

Giftedness and Talent: Reexamining a Reexamination of the Definitions*

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Abstract

In the scientific literature, there is ambiguity in the distinction between the concepts of *giftedness* and *talent*. This paper examines several common definitions of these two terms, with particular emphasis on the models proposed by Renzulli (1979) and Cohn (1981). Our critique of these two models leads to a clear differentiation between giftedness and talent: the former is associated with domains of abilities which foster and explain exceptional performance in varied fields of activities, that is, talents. Thus, one can be gifted without necessarily being talented (as with the case of underachievers), but not vice versa. Several factors which can act as catalysts for the actualization of giftedness in specific talents are discussed, particularly motivation and environmental quality.

In general usage, no definite distinction is made between the ideas of giftedness and talent. One will as likely say "Peter is scholastically gifted" or "he has great academic talent," "Nicole is a gifted painter" or "her work shows a lot of talent as a painter," etc. These two terms are confused not only colloquially but also in dictionary usage. For example, Webster's Dictionary defines "gifted" as "possessing natural talent" (1970, p. 162). Even the scientific literature on giftedness, principally deriving from American sources, supports this ambiguity by randomly using one or the other term in the same paragraph, thus suggesting that they are synonyms. Only a few authors have attempted to clearly distinguish between these two concepts.

This ambiguity in terminology reflects the conceptual ambiguity of giftedness and talent. After more than a half-century of research on giftedness, the concept remains subject to various and sometimes divergent definitions. Richert, Alvino and McDonnell even speak of a "labyrinth of seemingly conflicting definitions in use in the United States" (1982, p. 84). This is a disturbing situation in that the accepted definition determines both the procedures used to identify the gifted and the content of enrichment programs offered to those identified (Passow, 1981).

The object of the present essay is to demonstrate that these two concepts are in no way synonymous, but encom-

pass completely separate ideas. We will begin this demonstration by reviewing the principal distinctions outlined in the North American literature. This descriptive and critical analysis will lead to the presentation of a model for differentiating between these two ideas.

Review of the Literature

Four major trends of opinion are presented in the literature: (a) no distinctions between giftedness and talent, (b) conceptual separation between intelligence and other abilities, (c) marginal distinctions, and, finally, (d) the recent models of Renzulli and Cohn, subsequently integrated by Foster (1981).

Nondifferentiation

Those who indicate nondifferentiation constitute by far the most important school of thought. One only has to read the recent *Gifted Child Quarterly* issue on identification (1984, 28 (4)) to observe this nondifferentiation in action. We have selected only a few examples from well-known authors. In a recent article, Gallagher (1979) takes cognizance of several pressing issues in the area of giftedness, one of these being the lack of definition of this concept. Nowhere in this article does he make a distinction between giftedness and talent. These two terms are used interchangeably. Torrance (1980), considered to be one of the chief advocates of a concept of creativity dissociated from that of intelligence, begins his recent contribution to a volume of articles devoted to the education of the gifted and talented as follows: "This chapter will deal with the identification of giftedness in talents other than in the academic area" (1980, p. 43). No other particulars are given to support the interdependence of these two concepts. Is giftedness to be understood simply as excellence in an area of talent? Finally, the most "official" definition of giftedness, drafted by the Commissioner of Education of the United States (Marland, 1972), and embodied in the 1978 Gifted and Talented Children Act, begins: "Gifted and talented children are those..." (p. 2). Nowhere else in the course of his remarks does he specify the distinction between the two terms.

Intelligence as Separate from Other Abilities

Among authors who do attempt to differentiate giftedness and talent, the most frequent distinctions associate the former with intellectual abilities (often including scholastic

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ability), while the latter is reserved for other types of skills or aptitudes. For instance, Ward, an eminent theorist in giftedness, identified two modalities of giftedness, namely "1. *General Intelligence*, usually manifest in I.Q. scores, and 2. *Specific Aptitudes* (or talents), as measured by valid tests" (in Barbe & Renzulli, 1975, p. 62). Fleming and Hollinger (1981) clearly adopt this position in describing talents as "non-IQ test derived" (p. 188). Borthwick, Dow, Lévesque, and Banks (1980) quote a similar tandem definition adopted by the Province of Ontario. Finally, according to Zettel (1979), the State of Delaware is the only one to have inscribed in law a differential definition.¹ It reads as follows:

"Gifted children" means children...who are endowed by nature with high intellectual capacity and who have a native capacity for high potential intellectual attainment and scholastic achievement... "Talented children" means children...who have demonstrated superior talents, aptitudes or abilities, outstanding leadership qualities and abilities, or consistently remarkable performance in the mechanics [sic], manipulative skills, the art of expression of ideas, oral or written, music, art, human relations or any other worthwhile line of human achievement. (p. 63)

It should be noted that these two definitions go far beyond a single contrast between intellectual and other kinds of abilities; they also imply a distinction between innate versus acquired abilities and between capacity and performance. However, the principal contrast remains between intelligence and other abilities.

Marginal Distinctions

Two authors have differentiated between giftedness and talent in a manner which has not been widely endorsed or accepted by other researchers or professionals. On the one hand, Robeck (1968) mentions a hierarchical distinction: the talented have IQ scores ranging from 130 to 145, while gifted individuals score from 145 to 160. Those who surpass this level are referred to as highly gifted. On the other hand, Gowan (1979) maintains that giftedness and talent respectively correspond to verbal and nonverbal creative potential. Owing to their limited acceptance, the above definitions will not be considered in greater detail.

