

HOW THE GIFTED SHOULD BE DEFINED AND IDENTIFIED?

H. Bishay ☆

It is believed that planning an education for the gifted is a comparatively straight forward matter involving only three alternative designs: regular classroom enrichment, segregation, and/or acceleration. I believe that the most pressing current problem in the area of gifted education is to find a workable definition of the group and adequate identification procedures .

There is good reason to believe that many gifted education programs are attended by heterogeneous groups of students whose abilities and achievement of the group represent the entire above-average distribution (50 percent). This state of affairs can destroy many gifted education programs and ultimately the entire movement because demonstrable results will continue to be unimpressive and discouraging. It should be obvious that programs involving above-average students cannot be expected to yield the results which are assumed possible with carefully defined and identified gifted students.

Evidence regarding the extent to which school administrators, teachers, and parents agree on the definition of gifted students was secured during the 1979 summer session at the University of Michigan *. Forty-six students enrolled in the School of Education course on "Education of Children with Superior Abilities" were asked to give their preferred definition of a gifted student and to recommend a procedure for identifying the student. Responses were given after the completion of the course, which provided a detailed presentation of the instructor's (the author's) ideas and those found in the literature.

☆ Lecturer in the Department of Psychology at Kuwait University.

* The author was there as a visiting scholar.

The results are presented in Table 1.

These data suggest that the problem of definition and identification of the gifted is far from solved; on the contrary; a satisfactory solution is becoming increasingly elusive. The data also confirm the existence of a generally recognized trend on the part of many professional and lay persons to include numerous other characteristics besides superior intelligence as major criteria for placing students in gifted education programs.

An example of the trend is contained in the widely quoted report to the U.S. Congress on Education of the Gifted and the Talented¹. Parts of the document which relate to definition and identification are ambiguous and contradictory and can only lead to confusion when used as a basis for planning identification procedures.

In the report the gifted are defined as those with demonstrated achievement and/or potential ability in one or more of five areas: general intellectual ability, specific academic aptitude, creative or productive thinking, leadership ability, visual and performing arts, and psychomotor ability. By these criteria, the gifted would encompass 3 to 5 percent of any school population. The report advocates objective and professional evaluation measures for identification purposes and discourages the use of teacher nomination and group tests because large numbers of the gifted, as many as one half, are missed by these procedures. Because of the substantial relationship between creativity and intelligence, the use of creativity scales is also discouraged. Finally, the report concludes that evidence of special intellectual gifts or talent will be indicated by standardized tests, the judgement of teachers and other education specialists, and demonstration of advanced skills. Two percent of school enrollment is suggested as an allowable quota for reimbursement when provided.

The problem involved in following all the preceding guidelines is this: A conservative estimate indicates that a minimum of only 20 percent of the gifted will be identified. A Multi-dimensional definition and identification procedures such as those described in the report could ultimately lead to extremely heterogeneous groups rather than the more homogeneous groups which are the goal. Its use might lead

us full circle back to some form of ability grouping in vogue in the early part of the century. Ultimately, it would be necessary to handle the resulting heterogeneity by some form of subject matter streaming, as in the British system. The consequence would be a serious setback for gifted education because it would lead to a return to traditional academic education. Although programs for some of the gifted should continue to emphasize academic pursuits, for others, the dominant purpose must be quite different. In many instances the growing need is for efforts to sustain academic motivation and provide for acceleration during the long years needed to develop an adult physique and personality.

Another important problem related to the identification of the gifted is the strong possibility that the personality of approximately 20-50 percent of the gifted make them unattractive to the teachers as candidates for membership in special groups. This is especially true when the dominant purpose of a program involves specific academic skills and knowledge.

In the light of evidence now available, we know that the exclusive use of teacher nominations for initial screening should be avoided. Terman, who carried out the first large-scale and psychometrically based identification procedure, began with teacher nominations². We now know that used alone, teacher nominations can miss as many as 50 percent of those eligible. We can assume that Terman missed only 20 percent because of the care exercised during other steps in his procedure and the availability of highly qualified staff.

