

Chapter 2

Academic Guidance of the Gifted

The guidance counselor or consultant who sets out to establish a successful academic guidance program for talented students is beginning a challenging task. Scores of books and hundreds of articles have dealt with the design, implementation, and assessment of curricula, special programs, and guidance practices devised to meet the specific needs of gifted learners. Contributors to this literature represent the perspectives of numerous specializations in both education and psychology. Theories, based on varying assumptions and sometimes contradictory research evidence, abound. It is not surprising that the field of gifted education has been regularly criticized as lacking substantial and cohesive philosophical underpinnings (Ward, 1985).

Despite this complexity, the gifted education literature does include a wealth of vital information for counselors who want to help talented students make appropriate academic decisions. Although practices and recommendations are divergent, there is evidence that many of these approaches are successful in meeting the needs of gifted students. The task of the counselor is to review, interpret, synthesize, and integrate from these reports a cohesive framework that meets the specific population, environmental, and educational objectives for which the counselor is responsible. It is this process that makes the task so challenging. The purpose of this chapter is to assist the school counselor in taking the initial steps in this process.

As a resource for the counselor, there are four primary objectives of the chapter:

1. To familiarize the counselor with a set of theoretical themes that provide the basis for the appropriate academic guidance of gifted students.
2. To briefly summarize some of the major controversies typically encountered in gifted education and to illustrate the counselor's role as advocate in addressing these concerns.
3. To review a selection of curricular models currently employed in schools to meet the needs of gifted students.
4. To suggest guidance needs of gifted students based on the effects of various curricular models.

Although it is hoped that this chapter will serve as a starting place for the counselor who initiates a comprehensive academic guidance program for gifted students, this is only the beginning of the challenge. Further research and review of suggested materials as well as careful planning and implementation are essential to the development of a successful program.

Theoretical Foundations

Certainly no single statement is capable of expressing the diversity of thought on what gifted students need to realize their academic potential. What is suggested here are three general descriptive terms which, as a group, begin to encompass common themes represented in the gifted literature. Although not all writers use these exact terms, they are consistent with the assumptions and findings of much of the field. These three terms are: developmental, differential, and proactive. Because each of these terms has grown to have its own set of meanings in different settings, a discussion of each term as it is used in the context of this chapter follows.

Developmental

A primary characteristic of American educational research is its historical foundation in developmental psychology. Often cited is Piaget's interpretation of cognitive development as a universal and sequential process marked by defined stages and a predictable process of transition between stages. These views developed in turn from earlier scientific models of development that emerged from the natural sciences. Consistent with its historical evolution, the concept of "developmental" is used to refer to progressive changes that have been documented to take place in gifted learners. The following assertions have been supported by research in gifted education:

1. Through the process of physical and intellectual maturation, the characteristics, and consequently the needs, of gifted individuals change substantially over time. Successful programs will change with these needs.
2. This process of development includes universal patterns all people share- Because of this, it is possible to meet many needs of talented individuals through a general program of education.
3. Changes that take place in talented students are sequential and, to some degree, predictable. Therefore appropriate strategies of intervention can be developed in anticipation of specific needs as they arise.

These characteristics have two practical implications for a successful academic guidance program. First, and most important, the program must accommodate the sequential changes in intellectual and personal needs of gifted students. Goals and objectives for the academic planning of a gifted eighth grader will need to change substantially as that student progresses through high school. Second, although gifted individuals will vary widely in pace and nature of academic development, several commonalities of development warrant a general plan of educational alternatives. Such a plan must be flexible enough to meet individual differences. Thus, the necessity of a central framework for academic planning does not necessarily conflict with the need for individualization of that program

Differential

The term *differential* has become the key concept in curriculum development and academic planning for gifted students. This term is principally used to describe the intellectual characteristics of gifted learners. This use is supported by an extended history of research indicating that gifted learners are not only quantitatively different (learning more and learning faster), but also qualitatively different (learning in different modes and at greater depth) than their typical peers. In addition to showing differences in learning, current research also indicates that gifted learners have unique concerns in social, emotional, and vocational development. With this evidence in mind, educators have sought to tailor programs to meet the differential needs of highly able students.

A second use of the term *differential* is to refer to differences among groups within the general gifted and talented population. Several new trends in gifted education research indicate that giftedness is a complex and multifaceted concept applicable to diverse subgroups of students. Each of these groups has characteristically specific needs in terms of academic development. Examples of these trends include Howard Gardner's (1983) theory of multiple intelligences and Sternberg and Davidson's (1986) triarchic model of intelligence. In addition, growing attention has been given to the special needs of specific groups of gifted students including the underachieving, learning disabled, disadvantaged, culturally diverse, and physically disabled gifted.

For the school counselor, the idea of differential education for the gifted has implications for each of these two levels of meaning. First, educational options need to meet the intellectual demands that define gifted students as a whole. The most central concern represented in the

literature in this respect is to provide appropriate intellectual challenge. Substantive evidence indicates that capable learners learn most effectively when appropriately challenged and tend to become bored and frustrated when the pace and complexity of material is below their ability. The second meaning of differential, referring to differences among groups within the gifted, indicates that educators of the gifted must accommodate a growing number of academic objectives and concerns associated with new groups of gifted students as they are identified.

Proactive

Despite its becoming a standard buzzword in the areas of education, management, and human relations training, the term proactive effectively describes attributes of successful practices for gifted learners. Proactive, as it is used here, refers not so much to the content of a particular program, but instead to the process by which the program is conceived and implemented. A proactive approach to gifted and talented education begins with the needs and concerns of the student as an individual, not as a reaction to external stimuli. The first concern of the proactive counselor lies in helping the student, not in placating parents or school officials.

Buescher (1987) stressed a second aspect of a proactive approach. In a model for counseling gifted adolescents, Buescher effectively differentiated between proactive approaches to guiding gifted learners as preventative as opposed to intervening and remedial. A reactive approach centers on the need to respond to problems in a gifted student's development. Although such intervention strategies are necessary, Buescher argued that it is preferable to develop strategies that meet special needs of gifted students *before* problems arise.

