levels of development because the highest levels of development require commitment to the domain" (Cross & Coleman, *in press*). Given this situation, it means the qualities of the context, or environment, become more and more important as one moves deeper into a domain. Rapid learners in a domain need to find themselves in a responsive environment. The characteristics of these environments change as one progresses through a domain. How they should change is not yet clear, but one piece is certain. Being in an environment with like-minded peers promotes advanced development. It may serve to help persons define themselves as members of that domain. This aspect of context should be exploited in schools.

### **The Congruence of Acceleration to Advanced Development**

Authors in the field have argued about the efficacy of different grouping types for years. For example, Vaughn, Feldhusen, & Asher (1991) showed

evidence of enrichment being effective, whereas Stanley (1973) has long touted the effectiveness of acceleration. In their meta-analytic study, Kulik & Kulik (1991) determined that acceleration was a stronger intervention for advanced development than was enrichment, despite repeated efforts to show the effectiveness of the latter. One reason for this recurring finding is because acceleration more closely parallels the natural progression of learning in a domain, that is, the movement from simple to complex, from concrete to abstract, from unfocused creativity to focused creativity. Enrichment, on the other hand, disperses the drive for advanced development and short circuits the thrill of learning. Another reason is that, in an accelerated educational environment, a means of assessment becomes readily detectable. When an individual continues to participate in one domain for a sustained period, the prerequisites to later development are evident. This visibility means that focused feedback can be given to the person, either by self-observation or by the teacher or coach. In an accelerated context, growth and advancement in the domain are apparent to the person as well as to outsiders. The mystery of how it happens is not revealed, but the progression is. The teacher and the students see the results of their efforts. Recognition of advanced development and success comes from that and in turn clarifies what one can do and be in that domain. In other words, a process of self-definition begins and continues as development advances. These are powerful determinants of advanced development.

### **Ability Measures for Nonmodal Gifted**

In general, we would abandon the widespread use of ability measures in the identification of children who are gifted because the practice leads to policies that are antithetical to advanced development, as we have noted in this chapter. On the other hand, we advocate the use of ability measures with nonmodal children, the children who are typically missed in our identification systems. Our view may seem perverse because the conventional wisdom is that ability measures are heavily biased. In our view, the ability measure provides an imprecise but useful indicator of general development for those children who are growing rapidly in the face of less than maximal contexts for advanced development.

### **SUMMARY**

Giftedness is a combination of advanced development and creativity. It is developmental in nature in that it begins as potential (generally in young people), evolves into achievement within recognizable domains during the school years, and becomes increasingly advanced (compared with peers) through the nonuniversal development of the individual. Although the authors recognize that development continues across the life span, the

School-Based Conception of Giftedness was created to emphasize the development of talents from the early years through late adolescence. Moreover, innumerable talent domains exist; only some manifestations are within the charge of our nation's schools. The domains in which giftedness are recognized are reflective of society's values and are subject to historical influences. Giftedness, therefore, represents a complex series of interactions that include the coordination of many traits of the individual student, such as motivation and perseverance, with context variables, such as teacher expertise and opportunities for practice, along with the general ability levels of the individual in terms of academic domains, and levels of creativity. Consequently, although the potential to be gifted *may* be normally distributed, giftedness is not.

Ultimately, giftedness is a consequence of development of the individual over time. Although people generally follow certain forms of universal development, such as those described in developmental psychology, the pattern of those developing extraordinary talent is necessarily nonuniversal by its very nature (Feldman, 1997). It may represent common patterns within specific disciplines and, therefore, will be both idiosyncratic and normal. Hence, people may be born with the potential to be gifted but many do not actually become gifted because to be gifted means to be gifted at something.

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