

FOCUS ON EXCEPTIONAL CHILDREN

The Gifted and Talented: A Case in Point

Carol L. Schlichter

David, a fifth grader in a small, Southern rural county, has above average intelligence. He is probably gifted, though his teachers have not identified him in that way and though there is no test score which verifies that David's IQ is 130 or above (the level required in his state to qualify for special service).

When David first entered school he could read and converse about many topics. During his first year in school, he read 200 books. His teacher told David's parents that his being able to read when he came to school created a problem.

In the second grade, David began to write stories and reports for social studies and science. His teacher complained that he finished his work quickly and then bothered other children. One day about midyear of the second grade, David complained of stomach aches and didn't go to school. During the second day at home, he revealed to his mother that they were having review at school and that it was boring.

The third grade was a disaster for David. When he finished his assignments, his teacher often gave him things to copy and other busywork. Once when he was told to copy something, David proudly used the fancy, old English lettering he had taught himself. His teacher punished him and made him do it over again. The teacher also complained to David's parents that he read library books while she was teaching, and daydreamed a lot.

In the fourth grade, David's teacher took more time with him. When he finished his work, she let him work on various projects. Among other things, David built a Pueblo village to scale and constructed crossword puzzles. His teacher reported to his parents that David was bright and a joy to teach.

According to his parents, David spends lots of time at home making up unusual codes which involve three or four levels of processing to decode. He likes to paint and draw, especially cartoons; and he plays the piano well. David frequently "invents things." His mother says he is always thinking up things to do; for example, he recently drew up specifications for a "telephone bank" from which he is now going to make a real model. David really enjoys some sports, such as swimming, golf, and tennis, although he is the only boy in his class who isn't on a football team. His parents indicate that David won't be pressured into doing things just to be like everyone else.

Dr. Schlichter is Assistant Professor of Special Education at the University of Alabama.

This year David is in a departmentalized fifth grade. His teachers complain that he finishes his work quickly and beats out rhythms with his pencil. David says his teachers will not let him take out books or do anything else until everyone finishes. His parents report that he hates school and actually looks forward to orthodontist appointments because he can be out of school.

DEFINING THE GIFTED AND TALENTED

Traditionally, definitions of the gifted have focused on youngsters exhibiting a high level of intelligence, which was defined in terms of IQ scores of 130 and upward. As a result, the concept of giftedness came to be closely allied with a view that equated intelligence with the small range of cognitive abilities represented by IQ scores. In the 1950s, J.P. Guilford began publishing research on his Structure of Intellect model, which pointed to the complex, multidimensional nature of intelligence (Guilford, 1956). This model of human intelligence hypothesized the existence of some 120 different cognitive abilities which comprised intelligence. Importantly, Guilford's work highlighted the role of creativity as an area of abilities to be included in the concept of

intelligence — an area noticeably untapped by traditional intelligence tests.

Largely as a result of studies based on this multi-dimensional view of intelligence, the definition of giftedness expanded from the rather narrow, traditional focus on a few intellectual abilities to a definition which included a wide band of diverse intellectual abilities. The impact of this research was clearly reflected in the definition of giftedness included in the study conducted by the Commissioner of Education (Marland, 1972) under the provisions of Public Law 91-230, Section 806:

Gifted and talented children are those identified by professionally qualified persons who by virtue of outstanding abilities are capable of high performance. These are children who require differentiated educational programs and services beyond those normally provided by the regular school program in order to realize their contribution to self and society.

Children capable of high performance include those with demonstrated achievement and/or potential ability in any of the following areas, singly or in combination:

1. general intellectual ability
2. specific academic aptitude
3. creative or productive thinking
4. leadership ability
5. visual and performing arts
6. psychomotor ability (p. 2).

The importance of this statement, as a reflection of a major trend in defining the gifted and talented population, is seen both in its application of a broadening concept of giftedness and in its attempt to represent the

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Executive and Editorial Office
6635 East Villanova Place
Denver, Colorado 80222
Telephone (303) 757-2579

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broad range of valued abilities/achievements in the real world.