A proactive stance to guiding talented students may indeed be one of *the* most difficult aspects of a successful program. The proactive process begins with developing a clear understanding of the unique educational needs and aspirations of talented students as individuals. Effective programs have used standardized testing, assessment worksheets, and individual counseling interviews to accomplish this objective. Certainly this kind of individual attention is not easy when counselors are assigned caseloads of 300 to 500 students. Proactive academic guidance may be nearly impossible if counselors are also expected to deal with mental health concerns, substance abuse, and unwanted pregnancies in addition to academic advocacy.

Another threat to a proactive approach arises from the common political environment in which many schools are immersed. In a period when schools are changing in response to national, state, and local agendas on educational quality, there is a natural tendency to focus program goals on what will be institutionally advantageous. Capable counselors must be aware of and assimilate external influences into a successful academic guidance program, but the core mission of the program must revolve around the individual needs of each student. In some cases, this means that counselors may have to make recommendations for the good of the student that are not necessarily popular with other parties.

Summary

The terms, *developmental differential*, and *proactive* provide the philosophical basis for a successful guidance program designed to meet the needs of talented students. The developmental and differential needs of gifted students have been defined by common themes emerging from a large and complex history of research. This research has diversified to focus on several distinct subpopulations within a general g gifted population. The need for a proactive approach centers on the understanding that appropriate guidance begins with the specific, individual needs of each student and that these needs should be met before problems are encountered. These key concepts will now be used as a basis for discussing and evaluating alternatives in building a successful academic guidance program for gifted students.

At this point, more questions have been raised than answered about the content of a successful academic guidance program for gifted students. How will a successful program meet the changing

needs of the gifted as they progress through high school'? How will a central program meet the special needs of different groups of gifted students'? Finally, what resources and alternatives are necessary to meet these special needs.' The remainder of this chapter is devoted to answering these questions.

Curriculum Choices for the Gifted Student

It is unfortunate that in the myriad of tasks typically assigned to school counselors, involvement in the selection and design of academic curricula is not a common job expectation. School counselors are expected to coordinate personal, educational, and vocational counseling for students and consult with teachers and parents about these processes. Counselors will inevitably deal with issues related to academic curricula, but they are rarely expected to be involved in academic curricular development. Counselors need to develop a closer alliance with administrators and classroom teachers in designing the classroom experience.

As an advocate for the appropriate education of students in general, the counselor should be prepared to develop defensible recommendations for gifted students. In order for the counselor to function effectively in the role of advocate, the counselor must develop an understanding of the issues and alternatives currently associated with gifted education. To begin with, a counselor can anticipate a few major controversies in any attempt to alter the curriculum to meet the needs of talented students. Counselors should be familiar with these controversial issues and understand the rationale and research evidence used to support conflicting viewpoints. Second, counselors should become familiar with some of the major curriculum models that are commonly used to meet the differential needs of gifted learners. With this information, the counselor will be far better equipped to participate in curriculum planning and to deal effectively with problems associated with differential education of gifted students.

Controversies in Gifted Education

From its inception in American education, differential treatment of high ability students has been controversial. Conflicting viewpoints emerge from two primary sources: one, criticisms of basic tenets of gifted education from those outside of the field and, two, controversies over theory and practice within the field. Any counselor who decides to take an active role in the design and implementation of differential curricula for gifted learners should anticipate and prepare to encounter these issues. A successful counselor will understand the nature of these debates and be versed in the defense of a justifiable position.

Controversies arise over almost any aspect of gifted education, from identification to life-span, developmental issues. Over the years, many of these controversies have erupted in heated debates in educational literature, political struggles in legislatures and school districts, and legal action in the court systems. Although these issues are far too numerous and complex to discuss here in detail, three issues related to curriculum development for secondary gifted students will be reviewed. These issues include the elitism, homogeneous grouping, and the enrichment versus acceleration controversies. Counselors who encounter one or more of these issues are encouraged to review the references cited in this section.

The Elitism Controversy

Perhaps the most prevalent criticism of gifted education from outside the field is the charge that differential education promotes a sense of elitism among students who receive special educational opportunities. Advocates of this view hold that identification, labeling, and special treatment of a group of students will invariably result in their developing the attitude that they are superior to other students. Not only is labeling seen as potentially destructive to the students who are identified as gifted, but also to the other students who are not identified and consequently sense that they are intellectually second rate. The argument on these lines

follows the self-fulfilling prophesy criticism of educational tracking: Students who are not identified as gifted are less likely to aspire to higher achievement.

The most common response to this criticism centers on the argument for egalitarian treatment of students in providing appropriate educational experiences. Proponents of this view often quote Thomas Jefferson: "There is nothing more unequal than the equal treatment of unequal people." Although the egalitarian argument is widely held in defense of gifted education, some educators still question the validity of excluding students who might benefit from the kind of programming made available to gifted students. Renzulli's Revolving Door Identification Model provides at least a partial answer to this concern in making gifted programming accessible to a larger pool of students than that defined by an arbitrary identification cutoff (Renzulli, Reis, & Smith, 1981). Although Myers and Ridl (1981) accept the idea of egalitarianism in education, they warn that classifying students by ability may result in an "academic caste system" that will reflect socioeconomic and possibly racial segregation.

There is considerable concern over the specter of elitism in gifted education, but there is little documented evidence of elitist attitudes among educators of the gifted or gifted students themselves. In extensive interviews with gifted students, Delisle (1984) found that gifted students did not express any sense of superiority over their typical peers. In addition, reports focusing on students' reaction to the label of "giftedness" did not reflect attitudes of elitism among gifted students toward their peers or siblings (Colangelo & Brower, 1987). Undoubtedly, elitist attitudes do exist among some gifted students, but these attitudes reflect individual personalities within the field rather than inherent characteristics of the field itself.

The Homogeneous Grouping Controversy

Closely linked to the concern of elitist attitudes is the controversy over homogeneous grouping—the common practice of grouping high-ability students in special classrooms or activities. This controversy has resurfaced repeatedly in American schools. Rosenthal and Jacobson (1968) advanced the argument that grouping by ability lowered the expectations and consequently the achievement of students placed in lower-level classes. There is also the concern that removing gifted students from the regular classroom eliminates a positive academic role model for other students.

Criticism of ability grouping is usually leveled at the tracking of lower achieving students, not at meeting the needs of high-ability students. Undoubtedly, steps should be taken to provide appropriate instructional strategies that enable all students to achieve their potential. However, denying appropriately challenging forms of enriched or accelerated curricula for able students is wholly indefensible.

