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Will the Gifted Child Movement Be Alive and Well in 1990?

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The beginning of a new decade, like graduation ceremonies, elections, and other "passages," is a time when we are likely to reflect upon some of the collective wisdom of the past. At these times, we attempt to chart new courses that will guide us through the uncertainties that are the only universal characteristic of the future. The decade beginning now is an especially important time for such reflection because we are in the midst of enjoying the strongest amount of acceptance and public support that has ever been accorded to the gifted child movement in America. The question that is continually being raised, however, is whether the movement will grow and prosper, or whether it will once again fade into obscurity as has happened so many times in the past. The answer to this question is obviously very complex, and yet at the same time it seems that the entire future of the field revolves around one "big" issue and its related creative challenges for program development. Oversimplifications of important issues are always dangerous; but perhaps by bringing the larger issue into focus around a single problem the thoughts presented here will help to establish a common target towards which many people can take aim in the decade ahead.

What is this big and important issue? Simply stated, the field of education for the gifted and talented must develop as strong and as defensible a rationale for the practices it advocates as has been developed for those things that it is against. Perhaps an analogy will help to clarify both the issue and the reason for its importance.

During the 1930's and 1940's the Progressive Education Association was the biggest and strongest educational force in the United States. Today it is virtually unknown. Why did this pioneering attempt to reform American education, this revolution in educational thought inspired by John Dewey, fade into oblivion? Most historians attribute the demise to the fact that the progressives knew more about what they were against than what they stood for. Like educators of the gifted, this innovative group was against the content-centered, memory-oriented curriculum. They were against schools that were more subject-centered than child-centered, schools that were lock-step in even the smallest detail, and a curriculum that was based on a philosophy of functionalism rather than humanism. To be certain, many of the ideas of the progressives were integrated into the mainstream of American education, but the movement bogged down and lost its punch as a major reformation because it failed to follow through on its criticisms with a solid and positive course of action. A similar analogy could also be presented using the open education movement of the 1960's.

Let us now turn our attention to the present day gifted child movement. First, most educators of the gifted would agree on the types of educational practices we are against. Second, many of the things we stand for (e.g., more emphasis on cognitive and affective process development) have been integrated, or at least accepted, by persons in general education. Finally, in spite of several years of increased activity within the field, very little attention has been given to the development of systems, theories, or models that can be used as defensible rationales for the day-to-day activities that we advocate for gifted youngsters.¹

At this point I feel certain that the practical-minded reader is ready to give up on this article! Why, he or she might ask, is the writer making a pitch for more of "that theory stuff" when what I need are some Monday-morning activities to use with my gifted students? The answer to this question is a difficult one, and having been a teacher of the gifted. I can readily identify with the urgency of learning (usually guickly) how to "do something" to keep a dozen or so active minds busy for two and one-half hours. But therein lies the dilemma. Suppose that I were to complete this article by carefully describing four or five of my favorite no-fail activities for gifted youngsters. This approach would certainly have popular appeal, but I fear that it would also be a disservice to the reader unless it was accompanied by a defensible rationale for why such activities are being recommended for gifted youngsters. Unless the teacher of the gifted or program director can stand before the board of education or curriculum council and answer what I have described elsewhere as "those haunting questions" (Renzulli, 1977), we may be in danger of winning the battle but losing the war. The most frequently raised haunting question is familiar to almost all people working in this field: "Isn't what you are doing for the gifted good for all youngsters?" If we deal only with Monday-morning realities and do not give equal attention to the development of systems, theories, and models, we may never be able to answer this question in a defensible manner.

Let us examine one example of how the development of systems and theories can help us to win the war. Another haunting question that both critics and people within the field are beginning to raise relates to evaluation. How, they ask, do we know that our programs are having any payoff or that one approach to gifted education has certain advantages over another? The sad but true fact is that we can't really develop respectable evaluation designs when our programs are little more than patchwork collections of random practices and activities. Researchers and evaluators can only obtain effective results (and hopefully gain maximum support for programs) when they are testing a model or a comprehensive and integrated approach to programming. Then the program director can stand before the board of education and say, "Our program is based on (this or that) model, and within this framework, our evaluation data reveals (thus and so)."