The Renzulli and Cohn Models

Probably the most well-known attempt to redefine giftedness is credited to Renzulli (1978, 1979). He puts forward two major criticisms, among others, to the definition proposed by the U.S. Office of Education (Marland, 1972). First, the definition does not include any reference to motivation, even though a large body of research concerning gifted or talented adults confirms the importance of this variable in the expression of creative and productive behaviors. Second, the six categories of giftedness referred to in the definition (general intellectual ability, particular

scholastic aptitude, creative and productive thinking skills, abilities in leadership, visual and expressive arts, and the psychomotor domain) are not "parallel"; two of them (specific academic aptitude and visual and performing arts) call attention to fields of human endeavor or general performance areas in which talents and abilities are manifested, while the remaining four categories are brought to bear on performance areas (1979, p. 7).

Based on a detailed review of writings dealing with explanatory factors related to the exceptional performance of adults considered to be "creative/productive" or eminent in various spheres of human endeavor, Renzulli (1979) offers a redefinition of giftedness which proposes the interaction of three fundamental psychological traits: (a) greater than average (but not necessarily exceptional) ability; (b) creativity; (c) motivation, which he terms "task commitment." In order for giftedness to become manifest, these three components should be simultaneously present and must take root in some area of performance. Renzulli introduces both general and specific performance domains. The complete model is outlined in Figure 1.

Similarly, Cohn (1977, 1981) has formulated a model of giftedness which clearly dissociates the concepts of giftedness and talent. Cohn's model, presented in Figure 2, breaks down giftedness into three major categories of abilities—intellectual, artistic, and social—each one further divisible into more specific subcategories of talents.

Recently, Foster (1981) has attempted to integrate the models of Renzulli and Cohn. As illustrated in Figure 3, the synthesis undertaken by Foster is, in effect, quite simple: he inserts Cohn's model in between the left and right hand sides of the Renzulli model. Both Cohn's major categories of abilities and the components of Renzulli's two performance levels (general and specific) are respectively arranged hierarchically. Figure 3 demonstrates this integration applied to the particular example of talent in leadership.

Foster appropriately comments that an examination of this integrated model clearly brings to mind career decision-making models similar to those devised by Holland or Roe (Osipow, 1973, cited by Foster, 1981). The left hand side, which serves to isolate exceptional from average performance, is the only sharply dissimilar component.

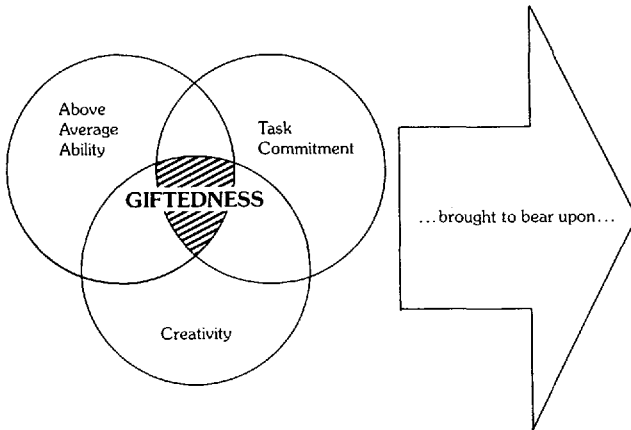
Critical Examination of the Proposed Distinctions

Our interest in this problem began with a query on the applicability of Renzulli's model to the case of underachieving gifted children or adolescents. Underachievement is generally revealed by a marked disparity between intellectual ability and academic performance in one or more subjects (Whitmore, 1980). Can one say that a child who obtains an IQ score of 130 or more is not gifted because he is not sufficiently motivated (for one reason or another) to succeed in class? Is there not a need to make a distinction

GENERAL PERFORMANCE AREAS

- Mathematics Visual Arts Physical Sciences
- Philosophy Social Sciences Law Religion
- Language Arts Music Life Sciences Movement Arts

PSYCHOLOGICAL TRAITS



SPECIFIC PERFORMANCE AREAS

- Cartooning Astronomy Public Opinion Polling
- Jewelry Design Map Making Choreography Biography
- Film Making Statistics Local History Electronics
- Musical Composition Landscape Architecture
- Chemistry Demography Microphotography
- City Planning Pollution Control Poetry
- Fashion Design Weaving Play Writing
- Advertising Costume Design Meteorology
- Puppetry Marketing Game Design Journalism
- Electronic Music Child Care Consumer Protection
- Cooking Ornithology Furniture Design Navigation
- Genealogy Sculpture Wildlife Management Set Design
- Agricultural Research Animal Learning Film Criticism
- Etc. Etc. Etc. Etc. Etc. Etc. Etc.