Again, there is little evidence in the research literature to support any criticism of ability grouping. Kulik and Kulik (1984, 1987) conducted a careful review of the research designed to evaluate the effects of homogeneous grouping of secondary students based on ability. In each of their reports, the Kuliks concluded that ability grouping has minimal effects, either positive or negative, on the achievement of average or below-average students. Substantial evidence shows, however, that ability grouping has a positive effect on the achievement of gifted students. [In a synthesis of research in gifted education, Feldhusen (1989) summarized substantial findings that address the concerns associated with ability grouping:

[grouping] . . . leads to higher academic achievement and better academic attitudes for the gifted and leads to no decline in achievement or attitude for the children who remain in the regular heterogeneous classroom. (p. 10)

In addition to this research evidence, pragmatic considerations support the concept of grouping highly able students. First, there is the obvious consideration of curricular structuring. When a student is capable of learning material in a fraction of the time required by his or her classmates,

it is unreasonable to ask that student to fill the extra time with noncurricular activities. In a situation where accelerated learners are ignored, students often become bored, frustrated, and resentful of their educational experience. In contrast, when high-ability students are placed - in a fairly homogeneous classroom setting, they are more likely to share with intense interest and intellectual curiosity.

Acceleration Versus Enrichment Controversy

The acceleration-enrichment debate has continued to be a critical focal point in gifted education. Unlike the case in the previous two controversies, this debate is most earnestly contended by researchers and practitioners within the field of gifted education. Those in favor of acceleration support learning experiences for the gifted that advance the pace of subject matter and are directed at the mastery and integration of content. Proponents of enrichment favor instructional strategies that emphasize student-directed exploration of subject matter, with emphasis on depth of analysis and integration of higher-order thinking skills. These models have been differentiated using the term vertical to refer to acceleration, suggesting a higher level, whereas horizontal has been used to describe the increased breadth of enrichment strategies.

The first issue to consider when dealing with the acceleration-enrichment controversy is that the line separating these two camps of thought is far from clear. Both approaches share common educational objectives. As Kirschenbaum (1984) concluded, ". . . enrichment offers advancement at an accelerated pace, and accelerated curricula provide students with enriching and broadening experiences in learning" (p. 96). For example, a ninth-grade gifted math class involving a unit on statistics would not only enrich the regular math curriculum but also challenge students to master advanced subject matter.

Davis and Rimm (1985) adopted operational definitions to distinguish between acceleration and enrichment. They defined acceleration to refer only to practices that result in advanced placement in grade level or course credit. Although enrichment may involve beyond-grade-level work, it does not result in the advanced academic standing of students. These definitions may be useful for administrative purposes, but this distinction gives no insight into the qualitative differences in the structure of these two instructional approaches.

Many specific strategies have been suggested as means of acceleration and enrichment. Most of the acceleration strategies listed here involve moving through existing coursework at a faster pace. Often this kind of acceleration can be accomplished simply by placing a student in a more advanced course. When this is possible, acceleration requires no special curriculum development or teaching loads and consequently is very cost-effective. Enrichment, in contrast, requires careful attention to curriculum development and skilled teaching to implement effectively.

In the course of the great debate concerning acceleration and enrichment, opponents of each view have made many heated claims. Julian Stanley (1978), a major advocate of acceleration, rigorously attacked enrichment as it is often practiced in the schools as ". . . a euphemism for busy work, fun and games, and whatever special subject matter the school wants to offer its many varieties of talent" (p. 3). Stanley is undoubtedly reacting to some of the many unfortunate stories told by his young students of extreme ability, but his criticism is directed at poor educational practices, not at enrichment per se. Enrichment programs that

follow Renzulli's guidelines, which involve competent personnel and possess adequate resources, are likely to provide excellent educational opportunities to students who are moderately bright, creative, and task's

Educators have several leading objections against the practice of acceleration. Many practitioners suggest that accelerated students are being rushed through the school and that the stress related to working with more mature students is detrimental to accelerated students' emotional development. Others fear that accelerated students will miss critical material if areas are skipped over, resulting in "learning gaps." However, extensive reviews of research on the effects of acceleration at both the elementary and secondary levels indicate that acceleration promotes and show no indication that accelerated

practices are detrimental to the social-emotional development of capable students (Uaurio, >: & 1979: Kulik & Kulik, 1y84).

D^espite these assurances, teachers and school administrators are often at the practice of acceleration. In a survey of coordinators of gifted programs, school psychologists, principals, and teachers, Southern, Jones, and Fiscus (1989) found that even professionals in gifted education maintained reservations about acceleration. These researchers f^ound that fears of emotional stress caused by acceleration are of more concern than re^servations about the accelerated students' ability. The report concludes with the suggestion that acceleration and enrichment should not be seen simply as two opposing types of curricula for the gifted, but as two sets of learning styles and needs different groups of gifted learners exhibit (Colangelo & Zaffrann, 1979). In this conceptualization, enrichment programming is more suited for students with needs for self-directed exploration of subject matter whereas acceleration is more appropriate for students who are achievement-oriented. In another curricular model, Cox, Kelly, and Brinson (1988) suggested implementing enrichment curricula for a broad base of gifted students along with specific acceleration strategies for a subset of the gifted population.

Implications for Counselors as Advocates

Inevitably, a counselor dedicated to the advocacy of appropriate educational experiences for gifted students will encounter situations related to these controversies and perhaps many others. Here are some examples of controversial situations in which a secondary school counselor might become involved:

Case 1. A highly talented eighth grader who masters first-year algebra and geometry during a special summer program requests to take secondyear algebra in the high school. The teacher of this course expresses concern that the student will be too immature socially to function in the classroom.

Case 2. A student complains that the independent research project being conducted by students in the honors American history class is far more interesting than the traditional instruction that she experiences in her regular history class. This student did not have the minimum grade point average necessary for placement in the honors class.

Case 3. Reservations are expressed at a faculty meeting concerning the proposed implementation of advanced placement courses. An administrator complains that the time and resources required for the program would serve a group of students who are already advantaged and that more attention should be given to remedial courses for disadvantaged students.