¹ Six notable exceptions to the lack of theory and system development can be found in the work of Ward (1961), Stanley (1974), Feldhusen & Kolloff (1978), Treffinger (1975), Renzulli (1977), and Renzulli and Smith (1979).

Before going on to some specific needs related to the development of rationale, there are two final concerns about the general issue that should be mentioned. First, I am not advocating esoteric systems, theories, or models. Any theory that is not rich in examples and suggestions for practical application is as valueless to an applied science or field of study as are specific activities without an accompanying rationale. I believe that "practical theory" is the best of both worlds, because the two approaches (theory and practice) working together side-by-side can provide actual learning activities that will help to validate the theories and models, and provide a framework within which numerous creative people can contribute practical applications of a given theory or model.

Second, if the field is to advance, we need competitive and even conflicting theories so that we may test one against the other in a never-ending search for better ways of serving gifted and talented youth. There is an old saying in science about the accepted theories of today being tomorrow's outmoded ideas. Just as Einstein's work largely disproved many of Newton's "laws" of physics, so also must we challenge conventional wisdom and existing ways of doing things. This challenging attitude is exactly what we advocate for gifted youth. Perhaps the time is long over-due for us to begin practicing what we preach. In order for our field to advance we need to create systems, theories, and models that will serve as the vehicle for a great in-house dialogue directed toward providing a true meaning for our most frequently used (and abused) concept; "qualitative differentiation."

Four Related Issues

Following is a discussion of four areas in which there is a need for the development of more defensible systems, theories, and models. The four issues that follow are particularly interesting because of past or present efforts and because they may stimulate a little of the controversy that is needed in our field.

The Identification of the Gifted and "Gifted Hypocrisy"

Although most people will not admit it, up to this point in our history we have continued to view giftedness as an absolute concept—something that exists in and by itself, without relation to anything else. For this reason, most of our identification efforts are directed toward uncovering the magic piece of evidence that will tell us if a child is "really gifted." The absolute conception causes us to act as if giftedness is something that "you have" or "you don't have," and consequently, we still think in terms of a child being "in" or "not in" a program. Any mistakes in the selection (or rejection) process, according to the absolutist, are attributed to deficiencies in identification instruments rather than to giftedness being a relative or situational concept.

Although there is a great deal of platform rhetoric about multiple talents and multiple criteria for identification, the sad fact remains that most students participating in special programs are preselected for time periods of at least one year, and in most cases the major criterion for selection is a predetermined cut-off score of 125 or 130 on

an intelligence test.² One need only survey the identification procedures for a cross section of special programs or review several states' guidelines to affirm the continued reliance upon high test scores.

Our reliance upon intelligence test scores has resulted in pupil selection on an all-or-nothing basis. Students are either "in" or "out" of a program for an entire year and seldom are nonselected students given an opportunity for special services even when very valid indications of superior potential arise. This approach is roughly analogous to selecting students on the basis of hair or eye color because it assumes that giftedness is some sort of absolute and predetermined condition rather than a set of behaviors that emerge when certain traits interact with one another in relation to a particular topic, area of interest, or specific talent.

A large amount of accumulated research (Renzulli, 1978) clearly indicates that the type of gifted behavior displayed by creative and productive persons is always the result of interaction among three clusters of traits; above average ability, task commitment, and creativity. Outstanding accomplishments occur when these interacting traits are brought to bear on one or a combination of specific performance areas (i.e., the numerous ways and means through which human beings express themselves in real life situations). Research and plain old common sense tell us that gifted behavior is both topical and temporal in nature. That is, such behavior emerges in relation to a sincere area of interest and it operates at maximum efficiency during given periods of time. It is at such times as this-when a strong interest emerges and the child is unquestionably eager to put forth maximum creative effort—that supplementary services and resources should be made available to the child. It goes without saying that an important part of overall programming is the encouragement (indeed, the creation) of task commitment and creativity. But if we restrict our efforts for such encouragement to students who have been preselected (on the basis of test scores) for a special program, we may fail to "turn on" the child who has the greatest potential for benefiting from interest development and creativity producing activities.³ Gifted behavior emerges as a result of certain youngsters (generally of above average ability) taking advantage of opportunities that are made available to them. We can serve gifted students more effectively if we (1) expand the number and variety of opportunities, (2) make the opportunities available to more students, (3) do not require every child to follow through on every activity, and (4) provide supplementary services at the time and in the areas where a child shows the eagerness to follow through. In other words, our identification procedures should place as much emphasis on the ways in which children