Figure 1. Graphic representation of the definition of giftedness according to Renzulli. *Note.* From *What makes giftedness: A reexamination of the definition of the gifted and talented* (p. 24) by J. S. Renzulli, 1979, Ventura, CA: Ventura County Superintendent of Schools Office. Copyright 1979 by Joseph S. Renzulli. Reprinted by permission.

between the potential indicated by psychometric instruments and its manifestation in a field of performance, in this case, academic work? Moreover, the same problem presents itself with respect to other abilities. For example, Bloom (1982), in reporting the preliminary results of an important study on the process of accession to prominence in six distinct talent areas (concert pianists and sculptors in the arts, mathematicians and research neurologists in the cognitive domain, olympic swimmers and tennis players in the psychomotor domain) notes a similar problem:

In homes where other children were also interested in the talent area, the parents sometimes mentioned that one of the other children had even greater "gifts" than the individual in the sample, but that the other child was not willing to put in the time and effort that the parents or the teacher expected and required. (pp. 512-513)

Critique of Renzulli's Model

The factor that makes Renzulli's model inapplicable to underachievers is the presence of motivation as an essential

component of giftedness. If one accepts the premise that gifted underachievers are really gifted, it is necessary to redefine giftedness in such a way that motivation plays a different role. However, it remains necessary to reserve a central role for this construct since, as Renzulli's literature review strongly demonstrates, exceptional performance in a field of endeavor largely stems from an intense and prolonged investment of energy in tasks pertinent to that field.

Renzulli's model presents a second problem, similar to the first, namely the identification of creativity as an essential component of giftedness. Surely, the literature which Renzulli cites to justify this inclusion appears convincing, at first glance. However, the apparent primacy of creativity stems, in our opinion, from a bias in the selection of fields of study (architecture, arts, sciences) and in the types of eminence researched. For example, Renzulli extensively cites MacKinnon's (1964) study in which a panel of judges identified a group of prominent architects on the basis of the following criteria: originality of thought, ingenuity, rejection of established convention, etc. It is hardly surprising that with criteria such as these, creative individuals were identi-

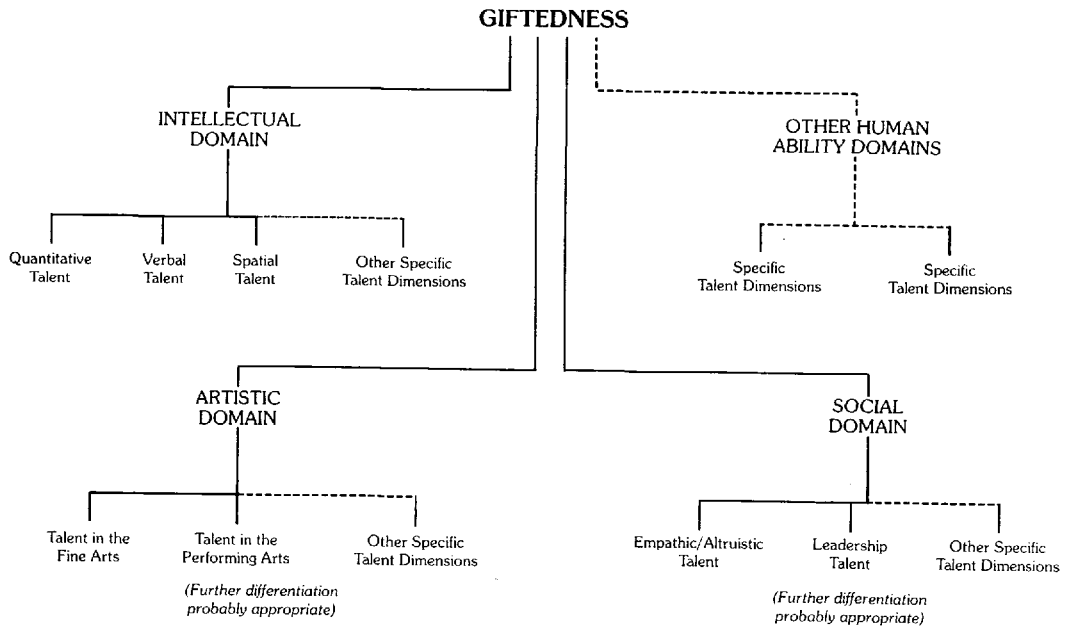


Figure 2. Graphic representation of Cohn's model of giftedness. Note. From "What is giftedness? A multidimensional approach" by S. J. Cohn, 1981, in A. H. Kramer (Ed.), *Gifted children: Challenging their potential* (p. 37), New York: Trillium Press. Copyright 1981 by Third International Conference on Gifted Children—Organizing Committee (1979) and World Council for Gifted and Talented Children. Reprinted by permission.

fied. It is true that "it is usually the originality, novelty, or uniqueness of a person's contribution that brings him or her to the attention of the public" (Renzulli, 1979, p. 15). However, this statement refers to individuals who can be considered agents of change, transformers, inventors, and the like. What, then, can we say of celebrated athletes whose accomplishments make international headlines, musicians of international repute, teachers or professors who have positively influenced their students, and many others who have attained a certain prominence, if not absolute renown, by means of interpretive, performance or other skills, and not primarily creative ability? Creativity may be regarded as a major determinant of exceptional performance in certain fields of endeavor, but not in all. It therefore should be considered as one ability domain, among others, in which giftedness can express itself.

This leads to the third and final criticism of Renzulli's model. It does not differentiate above average ability into separate ability domains. In fact, Renzulli's text leaves the distinct impression that these abilities are intellectual; all the studies which he cites examine the role of IQ (or its mani-

festation in academic performance) as a precursor to exceptional performance at an adult age. Do domains of ability, other than intellectual ones, not exist as well? Cohn identifies two others: social and artistic abilities. With reference to social abilities, recent work (see notably Ford & Tisak, 1983) appears to confirm the construct validity of measurement instruments intended as indicators of these abilities. Even though we are dealing with a still nascent field of research, the existence of such a domain of abilities seems to be both recognized and accepted by many. With reference to artistic abilities which Cohn divides into various subcategories of talent (see Figure 2), disagreement must be expressed. Indeed, the arts constitute several fields of talent to which no specific "artistic" abilities correspond. Moreover, no taxonomy of human abilities ever included artistic ability (on this subject see Anastasi, 1982, chap. 13). The skills capable of explaining various artistic talents which are strongly heterogeneous must be sought out in other domains.