[n each of these situations the counselor has the opportunity to intervene as an advocate for gifted students. Working from the theoretical basis established at the beginning of this chapter, the counselor can build a substantial case for meeting the specific needs of individuals or group- of students. In each case, questions relating to the three principles underlying effective education for gifted students need to be asked:

1. Is the recommendation in question taking into account the developmental needs of the student or group of students'?
2. How is the recommended practice actually different from the traditional curricular options available to students'? Does the characteristic that differentiates the practice complement the differential needs of the student concerned`?
3. Is the recommendation made in proactive response to the specific needs of the student in question or is it made in reaction to concerns of other individuals or school policies?

Applying these principles to the cases above, the counselor has the opportunity to advocate and defend an appropriate response. Here are some possible interventions the counselor/advocate might use in response to the three cases listed above:

Case 1. In the first case where the talented eighth grader masters the first-year algebra and geometry in a summer program and requests advancement, the counselor can be assured that substantial research indicates that young gifted students have performed very successfully, both academically and socially, in above-grade accelerated situations. The counselor should then seek evidence that the student in question demonstrates differential competence and the social maturity to support acceleration. Evidence of competence should be objective, possibly including documentation from the student's summer program of standardized achievement test scores. Teachers or the counselor should document in writing an evaluation of the student's social maturity. Finally, the counselor may need to address the logistical concerns of scheduling and transportation should the student need to move to a different building for math classes.

Case 2. In the second situation where a student wants the more stimulating honors curriculum, the school policy of setting a minimum grade point average for students to attend honors classes without exception might well be called for review. In a proactive sense, the counselor should concentrate on helping this student evaluate and define her own educational objectives and needs. Attempts to move this student into the honors section should be initiated only when and if the student herself decides that the honors curriculum meets her educational needs.

Case 3. In the last situation where reservations are expressed concerning implementation of advanced placement courses, the counselor might defend the expenditure of resources for talented students using the same egalitarian argument used to support remedial classes: the necessity of providing differential educational opportunities that meet specific needs of students. It would be essential in this case for proponents to have some objective assessment of the demand for advanced placement classes. However, care should be taken not to frame the controversy in a "one or the other" context. Rarely is the funding of gifted programs at the direct expense of remedial education. The issue at hand in this situation is providing appropriate education for all students, not promoting one population of students at the expense of another.

Educating Gifted Students: Four Curricular Models

There has been a substantial increase in the development of alternative curricular designs for gifted secondary students in recent years. Responding to the growing awareness in American education of the special needs of high-ability students, researchers and practitioners across the country have committed their energies to the development of specialized curricula and programs. This effort has resulted in a diverse group of curricular models that are currently functioning in schools. "These models vary widely in objectives, structure, content, and target populations. Some have originated from a need recognized in a specific population of gifted students; others have been developed in response to a broader spectrum of talents.

The diversity and number of curricular alternatives for gifted students are far too broad to review thoroughly in this chapter. Four prominent models have been chosen here for purposes of illustrating the diversity of practices currently used to meet the needs of gifted secondary students. Although each of these four models offers important contributions to the field, these examples are far from inclusive of all the many successful practices and curricular designs available to educators of the gifted and talented. Counselors who desire to investigate curricular options more fully should refer to some of the excellent books available on the topic, such as June Maker's book, *Teaching Models in Education of the Gifted* (1982;1998).

In reviewing these four models, the counselor should keep in mind that most schools do not employ a single model or program to meet the needs of all gifted students. In an extensive national survey of American schools, Cox, Daniel, and Boston (1985) found that a large percentage of schools were using various methods to meet the needs of able learners. Unfortunately, many of these

practices were found to be fragmented and discontinuous in scope and were unsatisfactory in meeting the full-time needs of gifted students. In response to this finding, one of the most important recommendations of this report centers on the need for educational programming for the gifted to originate from a single cohesive philosophy of education for able learners.

Keeping this recommendation in mind, schools should not simply pick and choose from the practices suggested by these models. Instead, an integrative approach should be employed, basing all curricular options on a central conception of what constitutes appropriate education of gifted students. The Pyramid Model, described by Cox et al. (1985), shows how diverse curriculum approaches can be combined to create a strong districtwide program.

SMPY and the Talent Search Model

In the late 1960s, a few young boys who were exceptionally talented in mathematical reasoning ability were brought to the attention of Julian Stanley, a professor of psychology at Johns Hopkins University. Dr. Stanley discovered that their local public schools were far from meeting the educational needs of these highly able learners. It was determined that many of these exceptional students were capable of doing mathematical coursework far beyond that expected in their grade level. Motivated by this discovery, Stanley initiated the Study of Mathematically Precocious Youth (SMPY) at Johns Hopkins in 1971. The goal of this program was to identify young students of extraordinary mathematical reasoning ability and to help them find appropriate curricular alternatives to develop their abilities.

In order to identify these highly able students, the concept of an annual talent search was initiated in 1972. Stanley, an internationally recognized psychometrician, found that traditional mathematical achievement tests used in the middle or junior high schools were far too "low ended" to differentiate among students of exceptional ability effectively. Stanley found that students who scored in the 99th percentile on such tests included individuals who still represented a broad range of abilities (Benbow, 1986). Stanley chose the College Board's Scholastic Aptitude Test math component (SAT-M) as an alternative test to identify young, precocious mathematics students. This test, designed to measure mathematical reasoning ability in 12th-grade students, was found to be a reliable and practical means of discriminating among these young, capable learners.

The Talent Search Model grew through the 1970s to include the identification and advisement of nearly 10,000 students. In the 1980s, the Talent Search Model was expanded to a national perspective and was administered through a series of national and local talent searches conducted through various higher education institutes throughout the country. Although each of these talent searches keeps to the same basic program of using "out-of-level testing" as a means of identifying highly gifted students, precise identification criteria and educational options made available to identified students vary from location to location. Recent developments in the Talent Search Model include the use of a verbal score on the SAT (SAT-V) as a means of identifying students with precocious verbal abilities and the use of the American College Testing Assessment Program as a means of identification.

Most talent searches are open to students in the seventh or eighth grades who achieve high test scores on standardized achievement tests designed for their grade level (identification cutoffs range from the 95th to the 97th percentile on these tests). Students who meet these cutoffs and learn of the talent search through school publications or a counselor sign up independently to take one of the standardized aptitude tests offered on a national basis several times each year. Students request that these test scores be reported directly to a talent search institution. Students who achieve a test score that meets the criteria of that particular talent search are then invited to participate in several advanced educational opportunities.