² Indeed, the well-known Pegnato and Birch study (1965) validated multiple criteria approaches to identification by comparing the alternative approaches with individual IQ test scores. In other words, a child was judged to be "really gifted" only if he or she met this ultimate criterion on a single measure. This being the case, one wonders why we should bother with alternative criteria and merely use individual IQ scores! Alternatives to the type of research design used by Pegnato and Birch can be found in Renzulli and Smith (1977) and Jenkins (1979).

³ Space does not permit a detailed discussion of how interest and creativity development activities are related to developing gifted behavior. The reader is referred to sections on Type I and Type II Enrichment in Renzulli, J. S. (1977), *The Enrichment Triad Model: A guide for developing defensible programs for the gifted and talented.* Mansfield Center, CT: Creative Learning Press.

interact with experiences (i.e., action or performance information) as they do on the ways in which children respond to structured questions or ratings (i.e., status or psychometric information).

Before discussing the characteristics of a more relative concept of giftedness and our need to think in terms of "gifted behavior" rather than "being gifted," consider one other reason why giftedness has traditionally been viewed as an absolute concept. There are in fact certain abilities that are more pervasive and enduring than others and it is precisely these abilities that have resulted in our rather narrow conception of giftedness. Essentially, these abilities include being a good test-taker and/or lessonlearner in a traditional learning situation. In most cases, good test-takers are also good lesson-learners, although there are many examples of youngsters who "go to school well" but who do not "show up" well on intelligence, aptitude, or achievement tests. There are also many cases of youngsters who score well on tests but who, for one reason or another, do not achieve well in traditional learning situations. Let us assume for a moment that being a good test-taker or lesson-learner is a certain type of "giftedness." These types of giftedness should obviously be respected and provided for to whatever extent possible in the school program. In fact, it is these types of giftedness that are most easily provided for through modifications and adaptations in the regular curriculum. Any child (regardless of test scores) who can cover regular curriculum material in a more compact and streamlined fashion should be given the opportunity to do so provided, of course, that it does not present the child with undue stress or emotional problems. If there is one important area in which regular classroom teachers might be legally actionable for negligence, it is in their lack of providing youngsters with appropriate modifications in the coverage of regular curricular materials.

If we consider test-taking and lesson-learning ability as certain types of giftedness, there are at least three important considerations that must be kept in mind. First, being a good test-taker or lesson-learner does not necessarily guarantee that a child will display gifted behavior in the creative and productive sense of that term. Creative and productive endeavors are the result of combining particular abilities in certain areas (including but not restricted to general intelligence) with task commitment and creativity. A second consideration is that one need not necessarily be a good test-taker or lesson-learner in order to display creative and productive behavior which emanates from high levels of task commitment and creativity. Our limited conception of giftedness, however, has often precluded entrance into special programs or supplementary services to good test-taking and lesson-learning ability and therefore highly creative youngsters or youngsters who have displayed unusual amounts of motivation to pursue topics or talent areas have been systematically excluded from special programs.