Many of the gifted missed today are predominantly those whom Guilford calls divergent thinkers³ and whom Torrance calls creative⁴. Previous to the work of these two men, the gifted divergent had for the most part gone unrecognized by educators. The group includes those whose level of intelligence is sufficient for inclusion in a gifted group and whose personality is questionable although normal but whose classroom behavior and life-styles make them unattractive to many teachers. And because teachers do not nominate them they are rarely considered when identification occurs. There is growing evidence that many of the gifted who are divergent thinkers are divergent persons in addition to being ignored. Not only are they not nominated for gifted groups, but they have been known to become candidates for special treatment for emotional and learning problems, underachievement, and retention.

It is urgent that we know recognize the frequently found personality characteristics of the gifted creative and consider their predictable classroom behavior under given conditions. Barron's description of their behavior and characteristics is relevant:

"Thus the creative genius may be at once naive, and knowledgeable, being at home equally to primitive symbolism and to rigorous logic. He is both more primitive and more cultured, more destructive and more constructive, occasionally crazier and yet adamantly saner, than the average person... The socially disrated traits that may go along with it [Creativity] include rebelliousness, disorderliness and exhibitionism, while the socially valued traits which accompany it include independence of judgment, freedom of expression, and novelty of construction and insight.⁵ "

According to Getzels and Jackson the high creatives among the gifted sample they examined "are more stimulus free " and as a result "tend to structure the task in their own terms, rather than to comply in terms of the given"; "tend to express more aggression and violence."⁶ A few of the characteristics attributed to the gifted creative personality by Maslow include "child-like in spontaneity, unfrightened by the unknown, comfortable, disorderly, sloppy, anarchic, chaotic, vague, doubtful, and the like."⁷ Roe's study of the personalities of 64 eminent divergent scientists leads him to the conclusion that they are independent, self-sufficient, stubborn, and autonomous.⁸ These characteristics presumably enabled them to pursue their felt destinies, unpressured by the opinions of ordinary people and group norms.

Torrance apparently sees little hope for successful attempts to pressure the gifted creatives into a more acceptable school adjustment when he suggests that one task of education is to help such children to become less abnoxious without sacrificing their creativity.⁹ Goertzel concluded that although a dominant need of the gifted is to be learning something, "this respect for learning is not to be confused with a love for the classroom. By conventional standards, the attitudes of the family toward formal schooling is often careless or negative. A few boys and girls never went to school at all."¹⁰

Let us now consider some of the evidence regarding possible school and teacher attitudes and policies and practices as they relate to gifted creative students. According to Getzels and Jackson, "they

[teachers] favor high achievers who are high I.Q.s. but not high achievers who are high creatives.'"¹¹ As reported in Goertzel, Torrance finds that 70 percent of the children rated high in creativity would not be selected to be members of a special class for intellectually gifted children.¹² It is worthwhile to refer to a gifted education program established by the public schools in Cleveland, Ohio, U.S.A. This program is called the Major Work Honors Program. This program lists the following criteria which must be met by gifted students as a basis for acceptance to the program: superior class achievement, good working habits, good emotional health, demonstrated maturity, and a desire to learn for learning's sake.¹³ These are admirable criteria for admission to an eminent gifted education program, but our best guess would be that very few gifted creatives are selected on this basis. This statement is not intended to criticize Cleveland's program, but it is important to recognize the strong probability that this program and all others which use similar definition and identification criteria are excluding an important group of gifted students.

Summary

In summary, I am suggesting that all those interested in gifted education must give definition and identification procedures top priority. The gifted should be identified with at least as much care and skill as are the mentally retarded, the emotionally impaired, and the physically handicapped.