Counselors are urged to contact one of the national talent search offices for exact information on qualification and registration procedures. A list of these offices is included in the Resources section at the end of this book.

Evolving from the SMPY and Talent Search models are several promising practices that the school counselor can use (Stanley & Benbow, 1982). These practices include the Diagnostic Testing followed by Prescriptive Instruction (DP-TI) model. Using this model, high-ability students are given a standardized test, which is then analyzed to identify specific content areas of lower competence that require instruction. Students are then assigned to a teaching strategy that specifically addresses the area in which work is needed. Another important contribution of the SMPY model is the identification and recommendation of several educational options for students identified by the talent search process. Most of these alternatives are accelerated in nature and many will be discussed more fully in the next section of this chapter.

Although the growth and success of the Talent Search Model have been widely evident in the last two decades and substantial documentation of the efficacy of recommended practices exists (e.g., Brody & Benbow, 1987), the Talent Search Model has not escaped criticism. Because the talent searches involve rigorous entry standards and heavily recommend acceleration strategies, the most common complaints against talent searches follow the same lines as do arguments about elitism and acceleration in general. More specific concerns have been raised concerning the fact that the use of ACT and SAT scores may hinder the identification of gifted women and minorities. In a defense of the Talent Search Model, Van Tassel-Baska (1984) argued that the use of out-of-level testing has increased, rather than reduced, the number of students identified as gifted. In addition, the Talent Search Model has been used successfully for the specific purpose of identifying talent in young women and minority students.

In regard to the educational philosophy set out in the beginning of this chapter, the SMPY and Talent Search models fulfill most of the criteria for a successful program for the gifted. To begin with, the Talent Search Model focuses on meeting the needs that, by definition, differentiate this group of students from their peers. Along with considering the developmental needs of gifted learners, the Talent Search and SMPY models recommend accelerated strategies that carefully match curricular development to the students' level of competence within specific subject areas. The SMPY and Talent Search models also make allowances for different levels of ability among students who are identified. These models emphasize curricular flexibility and alternative educational opportunities to meet individual student needs.

One of the strongest attributes of the SMPY model is the proactive role of "educational counselors" as suggested by Benbow (1986, p. 23). Benbow advocated the role of educational coordinators of the gifted rather than teachers of the gifted. This role emphasizes the assessment of individual students' educational needs and the placement of students in appropriate learning environments rather than emphasizing the development of a separate curriculum for gifted learners. The flexibility and individualization this role affords suggests an appropriate model for the counselor who might not be directly involved in the curricular design issues in the gifted classroom. This role is also optimal for counselors who work with students in schools with little or no resources for gifted students.

It is the narrow focus of the SMPY/Talent Search Model that poses the greatest possibility of limitation when evaluated in reference to our proposed philosophical basis of gifted education. The degree of this limitation depends on one's working definition of giftedness. Identification of gifted students solely by standardized testing that uses an arbitrary numerical cutoff limits this model's flexibility to respond to the differential definitions of gifted populations. Any population of gifted students who for one reason or another do not do well on achievement or aptitude tests of mathematical or verbal reasoning would be overlooked by this model. In addition, any model that focuses on acceleration to the exclusion of enrichment, particularly in subject areas other than math, may not meet the holistic needs of Gifted learners.

The Purdue Secondary Model

The Purdue Secondary Model for Gifted and Talented Youth was developed by John Feldhusen and his colleagues at Purdue University and is based on their years of research and service to gifted youth (Feldhusen, 1980). The model is intended to meet both the cognitive and affective needs of gifted students through a comprehensive program of counseling and differential educational opportunities.

As in the case of all appropriate models of gifted education, the Purdue Secondary Model begins with an appropriate rationale for the differential education of the gifted. The model builds on Feldhusen's (1980) conception of giftedness, which includes (a) general intellectual ability, (b) positive self-concept, (c) achievement motivation, and (d) talent. Feldhusen builds the case that students who demonstrate these characteristics need special educational programming to develop their potential. Appropriate educational opportunities include a variety of strategies, including broad-based intellectual challenges in both accelerated and enriched curricula.

The structure of the Purdue model includes three major areas of differentiated programming for gifted secondary students that are categorized in 11 conceptual "blocks." The first area of emphasis is in providing appropriate counseling services. The Purdue model recognizes the vital role school counselors play in secondary programs. The identification of differential abilities leads to the need to identify appropriate educational options for particular types of talent. In addition, the secondary school counselor fills a vital role in the personal and vocational counseling of gifted students.

The second major component of the Purdue model is the seminar. The seminar consists of a separate class for gifted students that emphasizes student-directed research, writing, presentations, and open discussions. The Purdue model stresses the need for the seminar to be taught by an outstanding teacher who can also fill the role of mentor for exceptionally able students. There is no limit to the precise topic of the seminar, rather a challenge to make the scope of the seminar relevant to the educational needs of students and contain sufficient flexibility for students to pursue individual interests within the topic area.

The third general area of the Purdue Secondary Model includes a wide variety of curriculum opportunities (blocks 3 through 11) that are intended to provide the model with the breadth and flexibility necessary to meet the holistic needs of gifted populations. Some of these options, such as advanced placement courses and math-science acceleration (blocks 3 and 5), include acceleration strategies suggested by the SMPY/Talent Search models. However, the Purdue model adds a far more comprehensive list of alternatives than that suggested by the SMPY model. Provisions for foreign language development, exploration of the arts, and vocational education opportunities round out the suggested educational alternatives.

An important characteristic of the Purdue model is the diversity of resources and methods it includes in meeting the needs of able learners. Special workshops and seminars are suggested throughout the model as successful means of addressing particular developmental concerns of gifted students, such as vocational development or college planning. Special Saturday morning programs or classes are also suggested as a means of addressing the needs of various gifted populations (Feldhusen & Robinson-Wyman, 1980). In order to integrate various academic disciplines in a suggested curriculum, the Purdue model suggests a team teaching approach to developing curricular units. Finally, the Purdue model incorporates the use of mentoring, both as a model for instruction and for vocational development for gifted students.

