Intellectual Challenges and Emotional Support of the Precocious Child

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The author discusses the rationale and validity for talent searches, with special emphasis on the Duke University Talent Identification Program (TIP). The Precollege and Summer Educational Programs are described and typical results are noted. The by-mail program and the efforts by TIP to serve as a resource to schools as they develop their own programs to serve the nation's most brilliant youth are discussed. The role of the counselor in the identification and nurturing of academically talented young people is suggested.

I finally felt like I was somebody, and that people respected me for being gifted instead of alienating me!

Student, 1984

The Duke University Talent Identification Program (TIP) was initiated in 1980 through a grant from The Duke Endowment. I was appointed as director and charged with the responsibility of developing a talent search and multi-summer educational programs. The early work at The Johns Hopkins University served as a prototype for the Duke effort. Presently, there are four regional talent searches (Duke University, the University of Denver, The Johns Hopkins University, and Northwestern University), and each has a different guiding philosophy, eligibility criteria, admissions standards, and other services. This article focuses on a model that has been successful at Duke University. The rationale and validity for talent searches in general are noted, with special emphasis on the program that has been successfully developed and implemented at Duke University. The program’s role as a component in the network of resources for academically talented young people is suggested, along with recommendations for counselors.

RATIONALE AND VALIDITY FOR TALENT SEARCHES

The notion of searching for a nation's best talent is nothing new. The Xia dynasty (DuBois, 1970; Wen, 1979) in China was systematically evaluating talent as early as 2200 B.C. The Xia dynasty examined its workers every third year and the government officials were either promoted or dismissed. In 1115 B.C., the Shang dynasty (DuBois, 1970; Wen, 1979) was searching for talented candidates to fill government positions. Included within the parameters of their talent search were the “six arts”: horsemanship, writing, archery, arithmetic, music, and the rites and ceremonies of public and private life. Later (202 B.C.–200 A.D.), the Han dynasty introduced written examinations in the “five studies”: civil law, military affairs, agriculture, revenue, and the empire’s geography (DuBois, 1970). Although these searches involved adults, the dimensions of writing (verbal) and arithmetic (mathematics) are similar to those incorporated into the four regional talent searches currently conducted in the United States.

Estimates suggest that less than half of the academically talented young people in the United States are being served by programs specifically designed for them. Currently, the federal government has no programs and has not demonstrated active interest in the nation's best intellectual resources.

The current situation in the nation's schools holds little promise for extremely brilliant students. The educational philosophy and operating budgets of most individual institutions make it difficult for the relatively small number of students who reason exceptionally well verbally and mathematically to receive the challenge that is due them and that is so important in fostering their continued intellectual development. The problems currently facing the nation's schools need not be recited. Shrinking school budgets may prompt the phasing out of those classes with less than peak enrollment—often advanced classes in mathematics, science, classical and foreign languages, and the fine arts. Ironically, this decline comes at a time of increasing demand for students well-educated in science and in the technological fields.

Many young people have the discipline and the willingness to master a subject and to progress to a high level of excellence. Many parents report that schools have few or no programs for highly motivated and extremely gifted students. Furthermore, they note that their gifted children are penalized by a nonchallenging and inflexible curriculum, which leads to boredom, and by teachers who often have not been given the time, resources, and training to become better equipped to teach exceptionally bright students.

Public policy dictates that schools must educate everyone. With the provision of adequate funds, perhaps students at every level of ability could receive an individually tailored education. Clearly, such an endeavor could yield an education of extraordinary quality but probably would not be politically or economically feasible. Necessarily, the nation's educational system has become an assembly line geared to serve students in the middle-ability range. Too often, exceptional children at both ends of the ability spectrum are left to fend for themselves.

In the present total educational system, there should be options for the very brightest students to select educational programs that meet their individual needs and aspirations. The nation's schools must be helped to develop their capacity to individualize instructional programs and create environments in which the best education for all can be provided. The primary goal of Duke's program is to furnish this important assistance though direct consultation or development of a demonstration center.
The Duke University Talent Identification Program began with the premise that the future of this nation will increasingly depend on the fullest development of our best intellectual resources (Sawyer, 1983, 1984, 1985). Therefore, the objectives of the program are to (a) identify the very bright among our young people at an early age (grade seven), (b) assist in the planning and implementation of programs to challenge these students, (c) follow and nurture their talent through the very critical middle school and high school years, (d) assist in their placement in colleges and universities that have programs of a quality matching the students' potential, (e) assist the economically disadvantaged through scholarship aid for the Duke Summer Residential Program, and (f) develop an effective research effort to help understand the nature of gifted adolescents.