Any effort to provide gifted education in a community or a school must begin with some idea regarding the number who will be identified and consequently need providing for. Much will depend on the chosen definition and identification procedure. The two most notable pioneers in the field, Terman and Hollingworth, defined and identified the gifted as those who scored in the 98th and 99th percentiles on individually administered intelligence tests.¹⁴ Both used the Stanford Binet Intelligence Scale. It has already been noted that any departure from their definition will result in a substantial increase in the number of students. By using all the criteria now being advocated as the basis for a definition and any number of the suggested identification procedures, the percentage of gifted can easily become twenty, thirty, or even fifty. It is conceivable that a given school system might then designate certain buildings as schools for the gifted, which would, in fact, become schools for the academically talented, and the edu-

cational outcome for these students would not be much different from the present outcome.

Those seriously interested in expanding the number of gifted from 2 to 8 percent on a systematic and sound psychological basis are referred to a recent book by Newland. He proposes "that the 1960 Binet IQ of 120-125 will be the lower limit for the population I shall call gifted"¹⁵ But it must be kept firmly in mind that the basic criterion for definition is still intelligence, and the basic identification procedure is psychometric; everything else is secondary.

Identification of the gifted is too frequently dominated by a misconception that all the gifted are convergent thinkers and highly motivated to strike for academic excellence which brings teacher approval, superior grade-point averages, academic honors, promotion to advanced placement courses, and admission to prestige colleges and academic programs leading to the respected and high-income professions. Many of the gifted do fit this stereotype; as children and adolescents they are like miniature scholars. Many others among the gifted, however, are divergent in their style of thinking and behaving. Although their actual scholastic achievement may be equal to that of the gifted convergent, according to Getzels and Jackson and Goertzel, they place the highest personal value on qualities which they feel teachers value least and are noticeably eccentric in their career planning and choice of vocational goals. Terman recognized from his sample that "The group has produced no great musical composer and no great creative artist."¹⁶ This suggests the probability that Terman's identification procedure screened the gifted convergent in and the gifted divergent out. It also suggests that any current identification procedure which begins exclusively with teacher nomination does more of the same.

There is another unfortunate outcome of faculty identification procedures which tend to exclude the gifted divergent: The students excluded may very well be those with the greatest need for the haven of refuge and relief from boredom which at least some special programs should be designed to provide. Many gifted convergent students can be expected, just as the superior do, to tolerate the ordinary routine of most school programs and achieve excellent records without extra effort or serious problems — but not the divergent gifted. From a psychological point of view many gifted education programs are probably established and maintained for the students who have the least need for them.

In the light of empirical findings there appears at present to be only one clear-cut solution to the identification problem: to use group-intelligence or mental-maturity tests exclusively for screening. A cutoff I.Q. of 115 locates approximately 92 percent of the gifted, and a cutoff I.Q. of 120 locates approximately 71 percent. The term "locate" as used here means that the gifted are screened into a larger group. They must then be identified on an individual basis by persons capable of doing so. The result of the group-test cutoff I.Q. scores of 115 and 120 is either an 8 or 29 percent initial loss. But teacher selection locates only 50 percent, and initial loss is 50 percent. As the group I.Q. cutoff is raised, the number of individual evaluations needed goes down but the initial loss increases. This is a real and frightening dilemma which must not be ignored. Consequently, the most dependable identification procedure is probably screening with a cutoff score as low as possible, depending on the availability of personnel for conducting individual evaluations. Additional consideration can then be given to the inclusion of exceptions involving characteristics other than intelligence and cultural difference and teacher, parent, peer, and self-nominations. But the number of exceptions should be limited and accepted only after extremely careful and thorough case studies. Identification of the gifted thus becomes primarily a psychometric procedure and the responsibility of psychologists. Full acceptance of this responsibility would require much more agreement among psychologists and others regarding the definition and identification of the gifted than exists at present. What is suggested here is both time consuming and expensive. We remain convinced, however, that no gifted education program can be better than the identification procedure with which it must begin. A timely principal or motto might be "Gifted Education For The Gifted".