Returning again to the theoretical foundation as a basis of evaluation, the Purdue model more than adequately addresses each of the three conceptual areas. First, the Purdue model has been systematically adapted to meet the developmental needs of gifted learners as they progress through school. Second, the synthesis of acceleration and enrichment alternatives, in combination with the broad scope of topical areas included by the model, suggests the flexibility necessary to address the specific needs of various populations of the gifted. This synthesis represents the strength of the eclectic approach to curriculum development (Feldhusen, 1984). Third, when implemented in a comprehensive fashion, the Purdue model functions in a proactive mode, with curricular options functioning to meet the needs of gifted learners as these needs become apparent.

The potential strength of the Purdue model does not come without cost, however. The major limitation of the model is its complexity and need for trained staff to implement the program successfully. The Purdue model suggests ways in which curricula for the gifted should be structured and what needs should be addressed. The model does not include the exact curriculum or the pragmatic details of implementing such a system. Instead, the model assumes that a given school will have the trained personnel, resources, and administrative support to implement such a program.

There is no doubt that to implement the Purdue model at a local school level will require substantial expertise in the areas of curricular development, counseling, program coordination, and mentoring activities. A comprehensive program will also require considerable support from school administration, teachers, and the community. If these requirements seem too intimidating for the small, rural, or poorly funded school, programming might be limited to various components of the model such as the Saturday morning activities. Feldhusen also suggests that cooperative arrangements might be used where services and programs are shared by several schools.

The Enrichment Triad/Revolving Door Identification Model

The Enrichment Triad/Revolving Door Identification Model (Renzulli et al., 1981) is the most widely used system of identification and curriculum modification in the United States today. The Enrichment Triad Model includes three types of enrichment activities for students. These include:

General Exploratory Activities

These activities, called Type I activities, are experiences designed to help learners to understand their areas of personal interests. Type I experiences are broad exploratory experiences in which students are exposed to a wide variety of content areas and topics.

Group Training Activities

These activities, called Type II activities, consist of materials, methods, and instructional techniques that enhance high-level thinking skills and facilitate feeling processes. These activities might include critical thinking skills programs, problem-solving training, reflective thinking, training in inquiry, training in creative problem solving, awareness development, and other creative or productive thinking activities.

Individual or Small Group Investigations

These Type III activities provide students with opportunities to investigate a real problem by using appropriate inquiry methods. Students engaging in Type III activities must have strong interests and task commitment. In these activities, students use the techniques of practicing professionals in a wide variety of fields. Type III activities are special projects that require a great deal of autonomy and initiative on the part of the students as well as skilled mentoring on the part of the resource teacher who serves as their assistant in the process.

The Revolving Door Identification Model is paired with the Enrichment Triad Model. This is the process by which a pool of approximately 15% to 20% of the student population is selected. Generally, these are students with above-average intelligence as measured by a variety of intelligence instruments; who have also shown evidence of ability to commit themselves to tasks; and who have above-average creativity. These students are exposed to Type I activities and receive Type II process training usually on a weekly basis. During the time the students are exposed to Type I enrichment activities and Type II training, it is assumed that they will become interested in the more challenging Type III activities. Students "revolve into" these options as they show an interest and a desire to pursue advanced work.

Generally, an Enrichment Triad/Revolving Door Identification Model gifted program is implemented through a pull-out process. That is, students are pulled out of the regular classroom for

a period of 1 to 3 hours a week in which they engage in special activities. Usually these activities take place in a resource room with a resource teacher specially trained in facilitating the students in the three types of activities. [n order for these programs to be successful. Reis and Renzulli (1984) contended that they must hold certain key features. The first, which they call "the golden rule," is that the more thoroughly teachers, students, parents, and administrators understand the structure of the model, the easier it is to implement the identification procedure and the learning activity. Therefore orientation, materials, and in-service training are all used to help teachers, parents, and administrators to be aware of the structure of the program. It is particularly important that all populations involved understand the language of the model. The second key feature of successful triad revolving door models is planning prior to program implementation. Reis and Kenzulli suggested that in each district a planning team be established to make decisions about how the model will be tailored to accommodate the unique characteristics and resources of the participating schools. They recommended that the planning team consist of volunteers and persons selected by the administrators, and that people such as teachers, school psychologists, media specialists, parents, principals, and central office administrators be on the team. The planning team decides which grade levels are to be included, the size of the talent pool, and the criteria to be used in choosing the talent pool.

Key feature three involves in-service and administrative support. Reis and Renzulli (1984) claimed that for any new program to be successful, in-service training must be provided for all persons who will be involved. They stressed the importance of school administrators in this process. The three kinds of in-service recommended are formal in-service (short sessions focusing on specific topics and skills), informal in-service (regular interaction of teachers of the gifted with other staff members), and finally, distribution of materials that describe the procedures being used in the gifted program.

Key feature four, the schoolwide enrichment team, is a group made up of the principal, the resource teacher, three or four classroom teachers, some parents, and sometimes a student. These teams put into practice an essential part of the philosophy of the Triad Revolving Door model that the total educational experience of all students should include varying amounts and levels of enrichment. The team plans and acts as a clearinghouse for visiting speakers, field trips, artistic performances, and other activities that will involve the entire school as well as those students identified as gifted. The team evaluates enrichment materials and decides which ones fit with the regular curriculum. The team recruits faculty members and community resource persons who can help with the enrichment sessions. It also reviews what is happening on television, summer programs, fairs, and contests that is related to academic and other opportunities for student participation in hobbies, theater, and local groups.

Key feature five, program ownership, means that everybody should feel as if the gifted program is their own, and that the total range of services provided are available to those who need and want them. Reis and Renzulli (1984) recommended that the resource room and appropriate activities, games, and materials be used for all children. These materials can be circulated from classroom to classroom. Enrichment experiences can be shared with other teachers and students whenever possible and, finally, the results of students' Type III activity can be shared with other students.

Key feature six, student orientation, holds that talent pool students should be given a detailed orientation about what services and opportunities are available so that they can avail themselves of these opportunities intelligently. The students must not only know what all the activities will entail but how the activities will be evaluated.

Key feature seven, communication with prime interest groups, means that even the general public will be kept aware of what is happening in the gifted education program. Newsletters, invitations to visit the resource room, and opportunities to view completed Type III products are all ways of communicating with the public as well as with the interest groups of parents, other teachers, and other students.