The program makes a special effort to encourage racial and ethnic minority student participation. The effort has been made possible with the help of R.J. Reynolds Industries, Inc., the Committee for Education, Inc., in Winston-Salem, North Carolina, the American Psychological Foundation, and the Atlantic Richfield Foundation.

Cohn (1983) provided a brief overview of the criteria of the various regional programs. The criteria for participation in TIP's annual search are that students must (a) live in the search region, (b) be enrolled in grade seven or be of seventh-grade age, and (c) be in the upper 3% on a nationally normed achievement test administered during the fifth or sixth grade.

Each year, talent search materials are forwarded to principals and counselors in the more than 14,200 junior high and middle schools in the search region. In the first 6 years, applications have been received from more than 152,000 seventh-grade students in the 16-state search area. The total number of annual participants could reach 50,000 by 1988. The students register with the Admissions Testing Program (ATP) and sit for the Scholastic Aptitude Test (SAT). A more complete description of the search is provided in Sawyer (1984).

Results to date confirm that the SAT is a valid instrument for measuring intellectual precocity in seventh graders. The participants hold their own when compared to the high school juniors and seniors for whom the test was developed. More than 2,700 participants in the first four searches obtained combined SAT (mathematical and verbal) scores greater than 1000. The highest-scoring student scored 1470 on the SAT before her 13th birthday. The highest SAT-M (mathematical) score obtained has been 790 (800 is highest) and the highest SAT-V (verbal) score has been 760. More than 60 students have obtained a 700 or greater on the SAT-M or SAT-V at or before age 12.

The results of the search, along with interpretative materials, are returned to the principal of the participant's school. A copy is included for the counselor. Each student and each of the more than 14,200 schools in the region receive copies of the program's newsletter, Talent Tabloid. Furthermore, all participants and their schools receive a copy of the program's Educational Opportunity Guide (Rigsby & Sawyer, 1985), which provides a list of more than 100 educational programs for brilliant students. These services as well as consultations are provided to the schools without charge. After the students receive their SAT scores, the program cosponsors, with the various state educational departments or agencies and a local college or university, ceremonies in each of the 16 states to recognize and applaud the students' intellectual talent. Various prizes and one-course scholarships are awarded.

Once the students have been identified and congratulated, the process of helping them make the most of their superior ability begins. A goal of the program is to be perceived as a resource and not a competitor; staff members have provided many students, parents, and teachers with educational counseling services in an attempt to help bright young people work toward fulfilling their potential. High-level instructional materials and syllabi are available to schools. A full-time coordinator for school and parent relations assists in developing the best possible local educational plans for the young people involved in the Duke program. Plans are underway to increase the counseling component of the program to better serve the students, their parents, and schools.

**ACADEMIC PROGRAMS**

The Talent Identification Program also creates new educational opportunities for its participants. The Summer Residential Program for Verbally and Mathematically Precocious Youth and the Precollege Program provide an opportunity for brilliant young people to participate in an academically rigorous program, which students enter during the summer before eighth grade and complete upon graduation from high school. The multi-summer educational programs stress the intellectual and social dimensions of the learning environment. The SAT scores that students obtain at age 12 are used as the sole criteria for admission to the Summer Residential Program. Participants enrolling in the Summer Residential Program's humanities and social science classes must have an SAT-V score of at least 500 and a score of 43 or more on the test of Standard Written English. Students selecting mathematics or science courses must have a SAT-M score of at least 550. Admission to college courses requires a combined (mathematical and verbal) SAT score of at least 1050. A wide array of classes, with offerings in the humanities, mathematics, sciences, and social sciences, are provided. The students are enrolled in one intensive (often at the college level) and fast-paced course in which instruction proceeds at a rate commensurate with their ability level. They are in class 6 hours a day Monday through Friday and 3 hours on Saturday. In the first four summers, more than 2,500 enrollments from 32 states and 5 foreign nations have been received for one of our 5-week Summer Residential Programs.

The instructors include carefully selected members of the various faculties of Duke University, outstanding teachers from public and private schools throughout the nation, instructors from the North Carolina School of Science and Mathematics, and graduate and undergraduate students from Duke. The teaching assistants for each class come from a variety of sources. Several of the young (14 to 16 years old) assistants are former summer program participants who have established themselves as outstanding students. Classes usually range in size from 12 to 20 students.

