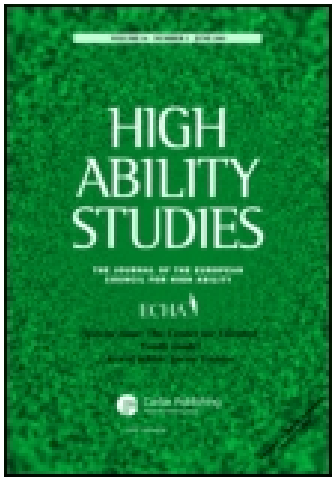

High Ability Studies
Publication details, including instructions for authors and subscription information:
http://www.tandfonline.com/loi/chas20

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Published online: 19 Aug 2006.

High Ability Studies
Vol. 16, No. 1, June 2005, pp. 41–54

The Duke University Talent Identification Program

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The Duke University Talent Identification Program (Duke TIP) holds the distinguished position of being the first 'transplant' of the Center for Talented Youth (CTY) regional talent search model developed by Professor Julian Stanley at Johns Hopkins University. Duke TIP was established in 1980, one year after CTY officially began. This article describes the history of Duke TIP and the evolution of its talent searches and various formats of its educational programming models as well as the complementary role that research has played at Duke TIP. The success of Duke TIP stands as a truly remarkable tribute to Julian Stanley and to the robustness of the talent search model that he created at Johns Hopkins University. Although the specific types of programs and initiatives may have taken different forms at Duke TIP, the underlying philosophy and commitment to identify and further the development of gifted and talented youth remains steadfast.

History

The Duke University Talent Identification Program (Duke TIP) holds the distinguished position of being the first 'transplant' of the Center for Talented Youth (CTY) regional talent search model developed by Professor Julian Stanley at Johns Hopkins University. Duke TIP was established in 1980, one year after CTY officially began. Its quick development can be attributed to the close prior relationship that Duke's Provost William Bevan had with Julian Stanley and Bevan's familiarity with Stanley's seminal 'Study of Mathematically Precocious Youth' (SMPY) research. Before coming to Duke University, Bevan had been a colleague of Stanley's in the Psychology Department at Johns Hopkins, and later served as Johns Hopkins' Vice President and Provost. Bevan came to Duke in 1974 as a chaired professor in the Department of Psychology and served as Duke's Provost from 1979 to 1983. In the fall of 1979 Bevan sent Professor Ellis B. Page, a close colleague of Julian Stanley's who had just joined the Duke Education Faculty, and Dr Robert Sawyer, Duke's Director of Summer Educational Programs, to meet

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ISSN 1359-8139 (print)/ISSN 1469-834X (online)/05/010041-14

DOI: 10.1080/13598130500115221

with Stanley and to assess the viability of transferring his talent search model to Duke.

As a Georgian up to 1942, Stanley had a special interest in the South. He had identified Duke as the ideal setting for his second regional talent search because of his prior relationship with Bevan and because of Duke's southern location and outstanding academic reputation. The recommendation made to Bevan was to start a regional talent search the following year using the Hopkins model as a starting point upon which to build. Dr Robert Sawyer became the founding Executive Director of Duke TIP, a position he held through the first decade of the program. The name of the new program, the Talent Identification Program or 'TIP', was selected, in part, to connote that the students identified and served by the new program would be from the upper 'tip' of the standard normal distribution of test scores.

Duke University proved to be a receptive home for the new talent search. In addition to the support provided by Bevan as Provost, the President of Duke University at the time, Terry Sanford, was very supportive of the new program. Before assuming the presidency of Duke, Sanford, as Governor of North Carolina, had established himself as a strong advocate for education and earned the title of 'America's Education Governor'. His tenure as governor was marked by efforts to recognize and develop North Carolina's talented students, including the creation of the Governor's School of North Carolina, the North Carolina School of the Arts, the Learning Institute of North Carolina and the North Carolina Advancement School. The support of the administration was further evidenced by its generous allocation of renovated space for the new Duke program. A final piece critical to the new Duke program's initial success was provided by a generous grant to launch the program from the Duke Endowment, a charitable foundation started by Duke's founder, James B. Duke.