Other areas of ability can be added to this list: one suggestion is creative ability, already pointed out above, with-

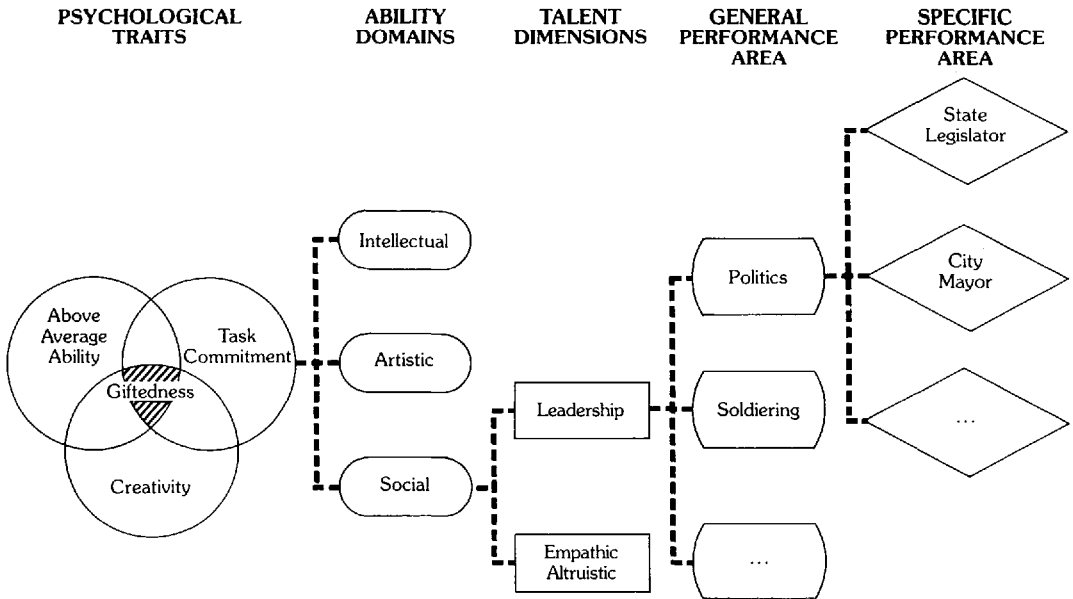


Figure 3. The Renzulli/Cohn integrated model illustrating the particular case of talent in leadership. Note. From "Leadership: A conceptual framework for recognizing and educating" by W. Foster, 1981, *Gifted Child Quarterly*, 25, p. 20. Copyright 1981 by the National Association for Gifted Children. Reprinted by permission.

out entering into the debate on whether or not it belongs to the domain of intellectual abilities. Then there is psychomotor ability, of great importance in athletics and sports. Concerning this category of skills, one wonders why the U.S. Office of Education decided in 1978 (Passow, 1981, p. 5) to eliminate these abilities from the original definition put forward by Commissioner Marland in 1972. This resulted in the excision of a domain of abilities whose importance was evident not only in sports but also in the arts (sculpture, music, dance, cabinet-making, drawing) and in many other fields (surgery, gem-cutting, construction trades, etc.).

In short, an adequate model for giftedness should introduce a parsimonious taxonomy of human abilities. Renzulli's model does not posit any taxonomy of this type, since he clearly dissociates creativity and superior ability, the latter corresponding only (it seems) to intellectual skills.

Critique of Cohn's Model

Cohn's model answers partly this criticism, since it breaks down the general concept of giftedness into several ability domains. However, it poses a major problem of its own due to its hierarchical structure, namely the insertion of diverse subcategories of talent into one or another of the

identified ability domains. The implication of this hierarchical structure is clear: Excellence in one subcategory of talent can only be related to abilities in a single domain. This model of one-to-one relations between abilities and talents tallies poorly with reality in two respects. First, it contradicts a good number of studies cited by Renzulli which indicate that emergence in certain fields of talent involves several abilities, for example intellectual and creative. In addition, in the particular case of teaching, research has clearly demonstrated (see notably Doyle, 1975, p. 49) that excellence is due to a combination of factors: cognitive (clarity, structure, competence in the subject matter), creative (interest, stimulation of thinking) and social (friendliness, sensitivity to the reactions of the group, tactfulness). Second, even within one domain of talent, if it is not too restrictively defined, success can take diverse forms reflected by distinct profiles of abilities. Next to a surgeon, whose dexterity and sureness of movement are the envy of his profession, can be found a colleague renowned for the creation of a new technique or piece of equipment, such as an artificial heart. The same situation occurs in the world of the circus where trapeze artists work alongside clowns and animal trainers.

In short, an adequate model of giftedness and talent must allow for multidirectional and not merely bidirectional connections between abilities and talents. The expression "multidirectional connections" means, on the one hand, that a given ability can contribute to excellence in several fields of talent and, on the other hand, that a particular talent can be accounted for by a profile of diverse abilities.