The implication of this broadened concept of giftedness for David's case is that evidence of his potential in multiple, high-level abilities should become a target for careful consideration and planning. With the expanding view of giftedness, an expansion which includes the often neglected creative abilities, David may seem a more likely candidate for the gifted/talented population than when only one kind of giftedness is considered. And it is possible that others in this rural community, representing several minority groups and even less advantaged youngsters than David, may now be included in a population conservatively estimated to number up to 2.5 million when a broad band of abilities is included; for not only is intelligence multifaceted, but it takes many different forms depending on the circumstances in which an individual grows up, the opportunities to exhibit those different abilities, and the rewards which exist for the individual in a rapidly changing world (Thompson, 1972).

IDENTIFYING THE GIFTED AND TALENTED

Although many trends are developing in identification of the gifted and talented, only three have been selected for discussion here: (a) the use of multifaceted systems to identify a variety of gifts and talents, (b) the increasing training of teachers and administrators in the recognition of a wide range of abilities, and (c) early identification of the gifted and talented.

Use of Multifaceted Identification Systems

Many educators decry what appears to them to be an overwhelming variety of procedures and instruments for the identification of the gifted and talented. Yet, as Torrance (1965) so aptly pointed out, "Acceptance of a complex concept of giftedness . . . commits one unalterably to complexities in identifying gifted children" (p. 19).

Thus, while the monumental work of Terman (1926-1959) gave respectability to intelligence tests as a means of measuring mental ability and produced a useful profile of the characteristics of certain gifted children, it is now recognized that the Terman subjects represented a restricted population. This population did not include a cross section of the multicultural American society, and it did not sample the multidimensional aspects of intel-

ligence which are now known. The list of characteristics from Terman's research provided a legitimate basis for identification of the intellectually gifted, but it was not sufficient for identification of other important segments of the gifted and talented population, including the creatively gifted, the talented in visual and performing arts, and the large numbers of gifted among the culturally different.

In a recent publication of the National/State Leadership Training Institute on the Gifted and the Talented, Martinson (1974) examined reasons for and appropriate use of a variety of identification procedures ranging from the traditional intelligence and achievement tests to creativity tests, pupil products, and parent and peer nomination. Other writers (Bruch, 1975; Torrance, 1973) researched specific problems and applications of some of these multiple procedures with reference to certain cultural and subcultural groups.

The impact of this growing trend toward multidimensional systems of identifying the gifted and talented is reflected in local, state, and regional planning for the gifted. Kranz (1976) reported on the implementation of the Multi-Dimensional Screening Device in Fairfax County, Virginia, which involved rating such talents as ability in the visual or performing arts, creativity, academic ability, leadership, and psychomotor abilities; initial results were reported as including the identification of more minority children as gifted than ever before.

Ten states working together under provisions of Title V, Section 505, focused on multiple approaches to identifying the gifted and talented, as one of several topics. The results are reported in the form of an identification model (Tongue & Sperling, 1976) which outlines a comprehensive plan, including identification matrices and sample instruments for addressing multiple aspects of intelligence as represented in a cross section of the American culture.

Training of Educational Personnel in Identification

The trend toward increased training of teachers and administrators in the recognition of a wide range of abilities has its basis in findings which suggested that, without more complete training, teachers tend to miss large numbers of children who are gifted and to identify many children as gifted who are, in fact, not gifted (Gallagher, 1966), and that identification of the gifted is often hampered by apathy and even hostility among school

personnel (Jacobs, 1972; Marland, 1972). Martinson (1974) noted the tendency of teachers to nominate the neat and clean, achieving, compliant girl rather than the rebellious boy, or to use sex stereotypes and, as a result, to discourage girls with mathematical or scientific aptitude or boys who are talented writers or artists from pursuing their real interests. Gallagher's (1966) survey of studies on teacher nominations revealed that teachers frequently missed underachievers, the culturally different, and motivational and emotional problems among the gifted; and Torrance (1973) noted the tendency of some teachers to overlook, and even resent, the creatively gifted.

Recently, several studies have demonstrated the impact of training on improved quality of teacher nominations. Noting that in most studies teachers were seldom provided with behavioral definitions of the qualities of giftedness and often were left on their own to define the concept of "gifted," Gear (1976) investigated the effect of intensive, structured teaching training on identification skills. Her findings indicated that teachers who received the special training were significantly more effective than their control group in identification of the gifted. Torrance (1972b) implemented a design for training teachers to recognize and acknowledge the "creative positives" of disadvantaged children through an outdoor, summer workshop. He reported that teachers involved in the training showed significant gains in the direction of more favorable, more realistic, less prejudiced attitudes concerning economically and culturally disadvantaged children.