Grade 7 Talent Search

To help establish Duke's credentials in gifted education, Sawyer and Page met with state departments of education and gifted educators in the targeted region. Not surprisingly, Julian Stanley's name opened many doors. In its first year, the Duke TIP region included 13 states in the Southeast and Midwest: Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Oklahoma, Mississippi, Missouri, North Carolina, South Carolina, Tennessee and Texas. It remains an impressive accomplishment that the computerized system necessary to create the database that would allow such a broad search to be conducted within the program's first year of existence was developed over just a few short months. The first talent search forms were mailed in September 1980. Over 11,000 Grade 7 students from over 2,000 schools applied to the first talent search in 1980–1981, and 8,710 of them chose to take the SAT.

By the second year of the talent search, the states of Kansas, Iowa and Nebraska had been added, bringing to 16 the number of states participating in the TIP annual Grade 7 Talent Search. The second year over 18,000 students applied and 14,224

were administered the SAT. A major change occurred during the 1987–1988 talent search when, in order to better serve its Midwestern schools and students, Duke TIP accepted the ACT as well as the SAT for the talent search and admission to summer programs. The number of Grade 7 students in the Duke TIP talent search and participating schools has continued to increase substantially over the 25 years of Duke TIP. Today Duke TIP conducts the largest of the regional Grade 7 Talent Searches. In 2004 approximately 87,000 students applied to participate in the Duke TIP Grade 7 Talent Search and 80,012 were tested. Over the years, Duke TIP has continued to register only Grade 7 students, while the other talent searches have chosen to add Grade 8 students.

Grade 4 and 5 Talent Search

In recognition that younger children of exceptional intelligence also need motivation and support and responding to the demand for such challenging educational services from parents, Duke TIP began a talent search for Grade 4 and 5 students in 1994 under the leadership of its second Executive Director, Dr David Goldstein. Originally known as the Motivation for Academic Performance (MAP) program, the name of the younger talent search was changed to the Grade 4 and 5 Talent Search in 2001. Using a similar model as that behind the Grade 7 Talent Search, Duke TIP offers an optional testing experience, EXPLORE, developed by ACT for Grade 8 students, as an above level test to assess the younger students' current academic level and potential. Through the Grade 4 and 5 Talent Search, Duke TIP provides parents with information about how they can help their children develop their talents and encourages students to continue challenging themselves during a pivotal stage in their growth. In addition to a variety of resources parents receive (see Family Outreach section for more detail), those students who take EXPLORE and achieve a composite score in the 99th percentile receive a medallion for their outstanding achievement.

Recognition Ceremonies

A concerted effort was made from the inception of the Duke TIP talent search to publicly recognize the achievements of all talent search participants in a very positive manner, a tradition that continues today. All students participating in the talent search receive a Certificate of Participation in recognition of their accomplishments. In addition, a Grand Recognition Ceremony is held on Duke University's campus for the highest scoring students from all 16 states and ceremonies are held in each talent search state to recognize other high scoring participants. State ceremonies are held at colleges and universities with the support of each state's Department of Education and feature a keynote speaker. All recognition ceremonies are designed to celebrate the accomplishments of the students and their families. Students are individually recognized for their high scores and over the years have been rewarded with prizes that have included books, sets of encyclopedias, hand-held computers, medallions and summer scholarships. In the very first year of recognition ceremonies, 1981, during the months of May and June, 14 ceremonies were held

involving over 14,000 students, parents, siblings, teachers and friends. In 2004 that number had grown to 34 ceremonies involving 41,514 honored Grade 7 students and their guests.