Proposal for a Differentiated Model of Giftedness and Talent

The essence of the differentiated model that we are about to present in response to the various criticisms of existing models discussed above is a dichotomy between *domains of ability* and *fields of performance*, respectively corresponding to *giftedness* and *talent*. This dichotomy is not in itself new. The distinction between abilities or aptitudes and performance can be found frequently in the literature (cited earlier) and also serves as a principle of differentiation between the left and the right parts of the diagram presented by Renzulli to illustrate his model (see Figure 1). The contribution of our model is its association of giftedness with domains of ability, and talent with fields of performance.

Definitions of Giftedness and Talent

These connections engender the following definitions of giftedness and talent:

Giftedness corresponds to competence which is distinctly above average in one or more domains of ability.

Talent refers to performance which is distinctly above average in one or more fields of human performance.

Several elaborations of these two definitions follow:

1. The terms competence and performance are important to understanding the differences between giftedness and talent. Talent, which is defined in the context of a large or narrow field of human activity, expresses itself through a set of behaviors linked to this field of activity. The talented shooter of clay pigeons shows his expertise by the high proportion of pigeons struck; the talent of the mathematician may be revealed by the rapidity and ease with which he solves mathematical problems; the talented painter will be judged so by the quality of his works. Giftedness is somewhat different in that abilities are generally identified using more unidimensional and standardized measures so as to connect together in the purest form possible those individual characteristics which "explain" the observed performance. Strictly speaking, it is true that responses to standardized measures constitute a "performance"; as a matter of fact, they must be observable or, in other words, operational. However, precisely because of the antecedence of abilities with respect to talented behavior and their explicative power with respect to observed performance in

fields of talent, we have retained the use of the two separate terms, competence and performance.

2. This distinction is also intended to reduce the ambiguity between the two concepts as much as possible by adopting definitions which do not include the same words. It is this guideline which determined the choice of the terms *domain* (in the case of abilities) and *field* (to refer to "domains" of talent). It implies that to every field of talent corresponds a characteristic profile of abilities which would explain exceptional individual performance. In the course of the last 50 years, psychometric research concerned with scholastic activity has clearly demonstrated the existence of necessary, although not sufficient, ties between different intellectual abilities and varying scholastic performance (Carroll, 1982). The body of research dealing with other ability domains or fields of talent is still in an embryonic state.

3. This distinction implies, as a corollary, that every talented individual is necessarily gifted, although the inverse is not true; a gifted individual is not necessarily talented. Since it is a manifestation of giftedness in a particular field of activity, talent necessarily implies the presence of underlying abilities capable of explaining it. However, it can certainly happen, as is well illustrated in the case of underachieving children, that an individual shows himself to be gifted, that is the possessor of exceptional abilities, without having manifested his giftedness in any academic talent. In this regard, let us remember Bloom's anecdote cited above. Our distinction thus permits an elegant solution to the impasse generated by Renzulli's model which forced us to exclude underachievers from the category of gifted individuals. Our model allows us, in fact, to define these people as gifted intellectually, but not talented academically.

4. In light of these two definitions, we can infer that the six categories mentioned in the Marland definition overlap the concepts of giftedness and talent. Three of them (general intellectual ability, creative and productive thinking skills, and the psychomotor domain) identify domains of giftedness, while the other three (scholastic aptitude, leadership, and visual and expressive arts) refer to fields of talent.

The Model

As we have already pointed out, the difficulty created by Renzulli's model stems essentially from the presence of motivation as an essential component of giftedness. What happens to this construct in the presently proposed model? Its fate is illustrated in Figure 4 which visually explains the various components with their reciprocal connections. It can be observed that motivation has lost little of its importance, since it has become one of the essential prerequisites for transforming giftedness into talent. Several comments related to this diagram follow. They explain various beliefs and observations concerning the connections between giftedness and talent.

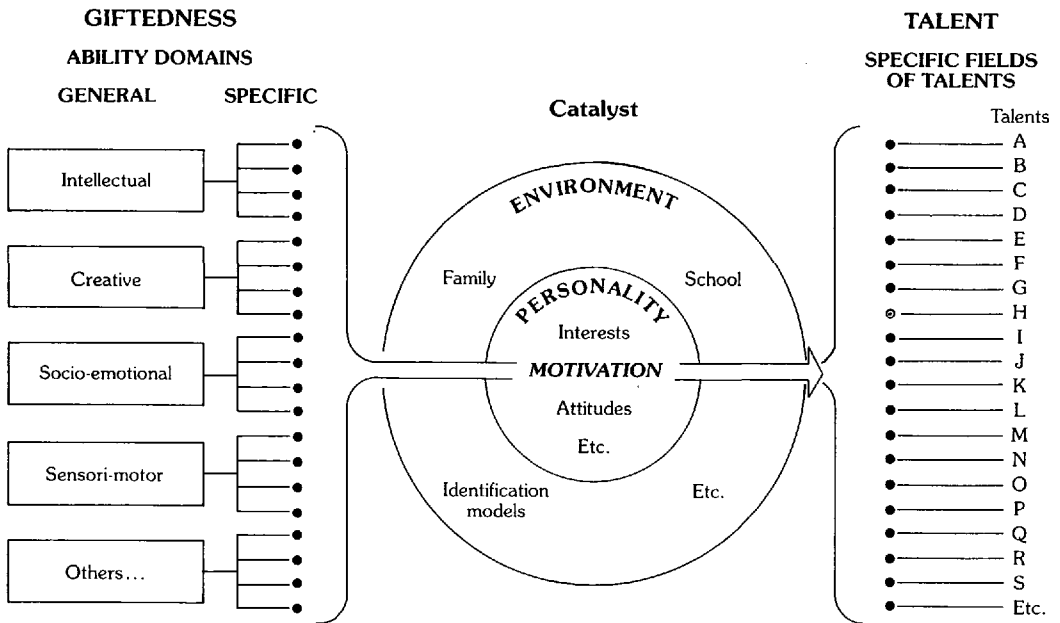


Figure 4. Graphic representation of a differentiated model of giftedness and talent.