Early Identification

A third recurring trend in the issue of identification is the emphasis on early identification. Martinson (1974) noted the particular importance of early identification for the gifted who are unusually advanced in aptitude and commitment to learning and production.

There is evidence that we *can* identify the young gifted or talented child, even apart from their tendency to emerge sometimes on their own. Studies reveal that attempts to identify the gifted through tests at the kindergarten level have been successful when careful preliminary search and screening were involved (Marland, 1972). In spite of the evidence, however, many school systems delay identification until upper elementary grades or beyond.

Although the degree of success for teacher identification varies, some data suggest that *parents* are more accurate — though ignored — identifiers of giftedness in the early years. In one study (Ciha, Harris, Hoffman, & Potter, 1974) the children's parents correctly nominated 67 percent of the gifted kindergartners who represented four different socioeconomic levels, including cross cultural and high minority areas. The authors concluded that even though parents did overestimate their children's abilities, they provided a more effective gross screening technique than either teacher nomination or the usual tests.

The consequences of failing to recognize the gifted and talented at an early age are great. As Martinson (1974) pointed out, not only do the gifted not identify themselves, but they are likely to go to great lengths "to resemble others and to minimize their own abilities" (p. 13).

In some ways, our case example, David, displays the classical characteristics of the Terman gifted child: read early, created stories and reports, interested in many topics, etc. However, on one major criterion that has received singularly long-term attention in identifying giftedness, David is not a sure thing — there is no IQ score of 130 or 140 to verify his intellectual giftedness. Yet David displays evidence of what may be high levels of creative and divergent thinking abilities, abilities now being recognized as important components of man's multidimensional intelligence.

If the teachers in David's school should receive training in observing a wide array of characteristics of the gifted and talented, they well may develop a different perspective on his abilities. His curiosity, inventiveness, impatience to be doing, unwillingness to conform to group pressures, and "problem" behavior then might be viewed as indications of other abilities.

With encouragement, David's teachers and parents could become involved in gathering supportive data through a case study approach which might include structured screening instruments, such as the following: (a) the Kranz (1976) instrument described earlier; (b) the *Scales for Rating the Behavioral Characteristics of Superior Students* (Renzulli, Smith, White, Callahan, & Hartman, 1976); and (c) the *How Do You Really Feel About Yourself* self-reporting checklist (Williams, 1972). Creative abilities might be assessed through the use of measures of creative thinking, such as those researched and constructed by Torrance (1966) and Guilford (1973),

with attention given to measurement issues discussed by Bruch (1975) in the assessment of creativity in the culturally different.

Additionally, it appears that others who know David might contribute valuable data: David's parents could document early developmental behavior, as well as leisure-time activities, projects, hobbies, and creative activities that may give evidence of consistent, intensive pursuit of interests and development of skills; the school librarian might offer numerous insights about David's skills/interests from reading choices he makes; an observation from someone in the community skilled in drawing up blueprints and other scaled models might be asked to assess David's prowess in these skills he exhibits at home and at school.

At any rate, David should not be summarily dismissed from membership in the gifted/talented population because his measured IQ does not reach 130 or because any other one score collected does not reach a specified cutoff point. Instead, David's potential/demonstrated abilities should be assessed in a variety of ways with a view toward appropriate identification that could lead to suitable educational experiences.

Proper and early identification of David and, perhaps to a greater extent, other culturally different youngsters in this rural community may be dependent on the extent to which educators consider possible differences due to lack of exposure to the types of enriching experiences valued in American education. According to Passow (1972), identification procedures for minority group youth should serve as a search for talent rather than as a process of screening out and barring participation in special programs.

EDUCATING THE GIFTED AND TALENTED

The ultimate goal of defining and properly identifying the gifted and talented is the provision of appropriate educational experiences. Evidence indicates that when appropriate services are provided for these youngsters, significant and measurable outcomes result (Marland, 1972).

In its broadest context, educational planning for the gifted and talented incorporates a consideration of elements common to the development of most educational designs: needs assessment, development of philosophical statement, goals and objectives, and definition of

program dimensions in terms of prototypes, curriculum, personnel, and evaluation.