The cost of the 1985 summer program was $975. Financial aid in the amount of more than $235,500 has been awarded since the academic programs were initiated in 1981. The Z. Smith Reynolds Foundation has made a special gift to the program to encourage brilliant young girls from North Carolina in science and mathematics.

The Duke University Summer Residential Programs have been effective in three respects. First, they have given students the opportunity to learn at their own pace and at their own high level of comprehension. Second, the programs have encouraged the development of support and coping strategies in brilliant students. Participants have commented on how much they have enjoyed meeting and forming friendships with other very bright students. Finally, students' participation in the summer programs has inspired some of their high schools to provide more appropriate educational programming for the gifted. The program's professional staff have been quick to respond to requests from parents, teachers, and school administrators for educational materials and consultation.

The results of the Summer Residential Program have also been outstanding in terms of grades and standardized test scores.
For example, in mathematics, the average number of classes completed during this period was 1.5. Several students finished three or four classes in a single 3-week period.

Students in precalculus math, chemistry, biology, Latin, and French courses mastered material to which they had never been exposed, earning scores on college board exams equivalent to those of much older students with much more coursework. Students in writing courses write at a level that would be the envy of many college freshmen.

The undergraduate faculty at Duke University granted the program permission to experiment with the offering of college credit courses to students at an early age. The first classes were offered during the summer of 1982. The courses were computer science, logic, and psychology. All three classes were taught by members of the faculty at Duke University or faculty members on visiting appointment. For instance, two visiting scientists from IBM served as instructors in the computer science class. The courses were evaluated using standards established for Duke undergraduates. In all cases, the summer program participants covered more material at a higher level than did the regular Duke undergraduates. During the summer of 1983, two additional classes were added—Arabic and statistics. The results were similar to those of the previous year. For the college-credit course offerings in 1984, the mean grade point average for the 68 youngesters, ages 13 to 16, was 3.51. A more complete description of the Summer Residential Program is presented in Sawyer (1984).

After studying in the fast-paced summer programs, many of the students were prepared for an academically mature or advanced placement class in an academic area. Here is where problems were often encountered. Fewer than 15% of the schools in the search area have Advanced Placement Programs. Also, most junior high schools have not been accustomed to allowing their most capable students the freedom of enrolling in advanced classes in high school. Students' need for more mature courses stimulated the staff of the program to develop unique by-mail programs in a wide variety of subjects. The participants spend time working through the course of study with the help of a mentor, a high-level textbook, and supplemental materials developed by program staff members. Where applicable, the students then sit for the Advanced Placement (AP) examination conducted by The College Board the following May. The mean AP grade for all students in the first and second cohort was 4.03. The average grade (Advanced Placement Program, 1983) for the older (high school juniors and seniors) national group ranged from 2.91 (physics) to 3.39 (calculus). Perhaps of equal importance is the availability of the by-mail materials to interested secondary schools. Several schools have purchased copies of the materials for use with their brilliant students. The by-mail options and detailed results are more fully described in Sawyer (1984).

RESIDENTIAL LIFE

The program's philosophy underscores the importance of providing an opportunity for its extremely bright participants to learn highly challenging material in which they are interested while giving them time to be teenagers. Toward this end, the summer staff includes more than 25 residence hall advisors who are themselves gifted and interested in assisting brilliant young students. Professional counseling staff members are employed and reside in the dormitories. Furthermore, the teaching assistants live in the student resident halls, along with many of the faculty. The ratio of adults to students is approximately 1:8.

The residential life activities include movies, cookouts, dances, field trips, pizza parties, bridge and chess tournaments, sporting events, debates on social issues, talent programs, and a party for each student who has a birthday while on campus. Two special field trips are provided for students in American history, international relations, and biology. These students travel to Washington, D.C., to visit and study at the Smithsonian. In addition, the American relations class visits other points of interest, including selected embassies. Furthermore, guest speakers from the Duke University, Durham, and the Research Triangle communities are invited to speak to the students regarding various careers and professions. The students are encouraged to sample freely from the educational, cultural, and athletic resources available at the university.

Tannenbaum (1985) noted that brilliance in and of itself is regarded as fully acceptable as average ability. Academic standing alone seems to have little effect on a person's status among peers, but it does make a difference depending on what other attributes are combined with it. . . . This may mean that the brilliant student is an exceptionally prominent target for teenage pressures to conform to popular behaviors and values. If so, there is a danger that young people possessing outstanding abilities will deliberately mask their talent to relieve these pressures. (pp. 194-195)

Tannenbaum's concerns are realistic, because a number of gifted students will inevitably fall into the category of brilliant, studious, and nonathletic. Lending support to these concerns are Painter's (1981) findings that teachers rate very gifted students (IQ of 141 to 213) as having a lower standard of attainment at games and at swimming than did a control group and as being less popular than members of a peer group.