1. Four major domains of human ability are suggested: intellectual, creative, socioaffective, and sensorimotor. Since we have not made detailed inventory on this subject, the door is being left open for the identification or differentiation of other general domains of ability. It should be noted that the term sensorimotor ability is given preference over psychomotor, in order to underscore the important role of the various senses in many spheres of talent (e.g., marksmanship, wine tasting, perfume analysis).

2. Owing to important differences among authors and to insufficient research, the particular domains of ability are not specified. For example, in the intellectual domain alone, subcategories can vary considerably. In opposition to upholders of the g factor who vigorously defend the general IQ, a fair number of researchers have tried to identify relatively independent groups and subgroups of abilities through factor analysis. Work by Thurstone, Kelly, Guilford, Vernon, and many others, aptly synthesized by Anastasi (1982, chapter 13), suggests a large variety of abilities: verbal, numerical, spatial, perceptual, mechanical, mnemonic, etc. Some systems (e.g., Thurstone) place these in parallel, others (e.g., Vernon), create a hierarchy of major, minor, and specific factors. For his part, Guilford has proposed a tridimensional model of the structure of intel-

lect whose 120 cells stem from the junction of six operations, four contents, and five different products.

As if the problem was not already sufficiently complex and in dire need of some synthesis, specialists in cognitive psychology have also brought forth taxonomies of cognitive abilities. For example, consider the recent proposal by Sternberg (1981, 1984) of a triarchic theory of intelligence encompassing three distinct subtheories: a *componential* subtheory that posits three kinds of information-processing abilities (metacomponents, performance components, and knowledge-acquisition components), a *two-facet* subtheory which relates the above components to performance in coping with either novelty or automatization and, finally, a *contextual* subtheory comprised of three hierarchically related processes (adaptation, selection, shaping) which attempts to achieve the best possible fit between the individual and his sociocultural environment.

Finally, in a most interesting effort to synthesize available knowledge from psychometrics, cognitive psychology, and neuropsychology, Gardner (1982a, 1982b) has presented in much detail a theory of multiple intelligences in which six distinct "intelligences" are isolated: linguistic, musical, logical-mathematical, spatial, bodily-kinesthetic, and personal. This last one is subdivided into an intrapersonal

component (access to one's own feeling life) and an interpersonal component (the ability to notice—and make distinctions among—other individuals' moods, temperaments, motivations, and intentions).

3. Contrary to the position taken by Renzulli, the importance of creativity, now one of several general domains of ability, is diminished. In this new position, it is no longer an essential factor of giftedness or of talent. Unquestionably, it contributes to several talents, notably in the artistic field. However, it is also possible to identify numerous fields of talent in which abilities of a more technical nature have overtaken the importance of creativity: the interpretation of a musical score in contradistinction to its composition, expertise in microphotography, diagnosis in internal medicine or automobile repair, and athletics.

4. On the right hand side of the diagram, talents have been purposely isolated rather than regrouped into general and specific fields. The decision is based on several factors. First, the inventory of general fields proposed by Renzulli does not seem to be sufficiently exhaustive. Where are the talented sales representative, the architect, the mechanic, the electrician, the cabinet-maker, the stamp collector, the diamond-cutter to be placed? Second, Cohn's system contradicts the multidirectionality of the relations between abilities and talents in this model, or, in other words, the fact that a particular talent is subtended by a profile of abilities that can derive from different general domains. Third, the same principle of hierarchization of talents into general and specific domains runs into a major confounding fact, namely, the interrelatedness of fields of human activity. For example, the inventor of a new artificial heart works in the medical domain, applying to it principles and techniques of the physical or biological sciences and of engineering. Where is this talent to be placed? Similarly, in the domain of computer science, extremely varied talents come together. What becomes of the designer of hardware, of intricate microcircuitry, of print-out screens, of programming languages, or of sophisticated software? Where does one place the chemist who has specialized in the techniques of treating silicone in the making of "chips," in chemistry or in computer sciences? In short, the codification of talents poses problems which are best deferred to future work.

5. The two brackets that border the specific ability domains on one side, and the specific talent fields on the other, represent the *multidirectionality* of the relations between giftedness and talent. Each specific talent is expressed by a particular profile of abilities differing somewhat from the profile characteristic of another talent.

6. The variables placed in the center act as catalysts for the expression of talent. On the one hand, interests, varying personality traits, and environment should fix the orientation of the individual toward a particular field of talent, while motivation will contribute mostly to the intensity of the talent, obviously in conjunction with ability level. This last remark raises the question of the stability of talents. If a

child of five or six does not develop his or her special talent in swimming, for example, through rigorous practice and with the constant support of parents and teachers, he or she will probably not be considered talented 10 years later. He or she might still remain more talented than the average but, at age 15, only those who emerge at the local, state, or national level will be judged exceptionally talented. As clearly demonstrated by the SMPY project (Stanley, 1977) levels of talent are no less spread out than levels of giftedness.