Also, the integration of various program dimensions is essential for a well-articulated program; for example, the prototype or organizational pattern for a gifted program is given substance by the curriculum. The element of curriculum, "a method for organizing teaching/learning activities to effect specific cognitive and affective growth" (Kaplan, 1974, p. 93), was chosen as the primary focus of this section.

The two major trends selected for specific attention are: (a) the increasing emphasis on training in multiple, higher order thinking processes, and (b) recognition of the unique role of independent, investigative activities of the gifted and talented.

Increased Training in Multiple Thinking Processes

The trend toward increased training of the gifted in multiple, higher order thinking processes has its philosophic roots in concerns about conditions of a rapidly changing world, a world in which new knowledge is proliferated at a rate paralleled only by the rate at which much of the known information becomes obsolete. The need for independent, creative, and critical problem solvers is viewed as crucial. From these and other concerns, and based on new data provided by cognitive theorists such as Guilford (1956), grew a major emphasis on curriculum which focuses on learning through inquiry and discovery, problem solving, and creative thinking.

Beyond the philosophic "why," two other essential questions are involved in setting into motion the process approach to teaching the gifted: Can we increase students' abilities in the processes of thinking? How can we implement process training in the classroom?

Again, the important work of Guilford (1967) on the Structure of Intellect model and the subsequent interpretation of the model in terms of curriculum strategies (Meeker, 1969), point the way to possibilities for training which could enhance a wide variety of abilities, including creative and critical thinking. Additionally, Torrance (1972a) summarized the results of 142 studies covering the period from 1964 to 1971, which had as their focus some approach to teaching children to think creatively. In reply to his own question, "Can we teach children to think creatively?" Torrance responded with a resounding "yes," concluding that the most successful training ap-

proaches had in common several important characteristics: involvement of both cognitive and emotional functioning, consideration of adequate structure and motivation, and provision of opportunities for involvement and interaction among teachers and children.

As to the question of how to implement and integrate process training strategies systematically into the curriculum, Kaplan (1974) noted the emphasis on the use of what she termed "teaching/learning models," illustrated in the work of Guilford (1967), Bloom (1956), Krathwohl, Bloom, and Masia (1964), Torrance (1972b), Taylor (1968), and Williams (1972). It was suggested that the adaptation and use of these models to organize learning experiences across a spectrum of cognitive and affective behaviors could result in a truly differentiated curriculum for the gifted and talented.

The use of various teaching/learning models as an approach to curriculum development is reflected both in the implementation of classroom-based training experiments and in the development of curriculum materials. Evidence of this trend is widespread throughout local and state gifted program descriptions, as well as in the reports of federally supported projects. A few recent illustrations have been selected for mention here.

Kennedy and Newman (1976) reported the results of the use of the Structure of Intellect model to categorize games used with young children of multicultural backgrounds to improve analytic and problem-solving skills. Despite acknowledged limitations, the study was thought to offer encouragement about the effectiveness of the training process. Applications of the Structure of Intellect model in the development of curriculum materials can be seen in such publications as the *SOI Abilities Workbooks* (Meeker, Sexton, & Richardson, 1973) and *New Directions in Creativity* (Renzulli & Callahan, 1973).

The *Taxonomy of Cognitive Objectives* (Bloom, 1956) was implemented in a number of settings, ranging from preschool through secondary school levels. Bailey and Leonard (1977) described a model for systematically integrating a broad array of skills defined in the *Taxonomy* into curriculum units for preschool gifted youngsters. At the elementary and secondary levels, a curriculum project which focused on research in science was organized around a model of thinking operations which paralleled the Bloom levels (Del Giorno, 1977). Using a team approach to learning, students worked together in the roles of researcher, technician, and recorder to carry

out scientific investigations. Applications of the Bloom model in the development of curriculum materials can be seen in such publications as *Why Doesn't An Igloo Melt Inside?* (Patterson, 1973).

Process oriented curriculum materials growing out of the application of two other teaching/learning models are also noteworthy. *Classroom Ideas for Encouraging Thinking and Feeling* (Williams, 1972) demonstrates how both the cognitive and affective processes of productive and evaluative thinking outlined in the Williams' model could be integrated with subject matter. *Talent Activity Packet* (Talents Unlimited, 1974) demonstrates the application of the multiple talent model (Taylor, 1968) to all areas of academic content as a means of helping youngsters develop identified strengths in specific processes of thinking.