Our third consideration is simply that no one is "born with" task commitment or creativity. Rather, these are clusters of abilities that we should seek to develop in all students. Obviously, good test-takers and lesson-learners have high potential for benefiting from experiences designed to develop creativity and task commitment, but once again, these abilities are no guarantee of success nor should they preclude youngsters who do not have the test-taking and lesson-learning abilities. In a certain

sense, activities that are conscientiously and systematically designed to develop task commitment and creativity could be viewed as the situations or occasions whereby we can spot examples of gifted behavior. In other words, performance in these situations should become part of our identification procedure, and the entire identification process should be built around a "revolving door" concept that allows children to flow into and out of the special program as the need arises.

The main difference between this approach and the traditional method of having the same students in the program for the entire year is that there is a specific raison *d'etre* for a child (or small group of children working on a common problem) to be in the program for a given period of time. The period of time may be a few weeks or several months, the major determining factor being the amount of time necessary for completing the project or solving a particular problem. In a certain sense, this approach means that a child "earns the right" to obtain special services by showing some or all of the "necessary ingredients" of giftedness (that is, above-average ability, task commitment, and creativity). The concept of "earning the right" to obtain special services will obviously be a controversial one, but this approach will certainly help to overcome some of the very valid criticism that has recently been expressed by parents about the identification process (see especially Weiler, 1978). This approach also helps to insure continuous involvement on the part of the regular classroom teacher. In the traditional approach (in which the child is preselected and placed in the program for an entire year), the regular and special programs frequently operate as two separate entities and it is not uncommon for the regular classroom teacher "to forget" about advanced expressions of ability once children have been placed in the gifted program. The revolving-door approach, on the other hand, requires the regular classroom teacher to be constantly on the look-out for signs of interest, creativity, task commitment, and advanced expressions of ability. In addition to becoming a more sensitive "talent spotter," the regular classroom teacher can become more involved by providing certain types of enrichment experiences that will become useful as the situations or occasions for spotting children who should be "fed into" the resource room. The resource room becomes a place where extensions of the regular curriculum and more advanced levels of involvement can occur.

This approach can also help to overcome one of the main deficiencies of special programs that are organized around the resource room or itinerant teacher model. Most resource room teachers are not resources—they are teachers in the traditional sense of the term. In far too many instances when I have visited resource rooms, the teacher is teaching predetermined, prescribed lessons to the entire group. The content of the lessons may be different from the content of the regular curriculum, and the atmosphere may be a little more relaxed, but otherwise, the learning or instructional model is exactly the same as the type of teaching that goes on in any good classroom. If resource teachers want to become real resources to gifted and talented children, then they must drastically reduce the amount of time that they spend instructing students and "teaching lessons." A real resource person serves an individual student (or small group of students working on a common project) in much the same way that a graduate advisor serves a doctoral student working on a research project. The teacher helps the student to focus or frame the area of interest into a researchable problem; suggests where the

student can find appropriate methodologies for pursuing the problem like a professional inquirer; helps the youngster to obtain appropriate resources (persons, equipment, reference materials, financial support); provides critical feedback, editorial assistance, encouragement, and a shoulder to cry on; and helps the child find appropriate outlets and audiences for his or her creative work.

But how, you may ask, can the revolving-door approach help to accomplish these types of behaviors on the part of resource room teachers? The answer to this question lies in the greater emphasis that this approach places on the individual child, the child's particular area of interest, and his or her commitment to work on a certain problem. In other words, the *raison d'etre* that caused us to send children to the resource room becomes the basis for the supplementary services that are provided when they are working under the direction of the resource teacher. The revolving-door approach, in a certain sense, "forces" the resource teacher to deal with the individual child and the specific reason that the child was sent to the resource room.

This approach also will help us in matters of accountability and program evaluation. If we know the specific reason why a given child was sent to the resource room, and if we have some documentation about the specific services that were provided, then we can review the youngster's work and make determinations about growth in relation to the objectives set forth for the individual student.

By way of summary, the revolving-door approach can help to overcome many of the problems and criticisms that have been associated with programs for the gifted and talented. This is especially true for relatively affluent school districts where large numbers of parents feel that their children are gifted. This approach allows us to serve more students, to avoid the IQ cut-off score game, to place the rationale for advanced level services on characteristics that are unequivocally supported by the research literature, and to shift the emphasis of special programs from lesson-oriented, whole group activities to the development of individual strengths and interests.