7. The model shown in Figure 4 indicates that the environment has a greater influence on talent than on giftedness. The presence of the catalysts in the central section of the model bespeaks this difference. But, beyond this comparative statement, one should be very prudent when it comes to quantifying the respective impact of "nature" and "nurture," as witnessed by the acrimonious debate over the hereditary (or environmental) basis of intelligence (Eysenk & Kamin, 1981). All the more so, since such a debate appears to be irrelevant when discussing the specific educational needs of gifted or talented children. Whatever the origins of these gifts or talents, their presence in an individual creates needs which demand differentiated educational curricula (Massé & Gagné, 1983). It would thus be unfortunate for a strictly heuristic question to contaminate and inflame an otherwise very simple problem, that of the right of this special population to a maximum development of their abilities or talents.

8. A few words about the implications of this distinction for identification and programming purposes. Let us recall first an often forgotten principle that the specific objectives of the program must guide the definition of the appropriate clientele (Feldhusen, Asher, & Hoover, 1984). Thus, a program whose purpose is the development of reasoning or thinking skills should be primarily offered to children gifted in these ability domains. On the other hand, if the program promotes the development of mathematical talent, it will screen its candidates, as the SMPY does so effectively, with instruments specifically tailored for this field of talent. It would be eminently unjust to deny a manifestly talented youth access to a program in his or her field of talent under the pretext, for example, that his or her IQ falls somewhat below the arbitrary cut-off score established at the state or local level. Even though the identification of numerous talents calls for what are often subjective judgments instead of more standardized measures, it remains preferable "to have imprecise answers to the right questions than precise answers to the wrong questions" (Renzulli, 1984, p. 164).

9. Finally, our distinction leads to a substitution of the expression "gifted and talented" for "gifted or talented."

Conclusion

Having critically analyzed various proposals aimed at distinguishing between giftedness and talent, we have advanced a model differentiating between these two con-

structs. The model presents giftedness as exceptional competence in one or more domains of ability, and defines talent as exceptional performance in one or more fields of human activity. Motivation, a major component of giftedness in Renzulli's model, becomes one of the principal catalysts of the actualization of giftedness into talent, more particularly, of the emergence of exceptional talent. Creativity, another of the three essential components of giftedness according to Renzulli, is relegated to a less central role as one of the general ability domains. This reordering permits the accommodation of many talents such as sports and athletics, musical or theatrical interpretation, trades, and leadership in which divergent thinking does not appear to play a primary role.

In concluding this essay on a redefinition of giftedness and talent, the author is conscious of the multitude of questions left unanswered. Some of these have already been formulated by Foster (1981) in respect to Cohn's and Renzulli's models and they apply as well to ours. Essentially, Foster questions the explanatory power of such models.

It does not shed any light on why someone comes to express the appropriate mix of above average ability, task commitment and creativity or why such a person expresses those traits in the social domain as opposed to the intellectual or the artistic domain. At a more detailed level it gives no hint as to why a person expresses a talent for initiating and carrying through political and social movements. (1981, p. 19)

In fact, each component of our model raises questions as yet not clearly addressed and answered by research. For example, the codification of general and specific domains of ability as well as fields of talent are areas of research worthy of further study. With respect to the latter, it would be particularly interesting to further explore the potential contributions of Holland's model which provided the analytical framework for structuring the domains of interest listed in the Strong-Campbell Interest Inventory (Campbell, 1977). The central zone of our model occupied by the catalysts is also in need of elaboration, perhaps by calling upon such work as that of Atkinson, O'Malley and Lens (1976).

Independently of the numerous clarifications that should be made to this model, it is our firm belief that these two constructs are not synonymous, that they are not distinguishable as a function of the opposition between intellectual and other types of ability, but rather according to a dichotomy between domains of ability and fields of performance, and finally that motivation serves as a catalyst in the actualization of exceptional gifts into exceptional talents.

Footnote

1. According to Wells (1981), it was the State of Louisiana that took this initiative. However, the adopted definition is not cited.