The Duke program strives to assist students in coping with their all too common feelings of isolation and inferiority. These feelings are perhaps due to their being set apart and to awkward social relationships stemming from a lack of understanding by teachers and companions. These awkward relationships are often attributable to differences in achievement, aptitude, interests, and work mastered. There is evidence to suggest that just being enrolled and participating in a summer residential program has provided emotional support and helped the students remove the mask to which Tannenbaum refers.

First, the return rate in the program has been very high. Two-thirds of the students in the initial summer program enrolled in at least one of the following two summer programs; one-third enrolled in both of the following two summer programs. Many students have attended all seven sessions offered since the program was initiated. Second, many students have commented on how the program has helped them feel comfortable in social situations (e.g., "I think that many of us in our hometowns had been singled out, to an extent, as 'one of them,' a smart person. At TIP we became 'one of us.' ") (Thumasathit, 1984). Third, my colleague, Gregory Kimble, and I, with the able assistance of Susan M. Zilber, have recently surveyed summer participants to learn the extent to which they communicate during the academic year—between summer programs. Preliminary analysis reveals that the average number of colleagues contacted by a student was more than six and that their mean number of contacts was nearly 48. A typical phrase contained in the parental response was that "TIP was a positive experience to find real friends and peers." Whereas most of the students initially attended the program for academic reasons, many suggested that they returned for academic and social reasons. The TIP students' testimony at the U.S. Senate Children's Caucus (Sawyer, 1983) suggests that the summer program has become an integral part of the participants' academic and social lives.

THE COUNSELOR'S ROLE

An analysis of a questionnaire completed by applicants for the talent search suggests that junior high and middle school coun-

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Currently there is a wave of concern suggesting that most brilliant young people have emotional needs that are unmet. I agree that this may be true in some cases. Furthermore, I believe that less than academically brilliant young people have unmet emotional needs. Although the growing concern for the emotional needs of academically talented students is well-intentioned, one of the undesirable side effects is the inference that all brilliant young people fall into this category. In my opinion, an important role that counselors can play is to help put to rest the misconception that all bright students are emotionally immature and socially inept and that fast-paced instruction will only exacerbate the problem. I am unable to find in the literature studies that substantiate this misconception. Counselors may find Webb, Meckstroth, and Tolman’s (1982) and Kerr’s (1985) volumes useful in providing assistance for academically talented students.

As professionals committed to helping all children develop their abilities to the fullest, counselors are uniquely qualified to be advocates for gifted students. They know that no single program is appropriate for all students and can respond to those who challenge programs for the gifted are elitist. They understand the boredom and lack of challenge can lead to scholastic and social difficulties as easily as can an inability to meet unreasonable academic standards.

There are agencies and organizations that can help the counselor learn more about academically talented students. In addition to any of the regional talent searches, the National Association for Gifted Children, the Council for Exceptional Children, and various state departments of education can be of assistance. Counselors may find the Gifted Child Quarterly, the Gifted Children Monthly, the Journal for the Education of the Gifted, and G/CIT interesting and helpful.

SUMMARY

The first years of the Talent Identification Program have been filled with high hopes and expectations. As the program has refined the identification model and instituted high-quality educational offerings, it is now seen by students, parents, school personnel, and educators across the nation as an established program with an experienced staff, a pattern of successes, and a vision for the future. We are now part of the fabric of American education.

The program has demonstrated the need for identification and education of brilliant young students. The original objectives established for the program have been achieved, except for those relating to college placement and research; attention is now focused on these areas.

The nation’s educational programs should help motivate all students to reach their potential. The counselor has an important role to play in this process. Individualized instruction that allows all students to progress at their own rate and to achieve their own potential is urgently needed. Such instruction offers the best hope of breaking traditional instructional strategies and allowing brilliant students to benefit fully from local educational resources. The emotional support systems that counselors can help provide are imperative, as are the support systems offered by programs such as TIP. A seventh-grade student observed, “TIP is not only a place to learn school subjects but a place to learn about life. It gives everybody a chance to become acquainted with living away from home. TIP is a place to be with new friends and to see old ones; a place to love and hate, to laugh and cry. All in all, TIP is a place for growing, for maturing.”

REFERENCES


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