Educational programs

Summer residential programs

The first educational programs developed by Duke TIP were the 3 week Summer Residential Programs (renamed Summer Studies Programs in 2000) that were offered on Duke's East Campus in 1981 and continue to this day. Because the Duke TIP educational programs were developed to focus on both the intellectual and social dimensions of the learning environment, no exceptions were ever made to the residential requirement. Eligibility was determined solely on the basis of the students' SAT (and later ACT) scores. Mathematics (and later science) classes required a minimum score on the quantitative portion of the SAT, while enrollment in the humanities oriented classes required a minimum score on the verbal section of the SAT. In some cases a combination of the quantitative and verbal scores was used for admission. The university was committed to providing a multi-summer program for participants that might culminate in the already established Duke Precollege Program for gifted rising high-school seniors. Having overseen Duke's summer educational programs, including the Duke Precollege program (which began in 1978) before directing Duke TIP, Sawyer saw this as a logical connection.

It was determined that the curriculum for the first summer Duke TIP courses would reflect a liberal arts environment and center on both mathematics and humanities. Students were to study one subject (either mathematics, writing, American history, or German) intensively and at a very high academic level. The enrollment for the summer of 1981 consisted of 151 students from 25 states. Continuing his role as benefactor of Duke TIP, Julian Stanley gave $200 (29% of tuition cost then) scholarships to each of 19 CTY students who as Grade 7 students had scored at least 700 on SAT-M to attend Duke TIP's first summer program. He wanted to help Duke TIP initially set very high standards. During the summer of 1982 497 students attended the summer residential program across two summer terms. In 2004, 2065 students from 37 states and nine foreign countries attended Duke TIP Summer Studies Programs.

The early emphasis on a liberal arts curriculum still distinguishes the course offerings of Duke TIP educational programs today. Courses continue to be designed and taught at the college level. Another of the defining features of Duke TIP's educational philosophy is that the curriculum reflects new cutting edge trends in education, thus requiring forecasting where academic trends and fields will be at least 6 years in advance. Courses are designed to expose students while they are in Grades 7–10 to new ideas and topics that will be mainstream when they enter college, especially in the fields of mathematics and science.

Initially, acceleration courses (e.g. mathematics and college credit courses) were the predominant Duke TIP offerings, permitting students to take courses over the

summer and then advance in the curriculum at their home schools. As the program grew larger, courses were designed with the additional goal of enrichment, allowing students to develop their skills in logic, critical thinking and writing and become open to new ideas and different ways of thinking. A shared goal of Duke TIP courses became to develop a safe learning environment in which students could be creative, take risks and encounter and learn to respect diverse opinions. Consistent with this philosophy, collaboration and teamwork in the form of group projects grew to become common features of Duke TIP courses, and with the exception of the Duke Precollege Program, the decision was made not to grade courses in an effort to encourage collaboration and reduce competition among students.

As noted earlier, the Duke TIP educational programs have always stressed the social aspects of the learning environment in addition to the intellectual. Social interaction and networking are considered to be two of the most important components of Duke TIP educational programs. Whatever position in the social hierarchy students assume in their home schools, they will, in all likelihood, not have been exposed to a peer group of the same intellectual capacity and academic motivation as the one they encounter at a Duke TIP program. Program participation provides a wonderful opportunity for students to network and develop relationships with other gifted peers. Students are housed by age and not by course assignment, so they might develop a broader range of friends. Every evening students are required to participate in a social activity with their peers even if they choose to read with others in the library for the evening group time. Weekends include program-wide activities such as dances, cook-outs, quad fests and trips to enjoy some group activity in the local town (e.g. a professional baseball game). Since the Duke TIP region includes very rural areas in the South and Midwest, as well as economic diversity, these trips allow many students to be exposed to activities and opportunities they might otherwise not be able to take advantage of in their home communities. Finally, students eat their evening meals with their residential group and these groups are given a budget to subsidize weekly residential group activities planned by each group. Thus, in addition to the relationships students form with their classmates and instructors through participation in their academic classes, residential group activities provide students with opportunities to build relationships with their peers in their residential group, as well as with their residential counsellor.