One final thought may have merit: the possibility of two basic types of gifted education programs—one for the convergent thinkers and another for the divergent. The structure and the purpose of the two programs would be radically different. For the convergent there would be academic classrooms. For the divergent there would be Toffler's model of "imaginetic centers devoted to technically assisted brainstorming".¹⁷

Table 1
Definitions and Identification
Procedures for Gifted Students Preferred by 46
School Administrators, Teachers,
and Parents After Completing
an Educational Course Covering the Subject

	Number	Percent
Definition		
Intelligence only	3	7
Intelligence, academic achievement, and other characteristics *	43	93
Identification procedure		
Tests		
Individual intelligence	30	65
Group intelligence	25	54
Group achievement	21	46
Observation	29	63
None	04	09

* Including out-standing performance and/or talent in art, music, dance, creative, psycho-motor, athletic, and leadership abilities; and the following personality traits: alertness, independence, confidence, and positive self-concept.

References

- 1 — U.S. Commissioner of Education and U.S. Office of Education, **Education of the Gifted and talented** (Washington: U.S. Government Printing Office, 1972).
- 2 — L.M. Terman, **Genetic Studies of Genius**, Volume I, (Stanford: Stanford University Press, 1925).
3. G.P. Guilford, "Three Faces of Intellect" **American Psychologist**, 14, 1959, 469-479.
- 4 — E.P. Torrance, **Guiding Creative Talent** (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1962).
- 5 — F. Barroh, **Creativity and Psychological Health** (Princeton, New Jersey: D. Van Nostrand Co., Inc., 1963), 224, 213.
- 6 — W. Getzels and P. Jackson, **Creativity and Intelligence** (New York: John Wiley & Sons, Inc., 1962), 50.
- 7 — A. Maslow, **In Creativity and Its Cultivation**, edited by H.H. Anderson (New York: Harper & Brothers, 1959).
- 8 — A. Roe, "A Psychologist Examines Sixty-Four Eminent Scientists», in **Creativity**, edited by P.E. Vernon (Baltimore: Penguin Books, 1970).
- 9 — E.P. Torrance, **Status of Knowledge Concerning Education and Creative Scientific Talent** (Salt Lake City: University of Utah Press, 1961).
- 10 — V. Goertzel, **Cradles of Eminence** (Boston: Little Brown and Company, 1962).
- 11 — Getzels and Jackson, **Creativity and Intelligence**, 31 (See No. 6)
- 12 — Goertzel, **Cradles of Eminence**. (See No. 10)

- 13 — Major Work-Honors Program, Cleveland, Ohio, Public Schools of Cleveland, mimeograph.
- 14 — Hollingworth, **Gifted Children: Their Nature and Nurture** (New York: The MacMillan Company, 1926); and Terman, **Genetic Studies**.
- 15 — T.E. Newland, **The Gifted in Socio-Educational Perspective** (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1976) 26.
- 16 — L. Terman and M. Oden, **Genetic Studies of Genius, Volume V: The Gifted Group at Mid-Life** (Stanford: Stanford University Press, 1959), 150.
- 17 — Toffler, **Future Shock** (New York: Bantam Books, 1971).

pendent get high degrees in the dimensions of the self-concept more than subjects who are relatively more field dependent.

- 4 — Male subjects who are relatively more field independent get high degrees in the dimensions of the self-concept, and the level of aspiration more than female who are relatively more field independent.

« كيف نُعرِّف ونتعرَّف على الموهوبين »

د. حلیم بشاي

تتعرض هذه الدراسة الى مشكلة كبيرة في مجال دراسة « الطفل الموهوب » - هذه المشكلة هي كيفية التعرف على الاطفال الموهوبين وكيف نُعرِّف هؤلاء الاطفال ؟ - والهدف من هذه الدراسة هو الوصول الى تعريف شامل للطفل الموهوب حتى يمكن عمل استراتيجية تربوية نمكن من خلالها الى اثناء مواهبه .

وتشير الدراسة الى اهمية الكشف عن هؤلاء الاطفال بطريق القياس النفسي والفعل - وتشير ايضاً الى الضرورة الملحة لوضع سياسة تربوية واضحة للعناية بمثل هؤلاء الاطفال لما في ذلك من ثروة قومية .