Curriculum Hocus-Pocus

A second area in which we need to examine the rationale underlying special programs is concerned with the so-called "process models" that form the most sacred part of the litany in the area of education for the gifted and talented. *Bloom's Taxonomy. of Educational Objectives* (Bloom, et al., 1956) and *Guilford's Structure-of-the-Intellect* (Guilford, 1967) model are almost universally offered as the rationale for special programs. If we examine these models carefully, however, two almost obvious conclusions emerge. First, the models point out mental processes that should be developed in all children. Indeed, when Bloom referred to his taxonomy as a classification of "higher mental processes," he was merely calling attention to the distinction between these processes (which are common to all humans) and the lower processes of sensation and perception (which humans share with other members of the animal family). One of the reasons we cannot defend programs for the gifted by simply saying that focus should be placed on the upper end of Bloom's continuum (analysis, synthesis, and evaluation) is that the taxonomy is a hierarchical structure—one cannot

engage in advanced levels of analysis or creativity unless one has dealt with advanced levels of knowledge and comprehension (the two lowest levels in the taxonomy). Contrary to what the prophets of process would have us believe, knowledge is important, and for the person who is going to make a significant breakthrough in his or her field, knowledge of methodology (Bloom's level 1.20) is perhaps the most important skill that one can possess. Failure to understand this hierarchical arrangement has undoubtedly resulted in gifted education's over-reliance on the cute games and situational-specific training activities that purport to develop creativity and other thinking skills. Suffice it to say that there is a vast difference between the types of mental growth that result from a thirty-minute exercise in creative ways to paste macaroni on oatmeal boxes and the kind of disciplined inquiry and task commitment that sparked the work of Marie Curie, Rudyard Kipling, Martin Luther King, or anyone else that history has recognized as a truly gifted person. Our major theory development need in this regard is to learn how situational training activities can be used as stepping stones to more advanced kinds of inquiry rather than as ends in and of themselves.

A second conclusion that becomes apparent if we carefully examine the process models is the large amount of rigidity that such models place on learning activities. In their seemingly noble goal of focusing on particular processes (rather than content), such activities tend to fractionate learning into the highly structured kinds of experiences that we criticized in the content-centered curriculum. So now, rather than filling kids' heads with isolated facts and figures, we are filling each "cell" of the Guilford model with isolated processes according to a structured and predetermined lesson plan. Reliance upon the process models has undoubtedly resulted from a popular but completely unsupported belief that the gifted person is "process oriented." The reality, however, is that authors, inventors, designers, and anyone else engaged in the creative aspects of art or science attack a problem because they are attempting to produce a new and imaginative product. In the act of writing the story or designing the new piece of machinery certain processes undoubtedly are used and further developed. But gifted persons are highly product oriented—processes are the paths rather than the goals of their creative efforts. Unless we view process activities in this manner, there is a danger of trying to ram them down students' throats in much the same way that we force-fed youngsters with facts and figures.

My concern about a preoccupation with process models started to emerge a few years ago when I worked on a curriculum development project (for the gifted) that involved several scholars from the academic disciplines. When we tried to "sell" these scholars on the Taxonomy and the Structure-of-the-Intellect models they flatly stated these approaches where a kind of phony educationese or "curriculum hocus-pocus." They accepted the processes as psychological phenomena and even agreed that certain kinds of elementary training activities could be built around the models. But when it came to our target population—gifted persons—they said that these models simply were not reflections of the ways in which first-hand inquirers pursued knowledge in their respective fields. If we are to overcome our naivete in this regard, perhaps the starting point should be a careful study of the ways in which creative people attack real problems within the various fields of knowledge.

Some additional curriculum hocus-pocus has also resulted from the almost obsessive concern that many educators of the gifted have had for speed and efficiency in learning. Although we do know that brighter students can cover curricular material faster and more precisely than those of lesser ability, our knowledge about the contributions of other important factors such as task commitment, individual interests, and learning styles is far less sophisticated. Our lack of understanding about these factors has frequently resulted in quantitative rather than qualitative approaches to educating the gifted. In other words, we have simply dealt with the gifted by speeding up the traditional approach to learning.