Given the overwhelming dimensions of this trend in process training, it was predictable, and appropriate, that concerns be expressed about the almost single-minded preoccupation of some curriculum programs with certain groups of thinking processes, such as the divergent thinking abilities. Lucito (1974) offered two guidelines:

Educators should recognize that all intellectual activities can be worthy at times. Their worth is derived from the degree to which they are instrumental in reaching objectives useful to the individual in society.

Rewards should be given only when the intellectual process being displayed is appropriate to the task (p. 5).

In effect, Lucito's concern pointed to the need to put process training into a larger perspective of curriculum planning to meet a wide range of student goals and interests.

Role of Independent/Investigative Studies

The trend which concerns the special role of independent/investigative study in curriculum planning for the gifted is a complex one because it may, in the broadest sense, assume many forms, including independent or self-directed study programs, internships, career education programs, and mentor relationships. The role of such approaches to curriculum planning for the gifted is not recently conceived, considering the case made for experiential education by Dewey (1938) and the even earlier roots of the mentor concept illustrated by the relationship of Socrates and Plato.

The desirability of the trend toward increased involvement and self-direction of gifted students is based on several factors: Individual differences or learner characteristics for a wide range of abilities and talents can be taken into account; positive motivation for learning is enhanced; and opportunities for relevant application of knowledge and skills to the here and now are increased (Treffinger, 1975).

Treffinger defined some parameters of what he termed "self-directed learning" and proposed a model of instruction which illustrated gradual movement from teacher-directed learning to self-directed learning. He described in practical terms the involvement of the gifted learner in four basic factors of the learning process: identification of goals and objectives, assessment of entering behavior, definition of instructional procedures, and evaluation of performance. Critical to implementation of this model is the understanding that students, however gifted and talented they may be, do not overnight become self-directing; they have to be provided with opportunities at varying levels of self-direction to help them acquire confidence and specific skills of self-management.

At the state level, descriptions of programs for the gifted frequently include references to provisions for high levels of student involvement, and cooperative ventures in independent study are not uncommon. Atamian (1977) pointed to the Talcott Mountain Science Center for Student Involvement as a regional center providing tailor-made instruction for gifted and talented youngsters of elementary and secondary school ages. A major focus of this program was described as investigative student study; students were encouraged to identify topics of interest, develop a plan of investigation, implement the plan, and communicate the results through some tangible product. Student research rather than "teacher-manipulated discovery" was viewed as the primary goal.

The mentor approach, mentioned earlier as one form of independent/investigative study, is growing in popularity as a means for increasing student involvement and self-direction in learning. In this approach the gifted student usually leaves school for a part of one or more school days and is under the guidance of a specialist in the community who has expertise in the area of the student's particular interest (Gallagher, 1975). According to Boston (1976), the special relationship between the mentor and the apprentice provides a context in which experimentation can occur, skills can be developed, and

in which "results can be measured in terms of competencies gained rather than curricular territory covered" (p. 1).

What appears from the growing literature on the trend toward independent/investigative study for the gifted is that the rationales for these efforts have at least two factors in common: experiential learning, and a high degree of student involvement in decisions made about the instructional process.

New Directions for Designing Defensible Programs

One of the major challenges faced by professionals in educational planning for the gifted and talented has been the task of dealing with a widely accepted program goal referred to as "qualitatively differentiated" learning experiences. As viewed by Renzulli (1977), the challenge involves several issues: (a) how to capitalize on the unique characteristics of gifted and talented students; (b) how to provide a framework or rationale which integrates existing innovative practices; and (c) how to articulate a theoretical framework into practical guidelines for classroom implementation. Renzulli outlined an enrichment model which sought to account for these issues and which offered directions for meaningful individualization in terms of content, learning style, and teaching strategies. His model is examined here because of its potential for making greater practical application of the two major trends discussed earlier in this section.

The Enrichment Triad Model incorporates three types of enrichment:

1. General exploratory activities,
2. Group training activities, and
3. Individual and small group investigations of real problems.

The first two types of enrichment are viewed as important resource and support systems for the third type of enrichment; these two levels also are considered appropriate for all learners, with the third type of enrichment being considered appropriate mainly for the gifted and talented.