Key feature eight is flexibility. Reis and Renzulli (1984) suggested that the flexibility of resource teachers is one of the most important characteristics of this model. Teachers must be flexible so that programs can be tailored to particular students and to particular schools.

Key feature nine is evaluation and program monitoring. Reis and Renzulli (1984) claimed that programs cannot exist without a schoolwide

commitment to evaluation and monitoring. Evaluation not only provides important data for research but also helps to refine and further develop the program. Renzulli and his colleagues (1981) developed a wide variety of evaluation instruments that can be used to measure the outcomes of this model.

If these key features of successful enrichment programs are put into place, does this ensure that this model will meet the needs of all gifted students? The advantages of the Enrichment Triad/Revolving Door Identification Model are that these programs do allow at least some interaction with intellectual peers; that only a small number of teachers are needed; that the teacher can concentrate on thinking and research skills because of having no responsibility for basic skills; and that when the gifted child is out of the regular classroom, others can rise to the attention of the teacher. According to Belcastro (1987), there are still clear disadvantages for at least some gifted students. Belcastro claims that pull-out programs that are tied to the regular curriculum are quite rare. Instead he says that many such programs are a smorgasbord of offerings that have no common thread and that are disconnected from the regular curriculum. Too often this becomes a collection of games and activities that does not actually constitute a qualitatively different curriculum for the gifted. For example, the problem-solving strategies that are taught may not be associated with such content areas as biology or mathematics but instead with puzzles or mysteries. Creativity is used in future problem solving rather than applied to mathematics or social studies. In addition, the inclusion of so many above-average students with very gifted students often results in a dilution of the program so that it is not truly a differentiated program.

According to Belcastro (1987), a program that meets for only a few hours a week has a minimal impact on the academic experience of the gifted student. Time out for the gifted program is often time misused. In addition, students who miss regular classes in order to go to the resource room are often made to finish the work they missed at other times, thus putting more pressure on them. Because of the short amount of time, students gain few opportunities to interact with their intellectual peers. Faster pacing is seldom used, although the model allows for it. Even though a wide variety of strategies is encouraged, in practice this often does not occur.

Perhaps Belcastro's (1987) most serious criticism of pull-out programs is this: Although the Enrichment Triad Model is simple and expedient, it creates the impression that something substantial is being done for the intellectually gifted. The pull-out program, he says, not only delays but actually impedes progress toward sounder programs because it allows administrators and teachers to be comfortable with the status quo.

Cox and Daniel (1983) also listed disadvantages. They found that regular teachers resented the program because gifted students found the classes more exciting or stimulating than their own; that project planning was difficult when a week intervened between classes; that programs tended to be isolated, fragmented, time-limited, and lacking in continuity with other school programs; that one staff person could not be sufficiently skilled to do the program justice; that occasionally negative attitudes toward gifted students in regular classroom were instilled; and that teachers saw the pull-out program as an interruption of their regular programs, inducing hostility toward gifted programs in general.

Therefore, a major paradox exists in gifted education today. The most widely practiced model is increasingly becoming the target of criticism from researchers, scholars, and theorists as well as from parents of gifted students.

Autonomous Learner Model

The Autonomous Learner Model was developed by George Betts (1981) as a secondary model of gifted education. The program was developed not only for academically talented students but also for students talented in creative thinking, leadership, and visual and performing arts. This program brings all these students together for a series of activities designed to create "autonomous learners"-that is-students who are able to identify their own learning experiences and to implement their own learning projects. Gifted students are given the flexibility of determining intensive courses of study and units of learning for themselves. The Autonomous Learner Model is organized as a class that meets 1 hour a day 5 days a week. It can last for as long as 6 years.

Students are identified by a wide variety of procedures including tests of intellectual ability, creativity, leadership, and measures of a variety of talents. Most of the program is oriented toward developing the basic skills necessary for autonomous learning, for increasing self-understanding or self-acceptance, for increasing understanding and acceptance of giftedness, for developing effective interpersonal relationships, and for helping students to become more positive and productive individuals. The Autonomous Learner Model consists of five components: (1) orientation, (2) individual development, (3) enrichment activities, (4) seminars, and (5) in-depth study.

Orientation

In this component of the Autonomous Learner Model students are oriented toward the program in general and are encouraged to learn about themselves. During orientation to the program students learn to understand their own giftedness through readings and activities about gifted individuals. Group building activities involve team building and new games in order to facilitate group cohesiveness. A self-understanding program starts each student on the way to understanding his or her own needs, interests, and values. And finally, an overview of the opportunities and responsibilities available through the program is given.

Individual Development

Individual development involves skills and awarenesses for the individual's personal growth. This component may include learning skills such as study skills and learning strategies; personal understanding exercises; interpersonal skills training; and career education and development.

Enrichment Activities

Enrichment activities are closely tied to academic development. These activities involve exploring topics of interest to the students. In addition, cultural activities and adventure trips provide insights into ideas and experiences beyond those usually encountered in the classroom. Students may engage in service activities and cross-age tutoring. Finally, biographical research is an important aspect of the enrichment activities offered through this model.

Seminars

Seminars are the basic means by which students share the knowledge they have gained through this gifted education program. Seminars not only serve the purpose of sharing knowledge but also that of broadening the interests of students in the group. They are a way of providing peer teaching opportunities as well as a chance to work with community resource people to learn more about a topic of interest.

In-Depth Study

In-depth study is a component that teaches the basic skills of intensive research and preparation of presentations. Students choose individual projects on a particular topic for in-depth study, and they also participate in group projects in which the group cooperates in exploring an interest. Mentorships are an important aspect of this component; students are linked with community resource individuals and other teachers in order to learn about these persons' areas of expertise. As a part of the in-depth study component students learn the skills necessary to make presentations about their individual projects. In addition, they learn evaluation methods to enable them to assess their own work and that of others in their group.

The Autonomous Learner Model has become increasingly popular in secondary schools in this country. However, although it is the result of 5 years of research, planning, and experimentation, it has not generated a great deal of outcome research or comparative research. Therefore, little is known about how this model compares to others in terms of students' growth. It is important to recognize that this model is so highly psychological in nature that outcomes should be measured not just in terms of academic achievement, but also in terms of personal growth.