Let us briefly analyze a typical learning situation. Almost all traditional learning experiences are characterized by the step-by-step pursuit of curricular material that is planned and administered by the teacher. Students engage in predetermined exercises with generally prescribed procedures for problem solving and generally agreed upon standards of acceptability for success. Thus, the curriculum from the early grades through most college-level courses consists of one long progression of exercises after another, and the student is cast mainly in the role of a "doer of exercises." Are we really doing anything that is qualitatively different when we merely accelerate students or the rate at which we expose them to a never-ending diet of prescribed exercises? Simply removing youngsters from one exercise-learning situation and placing them in another similar situation (albeit at a more advanced level) does not change the role of the learner. Unless appropriate modifications are made in the ways in which advanced material is taught, I fail to see how an accelerated learning experience differs qualitatively from the regular curriculum. Providing highly able youngsters with opportunities to learn at advanced rates of speed is certainly an important objective of special education for the gifted, but what is equally certain is that the great accomplishments of mankind have always resulted when bold and adventuresome persons have dared to go beyond predetermined and step-by-step progressions through traditional material. The "stuff" out of which greatness is made can only result from experiences in real discovery, inquiry, and creativity rather than presented exercises in these important processes. It is for this reason that I am somewhat skeptical when people tell me they are "writing curriculum" for the gifted, even if the curricular material is in a nontraditional area or related to an esoteric topic or process. If the epistemology of the learning experience remains the same (i.e., the role of the learner and the ways in which he or she pursues knowledge), then I believe that writing curriculum for the gifted is yet another example of self-deluding hocus pocus. "Writing curriculum" implies more prescribed and presented exercises rather than starting with the child and his or her interests, and then providing the conditions, resources, and guidance that will result in first-hand investigative activity and real creativity. We will only make a breakthrough in our quest for qualitative differentiation when we learn how to "de-exercise" at least a portion of the school experience for gifted and talented youth.

The Teacher of the Gifted and American Pie

One of the more fortunate developments in the last few years has been a greater emphasis on identifying those characteristics and behaviors that help to define the socalled "teacher of the gifted." There are at least two groups of persons to whom we refer in discussing the "teacher of the gifted." The first group is obviously specialists—those individuals who have, by job designation, been assigned to work with gifted students at particular times and under particular circumstances.

The second group consists of regular classroom teachers when they are dealing with a child in whom we are trying to promote gifted behavior. It is sad but true that in the foreseeable future most gifted youngsters will spend most of their time in regular classrooms, and in the majority of school districts, they may not have access to any supplementary services or specialists in gifted education. It is in these situations that we must attempt to provide at least some of the services as those proposed in special or "pull-out" programs. There is no magic in being a specialist who is assigned to work with gifted children. Certain of the teaching behaviors employed by such specialists can also be used very effectively by regular classroom teachers, provided of course such teachers learn the competencies and have the time and resources to bring them to bear within their classrooms.

Let us now turn our attention to the question of what some of the special competencies of teachers of the gifted and talented are. On several occasions I have asked people in the field to list the most important characteristics of teachers of the gifted. The resultant lists can best be described as pure "American Pie!"

That is, such lists always contain very general and highly idealistic truisms with which very few people would disagree. Items that always show up high on such listings are: flexible, democratic, considerate of individual differences, open-minded, has a sense of humor, sensitive to the affective needs of students, varies the learning environment, etc.⁴ (Just for the fun of it—if you were asked to list the characteristics of teachers of the gifted, would not the above items appear relatively high on your list?)

This is not to suggest that these traits are not characteristics of teachers of the gifted. Let us assume, however, that you are the parent of a so-called average (or even below average) child. Does this mean that your child's teacher can be inflexible? undemocratic? inconsiderate of individual differences? closed-minded? lacking in a sense of humor? insensitive to affective needs? does not vary the learning environment? etc.? I would hesitate to tell the board of education in my home town that these are the kinds of things we seek in teachers of the gifted but not in other members of our teaching faculty.