Type 1 (general exploratory) enrichment activities have as their major goal the exposure of students, through interest development centers, to many topics or areas of study of potential interest. With a low level of structure allowing for individual exploration, Type 1 activities provide the lead-in for student identification

of Type 3 (real problem) investigations. In addition, Type 1 activities give the teacher some direction in planning appropriately for Type 2 (group training) activities.

Renzulli suggested that designing of interest development centers for Type 1 activities required particular attention to the structure, methodology, and content of various fields of knowledge. The ultimate goal of helping youngsters become "first-hand inquirers" in a field of knowledge was viewed as requiring that youngsters be involved in exploring *how* an historian or a geologist solves problems in his/her field rather than focusing merely on collections of accumulated knowledge in a particular field.

An example from my experience with a group of primary-age gifted youngsters may help to clarify the focus of Type 1 activities. The teacher of this group began the year with a field trip to an uncultivated area of the school campus; she invited a wilderness expert from a nearby university to assist the youngster in experiencing the joys of untamed land. On subsequent explorations, these youngsters had the opportunity to "claim" and stake off a portion of the land as their own. With guidance from the teacher, wilderness expert, and other resource people, such as the county agent and forester, these youngsters had many opportunities to observe/model professionals at work.

Through the provisions of many interest-arousing experiences with their own plots of land, these youngsters were engaged in raising questions and identifying problems which they might want to pursue. Such questions, raised in various ways by several students, grew out of explorations into the content of the plots. One youngster became interested in ways to determine whether or not early Indians had lived in the area of her plot. The role of the teacher, at this point in Type 1 enrichment, was primarily to assist the student in focusing an expression of interest in terms of a potential problem for further investigation.

Type 2 enrichment activities have as their major goal the development and enhancement of thinking and feeling processes which are related to the area of interest selected by the student for further investigation. In defining the nature of these activities, Renzulli termed them "training exercises" and compared them to the physical exercises of an athlete in training.

At this point the trend toward training of multiple, higher order thinking processes fits best with the overall framework of program planning. The use of various

teaching/learning models is highly relevant in terms of designing experiences which will help students develop or "exercise" skills that are directly related to the content and nature of their individually identified investigations.

As an example, let us return to the case of the science plots. The student interested in possible early Indian residency on her plot might be engaged in any of the following process-training exercises: (a) asking all the different questions she would like to ask that might help find out whether Indians lived on her plot; (b) thinking of all the different things that might have happened hundreds of years ago on the school campus if Indians had really lived there; and (c) brainstorming all the different kinds of unusual evidence she might find that would suggest that Indians might once have lived there. A follow-up activity to the third training suggestion might be to have an archeologist, museum curator, or an Indian buff visit the classroom, bringing pottery shards and other traces of early Indian life of the area, and demonstrate the process by which in investigator reconstructs parts of history from small pieces of evidence. The student might be given several of these pieces and asked to imagine through drawing, painting, or modeling all the different, unusual things of which the pieces might have been a part.

Type 3 enrichment activities focus on individual and small group investigations of real problems. At this stage, the youngster is involved in making decisions about the topic of his/her study and the methods for investigating it. The approach to the problem essentially models the methods of inquiry used by the professional in a particular field of study. Renzulli emphasized that the posture of the student investigator is one of a *producer* rather than a *consumer*, a role of adding new information, ideas, or products to a field of study rather than merely studying and reporting the conclusions of others.

The activities of Type 3 enrichment are not, according to Renzulli, teacher-determined exercises; the investigations should be topics of real interest to the student, and the approach to solution should be open-ended in the sense that no recognized correct answer represents the end point. To illustrate, the primary gifted youngster interested in early Indian life on her plot of ground might decide to do some digging on her land to discover bits of evidence to which she can then apply the appropriate methods of inquiry for formulation of possible new information. Given the results of such an investigation, and with the guidance of a professional in the field, this

youngster could provide additional artifacts/information to a local collection; or, depending on the interests of the student and the information acquired through the investigation, the product might take the form of taped/written and illustrated stories about early Indian life on a present-day science plot.

The Enrichment Triad Model offers new directions for curriculum planning for the gifted and talented which appear to account for present innovative trends and practices and to suggest development of new, more independent roles for students. In addition, it brings us full circle to a more enlightened view of the broadening concept of giftedness.