References

- Anastasi, A. (1982). *Psychological testing* (5th ed.). New York: Macmillan.
- Atkinson, J. W., O'Malley, P. M., & Lens, W. (1976). Motivation and ability: Interactive psychological determinants of intellectual performance, educational achievement, and each other. In W. H. Sewell, R. M. Mauser, & D. L. Featherman (Eds.), *Schooling and achievement in American society* (pp. 29-60). New York: Academic Press.
- Bloom, B. S. (1982). The role of gifts and markers in the development of talent. *Exceptional Children*, 48, 510-522.
- Borthwick, B., Dow, I., Lévesque, D., & Banks, R. (1980). *The gifted and talented student in Canada: Results of a CEA survey*. Toronto: The Canadian Education Association.
- Campbell, D. P. (1977). *Manual for the SVIB-SCII*. Stanford, CA: Stanford University Press.
- Carroll, J. B. (1982). The measurement of intelligence. In R. J. Sternberg (Ed.), *Handbook of human intelligence* (pp. 29-120). Cambridge, MA: Cambridge University Press.
- Cohn, S. J. (1977). *A model for a pluralistic view of giftedness and talent*. Unpublished paper prepared for the United States Office of Education.
- Cohn, S. J. (1981). What is giftedness? A multidimensional approach. In A. H. Kramer (Ed.), *Gifted children: Challenging their potential* (pp. 33-45). New York: Trillium Press.
- Doyle, K. O. (1975). *Student evaluation of instruction*. Lexington, MA: D. C. Heath.
- Eysenck, H. J., & Kamin, L. (1981). *The intelligence controversy*. New York: Wiley.
- Feldhusen, J. F., Asher, J. W., & Hoover, S. M. (1984). Problems in the identification of giftedness, talent, or ability. *Gifted Child Quarterly*, 28, 149-151.
- Fleming, E. S., & Hollinger, C. L. (1981). The multidimensionality of talent in adolescent young women. *Journal for the Education of the Gifted*, 4, 188-198.
- Ford, M. E., & Tisak, M. S. (1983). A further search for social intelligence. *Journal of Educational Psychology*, 75, 196-206.
- Foster, W. (1981). Leadership: A conceptual framework for recognizing and educating. *Gifted Child Quarterly*, 25, 17-25.
- Gallagher, J. J. (1979). Issues in education for the gifted. In A. H. Passow (Ed.), *The gifted and the talented: Their education and development*. (78th Yearbook of the National Society for the Study of Education, Part I) (pp. 28-44). Chicago: University of Chicago Press.
- Gardner, H. (1982a). Giftedness: Speculations from a biological perspective. In D. H. Feldman (Ed.), *Developmental approaches to giftedness and creativity* (New directions for child development, volume 17, pp. 47-60). San Francisco: Jossey-Bass.
- Gardner, H. (1982b). *Frames of mind*. New York: Basic Books.
- Gowan, J. C. (1979). The use of developmental stage theory in helping gifted children become creative. In J. J. Gallagher, J. C. Gowan, A. H. Passow, & E. P. Torrance (Eds.), *Issues in gifted education* (pp. 47-78). Ventura, CA: Ventura County Superintendent of Schools Office.
- In search of identification. (1984). *Gifted Child Quarterly*, 28 (4).
- MacKinnon, D. W. (1964). The creativity of architects. In C. W. Taylor (Ed.), *Widening horizons in creativity* (pp. 359-378). New York: Wiley.
- Mariand, S. P. (1972). *Education of the gifted and talented: Report to the Congress of the United States by the U.S. commissioner of education*. Washington, D.C.: U.S. Government Printing Office.
- Massé, P., & Gagné, F. (1983). Observations on enrichment and acceleration. In B. M. Shore, F. Gagné, S. Larivière, R. H. Tali, & R. E. Tremblay (Eds.), *Face to face with giftedness* (pp. 395-413). New York: Trillium Press.
- Passow, A. H. (1981). The nature of giftedness. *Gifted Child Quarterly*, 25, 5-10.
- Renzulli, J. S. (1978, November). What makes giftedness? Reexamining a definition. *Phi Delta Kappan*, 60, 180-185, 261.
- Renzulli, J. S. (1979). *What makes giftedness: A reexamination of the definition of the gifted and talented*. Ventura, CA: Ventura County Superintendent of Schools Office.

- Renzulli, J. S. (1984). The triad/revolving door system: A research-based approach to identification and programming for the gifted and talented. *Gifted Child Quarterly*, 28, 163-171.
- Richert, S. E., Alvino, J. J., & McDonnell, R. C. (1982). *National report on identification*. Sewell, NJ: Educational Improvement Center-South.
- Robeck, M. C. (1968). *Special class programs for intellectually gifted pupils*. Sacramento, CA: California State Department of Education. (ERIC Document Reproduction Service No. ED 042 271).
- Stanley, J. C. (1977). Rationale of the study of mathematically precocious youth (SMPY) during its first five years of promoting educational acceleration. In J. C. Stanley, W. C. George, & C. H. Solano (Eds.). *The gifted and the creative: A fifty-year perspective* (pp. 75-112). Baltimore, MD: Johns Hopkins University Press.
- Sternberg, R. J. (1981). A componential theory of intellectual giftedness. *Gifted Child Quarterly*, 25, 86-93.
- Sternberg, R. J. (1984). What should intelligence tests test? Implications of a triarchic theory of intelligence for intelligence testing. *Educational Researcher*, 13(1), 5-15.
- Torrance, E. P. (1980). Extending the identification of giftedness: Other talents, minority and handicapped groups. In National/State Leadership Training Institute on the Gifted and Talented (Ed.), *Educating the preschool/primary gifted and talented* (pp. 43-58). Ventura, CA: Ventura County Superintendent of Schools Office.
- Ward, V. S. (1975). Basic concepts. In W. B. Barbe & J. S. Renzulli (Eds.), *Psychology and education of the gifted* (pp. 61-71). New York: Irvington Publishers.
- Webster, D. (1970). *Webster's New World Dictionary* (College ed.). Toronto: Nelson, Foster & Scott.
- Wells, D. (1981). Definitions of gifted and talented used in the United States. *Journal for the Education of the Gifted*, 5, 283-293.
- Whitmore, J. R. (1980). *Giftedness, conflict, and underachievement*. Boston: Allyn & Bacon.
- Zettel, J. (1979). State provisions for educating the gifted and talented. In A. H. Passow (Ed.), *The gifted and the talented: Their education and development* (78th yearbook of the National Society for the Study of Education) (pp. 63-74). Chicago: University of Chicago Press.

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As of July 22, 1985,
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