As the demand for TIP courses grew, TIP introduced the 'Satellite Science Program' on Duke's West Campus. In 1998 this program was renamed the 'Program for Science and Business', and in 2003, it became simply the 'Duke West Campus Program'. However, the West Campus remained the program that focused on science, mathematics and business/law and the Duke East Campus program remained the humanities campus.

TIP at other universities

In an effort to provide for the growing number of students as well as offer programming more conveniently located for students in other parts of its region,

Duke TIP made the decision to offer its summer residential programs on other campus sites in the 1990s. These 'TIP at …' programs were begun under TIP's second Executive Director, Dr David Goldstein. These programs were to remain under the control of Duke TIP, with staff and instructors hired and trained by Duke TIP personnel. The first of these programs, TIP at Davidson, began as a trial one-term summer residential program in 1994 at Davidson College, located in Davidson, North Carolina. Eligibility requirements remained the same as for the Duke Campus summer program. (Initially, the program at Davidson was offered to Grade 7–10 students, but in 2000 the Davidson program became a Grade 7 and 8 site so that the social and emotional issues of younger students could be better addressed.) Its great success led to an expansion to a two-term program during its second summer and to the creation of two additional 'TIP at …' programs the following year. TIP at Kansas was started in 1995 at the University of Kansas in Lawrence and allowed Duke TIP to offer summer programming more conveniently located for the students in the western part of the TIP region. That same year also marked the start of TIP at Appalachian State University, located in the western part of North Carolina. A new TIP at Texas program will be added in 2006 in a continuing commitment to provide educational programming for eligible students in more distant parts of the Duke TIP region.

In 2001 TIP summer programs were identified as either 'Academy' or 'Center' programs. The TIP at Appalachian State campus housed the first Academy level program with expanded eligibility criteria that would allow students scoring within 70 points of the cut-off score for TIP's other programs to attend. The higher criteria programs became known as Center programs. Although the Academy programs share a similar educational philosophy and curricular offerings as the Center programs, center level courses move at a faster pace, allowing additional advanced and enrichment topics to be included within the course curriculum, a difference that continues today.

It is important to underscore that a standard set of program course offerings is not developed by Duke TIP for a particular year and then offered at all TIP campuses. Courses offered at specific university sites take advantage of instructors and features particular to that specific campus or geographical region. For example, the Summer Studies Program at Duke University's West Campus regularly offers a course involving primates (e.g., primate biology) in order to take advantage of the presence of the Duke University Primate Center. TIP at Appalachian State offerings regularly include a course that takes advantage of the surrounding mountain setting (e.g., Geologic Adventures along the Appalachian Trail). Access to the medical facilities at the University at Kansas allows a medical course (e.g., Introduction to Medical Science) to be standard in the course offerings in the TIP at Kansas program.

International programs

The creation of Duke TIP international programs in the 1980s provided TIP students with the opportunity to have an experience of study abroad. The first of these was an exchange program with the University of Ulm, Germany. In 1987 a visit

by a delegation from the German Ministry of Education offered an opportunity for a two-way exchange. One or two Duke TIP students would take part in the Sommer Akademien der Institut für Bildung und Begabung (Summer Academies of the National Institute for Education and Giftedness), sponsored by the German government, and several German students would come to study at TIP. The German Scholar Exchange Program continues today, providing Duke TIP students fluent in German with the opportunity to spend 3 weeks in Germany, the first week living with a host family, followed by a 2 week course taken with German students at the German Pupils Academy (Deutsche SchulerAkademie). German students can, in turn, take part in the exchange by taking courses at one of the Duke TIP summer program sites.