David's school experiences suggest that few opportunities have been provided for enrichment at various levels. And it is notable that as each year passes, David's feelings about school reveal clearly that he is getting the message, "It isn't 'cool' to be bright, to do things more quickly, to try out new ideas on your own." But what if David's teachers begin to look at David differently, and what if they are encouraged and become interested (as his fourth grade teacher) in making a difference in the experiences he has in school? How might the new trends in curriculum planning become meaningful for David's case?

Last year members of David's class spent some time studying their own town's early history as a part of the national bicentennial celebration. Each student was allowed to choose an event, a person, or a place, to study and make a report on. Since some old homes in the area were being restored, the students made visits and were given lectures on the early history of these homes. Later, several students were selected to become guest tour guides in these homes. David was among those selected. Dressed in the period of the times, he gave guided tours during which he *recited* the information he had been given. *Following is a suggestion of what might have been.*

From information on David's self-initiated construction projects at school and from reports of his parents about consistent involvement with designing and building scaled models at home, David's teachers have a built-in indication of a major interest, a necessary ingredient for Type 1 enrichment activities. Lacking this behavioral information, David's teachers might use the Interest-A-Lyzer (Renzulli, 1977) to identify such depthful interests.

Had his teacher last year explored David's interest in light of the social studies unit on local history, he/she would have found that David had been spending a great deal of his after-school hours "hanging around" one of

the homes that was being restored. Visits to the old homes which the teacher arranged might have included planned discussions with the architect, contractors, interior designer, and historians about the processes used to accurately restore the building. In addition, media resources such as films produced on the careful reconstruction of buildings at Williamsburg, Virginia, might have been used to depict the various steps in the process of historical restoration.

Type 2 enrichment activities might have made use of simulated activities in architectural design to provide practice for David in applying concepts and formulas of design. One source of such activities is *Architecture, A Book of Projects for Young Adults* (Wilson, 1968). Additional experiences might have been provided in visualizing and imagining different designs to satisfy various sets of criteria and drawing the blueprints to different scales. For example, David might pretend that he is an architect of the classical period in Greece who has been asked to design an additional building for some specified purpose at ancient Olympia. He might be expected to establish criteria based on study of the culture, needs, and style of Olympia and then to render several different drawings or blueprints which would satisfy the criteria.

Type 3 enrichment activities would involve investigations which David would plan based on his special interest. Possibly, with the intense interest David has exhibited in the restoration of the one particular home, the architect might be willing to have David participate in planning the restoration of a portion of the house, such as one of the rooms, an out building, or a section of the grounds. Or David might be given sketches or photographs of an actual building from various angles and asked to think in reverse to reconstruct with his own drawings the steps an architect might take in building the structure.¹ A part of the project might involve development of a "critical path network," a systems approach for developing a physical path for construction.

The role of the teacher and on-site professionals as facilitators would be to help David locate resources and develop basic abilities related to his investigation. David might be involved in meetings with local/state historians who are assisting in decision making in order to verify/evaluate his own thinking.

¹ This activity was suggested by a youngster who is gifted but who, like David, has not been identified as gifted.

Depending on the level of skill he exhibited, David might ultimately present his own drawings/recommendations to such a group. Should some or all of David's ideas be accepted for implementation, he might be engaged in supervising the execution of his plans. Perhaps he might make a slide-tape record of the steps taken in the process and use the set as a part of his presentation to a tour group. Even if David's investigation should stop short of some of these suggested steps, his stint as a tour guide in the restored home would certainly take on new dimensions, and content!

A FINAL COMMENT

Programs for the gifted and talented are growing and changing in David's state; more are appearing in the rural towns and counties, and more are beginning to serve gifted youngsters. Maybe the educators in David's school will get involved. Involvement must come soon. There are many more youngsters just like David.

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CLASSROOM FORUM

by Debby Gilbert
Curriculum Coordinator
Learning Disabilities Program
DeKalb County, Georgia

Teachers often have questions as to how to work with their volunteers, how to communicate to them their role in the classroom, and how to keep them happy and coming back to help throughout the year. These volunteers may be parents, college students, high school students, or simply children from upper grades. What are some good, basic ideas for a diverse group such as this?