Concerns and Issues for Curriculum

It should be apparent from the foregoing discussion that each of these curriculum models may be associated with a unique set of student needs and concerns. Each model essentially shapes a very different kind of gifted student with his or her own perception of what it means to be gifted. In addition, each model may be associated with particular presenting problems for counselors' clients.

The acceleration model is likely to produce students in high school who have advanced far ahead of their peers in at least one area. These students may already have exhausted all the resources available to them in their area of talent in their high school. For instance, the student who has been radically accelerated in math may already have completed calculus after a few summers at summer institutes at Johns Hopkins or Duke or a similar university program. This leaves the counselor with the job of determining in what way those math courses will be counted toward the student's graduation requirements and which courses in other areas should be substituted for that student's math courses. Another related difficulty may be that the student who has experienced highly accelerated, intellectually stimulating classes during the summer may return during the regular school year only to feel bored and frustrated with the slow pace of high school classes. Counselors may need to help students deal with these frustrations by assisting them to discover other sources of intellectual stimulation as well as ways of making the materials they are studying more interesting to them.

One other outcome of accelerated programs is that students, for the first time, may have spent long periods of time with their intellectual peers. As a result, they have often made close friendships and have discovered a social group that has more importance for them than any they have experienced before. As a result, the return from a summer program or the return to a regular program from a highly accelerated program of any kind may be associated with feelings of loneliness and alienation.

As mentioned before, for some students accelerated programs do lead to feelings of internal pressure and stress. It is not likely that the programs themselves are the cause, but rather the interaction of the fast-paced program with the student's perfectionism. Nevertheless, counselors need to help students adjust their personal expectations to the kind of competition they encounter in these classes.

[It is difficult to pinpoint what kind of counseling difficulties may be associated with Feldhusen's model of gifted education. It has already been noted that Feldhusen's Purdue Secondary model has a strong counseling component. Because programs are closely tailored to students' needs, it is likely that fewer psychological problems result from a mismatch of curriculum and student needs. Perhaps the only possible negative outcome of the Feldhusen model of gifted education is that students may become overreliant on individualized programming and the use of the counselor's time. It is also possible that some healthy, self-actualizing students may find counseling activities oriented toward building self-esteem to be superfluous.

The Renzulli Enrichment Triad/Revolving Door Identification Model may lead to a few characteristic counseling problems. The first arises when highly gifted students are not admitted to the gifted education program. Because Renzulli's identification procedures involve selecting students of above-average intelligence who are task-committed and who demonstrate creativity, it is often possible that a very high-IQ student will not be admitted. Most frequently, the very high-IQ student who is not admitted to an enrichment program is an underachiever whom teachers have a difficult time motivating. Occasionally, however, teachers or program directors have vented their resentment or hostility toward very bright students by denying them access to the program based on a subjective

judgment that the student is "test-bright but not creative." The unhappy scenario that often unfolds in this case is one in which the student and parent appeal their case to an administrator or board. The gifted student then is admitted to the gifted program only to learn that there is little there to meet his or her needs. Extremely bright students may feel that enrichment programs are too insubstantial and slow-paced for their intellectual needs. Students in these situations may seek the counselor's aid in finding more challenging activities or even in making the enrichment program more rigorous.

Another counseling problem that may be associated with the enrichment model may occur when students object to psychological exercises used in Type II activities. Many Type II activities are structured group experiences that were originally designed for encounter groups or training (Troups led by psychologists). Feedback and self-disclosure activities performed as part of communications skills training may be perceived as overly threatening and intense. Values clarification exercises may anger those students who have been brought up within traditional homes where absolute values are taught. Finally, fantasy exercises may be disturbing to students whose thought processes are already somewhat "loose" or unstructured.

Problems that may result from Betts's Autonomous Learner Model may be similar to those that result from Type II enrichment activities. Because Betts's model is the most psychologically oriented of all the models, students who are desirous of academic content rather than process activities may be particularly dissatisfied. Self-exploration and self-reflection may strike cynical, verbally brilliant students as silly or irrelevant. Gifted individualists who do not wish to share their feelings with other students may reject group activities. Counselors should ensure that all psychological activities such as fantasies, self-disclosure and feedback exercises, encounter techniques, and awareness techniques are used appropriately.

This means that these activities should be developed under the supervision of a counselor, counseling psychologist, or school psychologist to ensure that they are appropriate to students' developmental levels and that they do not involve exercises that are too intimate or too threatening.

Also, all ethical constraints about which counselors and psychologists are aware should be observed with these activities. Participants should be allowed confidentiality, and all activities should be voluntary. Students who wish to drop out of these activities at any point should be able to do so without negative evaluations.

With appropriate safeguards, Type II enrichment activities, and many components of Betts's model, can be helpful to gifted students. As part of the curriculum, they may also serve as sources of primary prevention of psychological adjustment problems. Students who are experiencing depression, loneliness, or stress, or those who are having difficulty with their academic program may come to the attention of the teacher or facilitator of these programs, who may then refer the students for counseling in a timely fashion.

It is clear from the preceding discussion that counselors should work closely with teachers of the gifted in developing curriculum. By helping teachers to develop gifted programs that are developmentally appropriate, carefully differentiated, and proactive, counselors can ensure that gifted education programs will fit the students' needs and create lasting contributions to the school curriculum.

The Council for Exceptional Children-the Association for the Gifted, has developed standards for programs involving gifted and talented students (CEC, 1989). Program design is the plan by which instruction is delivered to gifted and talented students. According to CEC-TAG, gifted and talented programs should be a flexible system of viable program options throughout the general and special education structures that are compatible with and matched to the strengths, needs, and interests of gifted and talented students. The Resources section at the end of this book includes general guidelines for program design that counselors may wish to share with teachers of the gifted and facilitators of gifted programs.

Summary

Academic guidance programs for gifted students should be developmental in that they should take into account progressive changes known to occur among gifted learners; they should be differential based on quantitative as well as qualitative differences; and they should be proactive. Counselors need to be aware of the various controversies surrounding gifted education, such as concerns about elitism, grouping, and acceleration versus enrichment, in order to be effective advocates for gifted students. Finally, counselors need to understand the impact of major curricular models on gifted students' adjustment and psychological growth.

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