Duke TIP offered TIP in China as its next international program in 1988 by using connections formed in Duke's undergraduate 'Duke in China Program'. Although the China program was cancelled in 1989 because of the Tiananmen Square incident, the following year TIP in China was restarted and offered through Capital Normal University. When TIP restarted the China program under its own identity and supervision, it became the first program permitting teenage scholars to be allowed into China. The development of other TIP international programs followed, including TIP in England in 1990, TIP in Italy and TIP in France in 1991 and, later, TIP in Greece in 1999. Typically, several international programs are held each year, again with the philosophy that the course is designed to take advantage of its venue. The TIP in England program has included courses on Shakespeare and international relations from the British perspective. Students enrolled in the TIP in Italy course study the art, architecture and history of Italy while traveling to Rome, Florence, Siena and Assisi. Students in the TIP in Greece course have studied Homer's *Odyssey* while climbing Mount Olympus.

Scientific field studies

In addition to summer residential programs and international programs, the 1980s also marked the beginning of Duke TIP's Scientific Field Studies Programs (renamed 'Field Studies' in 1997), which gave older students who had attended summer studies the opportunity to further their interest in scientific fields. These students could choose to be located at venues where they could interact with professionals in the field and see what a career in these areas would be like, ideally after taking a summer studies program course on the topic.

The first Scientific Field Study was a tropical studies course offered in Costa Rica. Its success led to the development of several domestic field studies, including TIP in New Mexico (a field study in geology), TIP at Mountain Lake in Virginia (an environmental field study), TIP in Colorado–The Rockies (a field study in geology and ecology) and the Duke Marine Laboratory (a field study in marine biology and coastal ecology that later became a summer studies program site).

In 1998 some underlying changes in the philosophy of the field studies occurred that continue to mark these programs today. Admission to a field study program now requires an application process (e.g., resumé, essay or school recommendation)

and is no longer based solely on test scores. As part of the field study experience all students are required to complete a tangible end product (e.g., an original film or a presentation made to the scientists at the site). Finally, several field studies in the humanities were developed and added to the curriculum. In 1998 a field study at Ghost Ranch, New Mexico, was added for creative writing, replacing the science-oriented New Mexico program and becoming the first Duke TIP humanities field study. Two years later a field study in film making and production was developed as a second humanities field study. In 2001 Costa Rica tropical medicine was added, joining the Costa Rica ecology field study. Finally, in 2002 a field study in observational and radio astronomy was added based at the observatory at the Pisgah Astronomical Radio Institute.

Institutes

In 2001 2-week summer institutes were introduced into the Duke TIP summer curriculum with the development of the Leadership Institute under the leadership of TIP's third Executive Director, Dr Steven Pfeiffer. The mission of the Leadership Institute is to encourage students to deepen their commitments to service, philanthropy and civic engagement, regardless of where their academic or career paths may lead. Students gain an understanding of leadership through accelerated classroom instruction and service learning experiences in the community. Students complete a group service learning project developed, planned and executed by the students. The culmination of the institute is the planning of each student's legacy project, which is completed in the student's community, under the guidance of TIP staff, as a demonstration of their leadership and commitment to volunteerism to improve their community.

Duke TIP's Global Dialogues Institute (GDI) was introduced in 2002 and offered on the campus of Wake Forest University. It operates on the premise that education's foremost purpose is to study and offer practical solutions for the urgent challenges facing the world today. Typically, such international issues as human rights, globalization, refugees and the management of limited resources are tackled, allowing students to apply their knowledge to the current events of the world. The goal of GDI is to prepare a collaboratively written document to be shared with the public in which students propose solutions to the challenges posed.

In 2005 Duke TIP will begin its newest institute, the Great Debates Institute, on Duke's campus. Students will be encouraged to develop their distinctive skills in the areas of public speaking and debate while studying the purpose, rules and guidelines of debate. The institute will also allow students to review the role of debate in American politics, including an analysis of great historical debates such as that between Lincoln and Douglas. The course will culminate with student debates on selected topics.

Scholar weekends

After the first summer of program offerings, the commuter program was initiated in September of 1981 with two initial courses being offered, Writing Skills and Latin 1.