An even bigger problem with the "American Pie" lists is that the items are too general or highly inferential to be of any practical value so far as teacher training is concerned. The "American Pie" list is really a list of personality variables, perhaps far less subject to modification (through teacher training) than specific teaching behaviors which relate more directly to the instructional process. We should, quite obviously, attempt to select teachers on the bases of these characteristics and to do whatever

⁴ Some of these lists of characteristics have been used for research studies and can be found in the literature. See for example, *Instructor*, May, 1977, p. 20.

training we can to promote them further. But once again, we should select and train all teachers with these characteristics in mind.

If we are ever going to make progress in defining the characteristics of the teacher of the gifted, I think it is important for us to get serious about specific teaching behaviors that promote specific kinds of learning and especially creative/productive behavior. To be certain, we can train all (or almost all) teachers to be more flexible, to ask higher level questions, and to teach lessens that promote creativity and affective development. At the same time, however, there are certain teaching behaviors that should be brought to bear upon youngsters who have transcended the role of merely being lesson-learners (at whatever advanced levels they are learning lessons), and it is these behaviors that are most crucial in helping youngsters develop their true creative and productive abilities.

Evaluation and the Absurdity of the Hard Data Mystique

A final area in which we need to give more attention to the development of a defensible rationale is program evaluation. Because of the relatively unique objectives of programs for the gifted and talented (Renzulli, 1975), the traditional models, instruments, and procedures that have been used to evaluate programs in other areas of education are largely inappropriate for evaluating programs that serve gifted and talented youth. In recent years there has been a great deal of concern about the specification of objectives in terms of observable and measurable student behaviors. Many evaluators have looked upon the "behavioral objectives models" as a panacea for conducting evaluation studies. The nature of gifted programs, however, and their concern for developing more complex behaviors and more comprehensive types of creative products may make this model too cumbersome to be practically applied to programs for the gifted and talented.

The rigid behavioral objectives model is mainly inappropriate for programs that serve gifted youngsters because it forces us to focus primarily upon those behaviors that are most easily measured, but also the most trivial. Such a situation may well result in the tail wagging the dog—that is, our programs may tend to focus on lower level (basic skill) objectives because of the neatness and precision with which they can be measured. Michael Scriven, the single-most influential person writing on educational evaluation today, has pointed out that "putting pressures on [a person] to formulate his goals, to keep to them, and to express them in testable terms may enormously alter his product in ways that are certainly not always desirable" (Scriven, 1967, p. 55). Other writers (Stake, 1973, pp. 196–199) have pointed out that the errors of testing increase markedly when we move from highly specific areas of performance to items which tend to measure more complex processes and youngsters' attempts to strive toward more unreached human potential.

Although the testing industry has provided us with a vast array of instruments for measuring the mastery of basic skills and general achievement, there has thus far been an absence of technology when it comes to evaluating the more complex types of learning and the creative accomplishments that oftentimes characterize programs for

the gifted and talented. The constant call for "hard data" has undoubtedly been the reason for limited technology and the development of alternative evaluation models that can better serve the types of programs advocated by persons in this field. On the one hand, persons are [in effect] saying, "Go forth educators of the gifted and develop in this special population of students the upper levels of their most creative and productive behavior !" At the same time, however, the persons who offer us this creative challenge frequently also request that we show the results of our efforts in terms of some nice, neat scores on a standardized test. Unfortunately, the complexity of our objectives and the neatness and precision of the evaluation data requested do not go together. Tests simply do not exist to tell us the amount of growth that takes place when a youngster's work is instrumental in changing a state law, stopping the construction of an environmentally unsafe interstate highway, producing an award-winning film, publishing a special-topic newspaper, or bringing about the erection of a monument at a place with important historical significance. These types of creative products are the right and proper types of data upon which our evaluations should focus. They may not be as precise and objective as scores on a standardized test; however, if we are to make any important breakthroughs in evaluation, the products of children must be viewed as data. Our evaluations of such data may be more imprecise than test-score data; however, it is far better to have imprecise information about the right type of objective than precise information about the wrong objective.