The concept of teacher aides or volunteers is one of the most promising educational developments of this century. Volunteers are an extra pair of hands, an extra set of eyes. If your school system or special education program is fortunate enough to have volunteers, you know that the effective aide can free teachers to be more creative, to plan individualized instruction more effectively, to have more time to do diagnostic work, and certainly to do more individualized teaching.

Volunteers come from many sources. Their training and preparation to be volunteers vary as much as their personalities and dedication to the task. Their success in your classroom depends on how completely their talents are realized by you, the teacher. The best teacher/aide relationships are based on good communication and, thus, a cooperative effort. You may wish to consult *An*

Effective Program for Teacher Aide Training (McMama, 1972) or *Teacher Aides to the Rescue* (Wright, 1969) for more extensive ideas on training, orienting, and utilizing volunteers.

Orientation to the program and the children with whom the aide will be working is the first step toward successful teacher/aide communication. Many films and slide productions are available through national and local organizations representing your area of exceptionality. Some of these media products may be available in your own school system. If none are easily obtainable, make your own, using your own classroom or those of fellow teachers. The point is to acquaint the volunteer or aide with the teaching techniques used in your classroom, the type of behavior management you use, and most certainly the characteristics of the children they will be working with. Solicit the help of your program coordinator or consultant and the program or school psychologist in presenting the orientation. Plan to present this program at strategic times during the year for new volunteers.

After the aide has become familiarized with the program in general, he or she needs to become acquainted with your particular classroom. The aide needs to know what the duties will be and how he or she will be expected to work with you. Most teachers prefer to do this during pre-planning week if this is provided in their system; if not, it should be done as close to the beginning of the school term as possible. The aide needs to see the room and talk with you without the pressures of the children and curriculum already upon him/her. Try to enlist the help of one veteran volunteer who will come to school every day for the first week or two. During this time, the students will experience the security and stability of one aide working with them and, hopefully, the other aide(s) will have the opportunity to come and observe how the veteran aide and your class interact on a daily basis. The new aide will have the chance to ask questions and to get to know your class, and thus to begin building his/her confidence and rapport with you and your students.

Communication between teacher and volunteer is an ongoing process. Many teachers find it essential to be sensitive to the needs of their volunteers. Occasional informal get-togethers over coffee or Coke with all the volunteers gives them an appropriate time to air their concerns and ask questions which the teacher might not have time to answer in the normal school day. It gives the teacher the opportunity to share new techniques,

clarify teaching methods, and perhaps solicit the volunteers' help in making materials.

Some teachers have found the following suggestions helpful:

- Set aside an area for the aide to work (including a desk, if possible) and provide the necessary materials.
- Make sure that all teacher's guides and checking materials are readily available.
- Prepare a written task sheet for the aide, outlining the tasks and stating specifically where and with whom he or she is to work.
- Prepare tapes for use by tutors and aides which will explain their tasks for the day.
- Provide space on the task sheet for the aide's comments on how the lesson or activity progressed and how the student(s) performed.
- Prepare tapes for use by tutors and aides which will explain their tasks for the day.
- Provide index cards with a mini-profile of each child on it. This helps acquaint the volunteer with that child's strengths and weaknesses, learning style, and

tips on how to best work with the child.

- Provide the volunteer with a file folder in which you have collected information about your program, articles you have found and reproduced, etc. — things which will keep the aide informed of new developments.
- Arrange some materials and instructions for making a game, a bulletin board, or other teaching tool in which the aide can work whenever there is spare time.
- Be creative — be sure the aide's tasks are as varied, as interesting, and as valuable as possible. No one likes to do the same things over and over again. You should try to provide challenge and motivation for the aide to want to continue to help you.

Above all, be sure to do the obvious — say "thanks" as often and in as many ways as possible! Encourage your students to do the same.

(The writer wishes to thank the many "special" teachers in the DeKalb County Schools for their contribution of ideas to this article.)

ALERT

February 1-3, 1978

Council for Exceptional Children
 Conference on Individualized Education Program
 Planning
 Albuquerque, New Mexico

March 1-4, 1978

Association for Children With Learning
 Disabilities
 Radisson Muehleback Hotel
 Kansas City, Missouri

May 2, 1978

Council for Exceptional Children Convention
 Kansas City Convention Center
 Kansas City, Missouri

May 15-20, 1978

American Association on Mental Deficiency
 Denver Hilton Hotel
 Denver, Colorado