What is most surprising about the hard data mystique is that very few persons calling for such objective data would question the more comprehensive types of objectives that we advocate for gifted youngsters. Using these objectives as our starting point, the first and biggest job in evaluation is to convince persons receiving evaluation reports (state departments of education, boards of education) that our special efforts require—indeed, demand—new evaluation models.

Although I can only speculate about some of the major characteristics of such models, one certainty is that we must develop better means for assessing the quality of all types of students' products. Such assessment will require that we seek the advice of specialists within particular fields (architects, furniture designers, choreographers, etc.). Through their knowledge, appreciation, special insights, and "connoisseurship" we may be able to learn about benchmarks of quality that will assist us in program evaluation.

References

- Bloom, B. S. (Ed.). (1956). *Taxonomy of educational objectives, handbook 1: Cognitive domain*. New York: David McKay.
- Do you have to be gifted to teach the gifted? (1977, May, 20). Instructor.
- Feldhusen, J. F., & Kolloff, M. B. (1978 September/October). A three-stage model for gifted education. *Gifted Child Today, 4*, 3–5; 53–57. https://doi.org/10.1177/107621758801100104
- Guilford, J. P. (1967). The nature of human intelligence. New York: McGraw-Hill.
- Jenkins, R. C. W. (1978). The identification of gifted and talented students through peer nomination (Doctoral dissertation), University of Connecticut, Storrs. *Dissertation Abstracts International, 1979, 40*. (University Microfilms No. 7914161, 167-A)

Pegnato, C. W., & Birch, J. W. (1975). Locating gifted children in junior high schools: Comparison of methods. In W. B. Barbe & J. S. Renzulli (Eds.), *Psychology and education of the gifted: Selected readings.* New York: Irvington Press.

- Renzulli, J. S. (1975). A guidebook for evaluating programs for the gifted and talented. Ventura County, CA: Ventura County Superintendent of Schools.
- Renzulli, J. S. (1977). *The Enrichment Triad Model: A guide for developing defensible programs for the gifted and talented*. Mansfield Center, CT: Creative Learning Press.
- Renzulli, J. S. (1978). What makes giftedness? Re-examining a definition. *Phi Delta Kappan, 60*(3), 180–184, 261. <u>https://www.jstor.org/stable/20299281</u>
- Renzulli, J. S., & Smith, L. H. (1977). Two approaches to the identification of gifted students. *Exceptional Children, 43*(8), 512–518.

https://journals.sagepub.com/doi/pdf/10.1177/001440297704300804

- Renzulli, J. S., & Smith, L. H. (1979). *Guidebook for developing individualized educational programs (IEP) for gifted and talented students*. Mansfield Center, CT: Creative Learning Press.
- Scriven, M. (1967). *Perspectives on curriculum evaluation. AERA monograph series on curriculum evaluation, No. 1.* Chicago: Rand McNally,.
- Stake, R. E. (1973). Measuring what learners learn. In E. R. House (Ed.), *School evaluation: The politics and process.* Berkeley, CA: McCutchan.
- Stanley, J. C., Keating, D. P., & Fox, L. H. (Eds.). (1974). *Mathematical talent: Discovery, description, and development.* Baltimore: Johns Hopkins University Press.
- Treffinger, D. J. (1975). Teaching for self-directed !earning: A priority for the gifted and talented. *Gifted Child Quarterly, 19*(1), 46–59. https://doi.org/10.1177/001698627501900109
- Ward, V. S. (1965). *Educating the gifted: An axiomatic approach.* Columbus, OH: Charles E. Merrill.
- Weiler, D. (1978). The Alpha Children: California's brave new world for the gifted. *Phi Delta Kappan, 60*(3), 185–187. <u>https://www.jstor.org/stable/20299283</u>