Each course met for 2 hours on Saturday morning for 28 weeks. The material was presented at a college level and the students were expected to spend 3–6 hours/week on preparation outside class. During the second semester, geometry and journalism were added to the list of course offerings. In 1982 the curriculum grew to include courses in English grammar, French, geometry, journalism, precalculus, psychology and Writing I and II. Despite the high quality of the commuter course offerings, enrollments were not encouraging. The small course enrollments were presumably a reflection of the lack of a metropolitan area from which to draw students, but also perhaps a model that was not particularly well received.

In the mid-1980s, a different form of academic year educational program, Scholar Weekends, was offered by Duke TIP on the Duke University campus. Students were given the opportunity to participate in a weekend-long academic residential program several times throughout the year. Course offerings included humanities as well as mathematics and science courses. The revised model proved to be very successful. Today, in addition to Scholar Weekends offered on the Duke's campus, Duke TIP also offers Scholar Weekends at Appalachian State University, New College in Sarasota, Florida, the University of Kansas, the Houston, Texas Museum District and Texas Christian University in Fort Worth, Texas. Future plans to expand Scholar Weekends within Duke TIP's 16 state region are in development. Duke TIP also hosts Academic Adventures, a Saturday program for Grade 4 and 5 students that began in 2003 on the Duke University campus. Plans are underway to expand the offerings of this program as well.

Independent and distance learning: the 'TIP by-mail' program, 'LOYO' and E-studies

The success of the first Duke TIP summer residential program created a problem for some of its first students. In many cases the home schools of these students did not have the course offerings necessary to meet their needs. For example, having taken mathematics over the summer, several of the students were prepared to undertake calculus, but most junior high- and middle-schools did not offer calculus. In addition, many schools were unable to offer a wide array of Advanced Placement (AP) courses for their students. Recognizing this need, in the autumn of 1981 the summer Duke TIP mathematics instructor created a 'TIP By-Mail' class in AP calculus open to those students who had studied with him during the prior summer. The class enrolled 11 students, nine of whom finished the course and took the AP test in calculus (level BC). All students received a score of 4 or 5 on the exam. In 1982 Duke TIP offered its second by-mail course, Latin I, and in 1983 by-mail offerings were expanded to include courses in American history, biology, chemistry, Latin II, Latin (Vergil), English literature, writing and physics.

As the popularity of the by-mail correspondence program grew, a transition in mentorship occurred. The program was renamed 'Learn On Your Own' (LOYO) and now required students to secure their own tutors in their home areas rather than rely on Duke TIP personnel for mentoring. In addition to providing challenging

independent learning opportunities for motivated students who had attended a Duke TIP summer program, the program expanded to include students who could not or chose not to attend one of Duke TIP's face-to-face programs. As with all other Duke TIP programming, a liberal arts curriculum guided the development of LOYO study courses such that mathematics, writing and interdisciplinary courses combining history and literature were created. The courses were designed for students to work independently with the assistance of a mentor who had expertise in the content area. Students spend between a semester and a year completing the course, depending on the pace at which the student works.

In 2004 Duke TIP launched its new 'e-Studies program' offering students an opportunity to connect with other gifted students, with a Duke TIP instructor and with challenging course content using Blackboard, an online course management system.

Unlike traditional online courses for gifted students, in which the Internet serves primarily as a medium for delivering content, Duke TIP's e-Studies courses utilize Blackboard's communication tools, including asynchronous discussion boards and synchronous chats, to create an online learning environment that fosters collaboration. Students on an e-Studies course complete group projects and presentations or participate in writing workshops, in which they read and critique each other's work. Instructors on an E-studies course present material, facilitate discussions, provide feedback on student work and hold virtual office hours. The rigorous academic content and advanced high-school and college level courses not frequently found in secondary school, combined with the accelerated pace and the numerous opportunities for interaction and collaboration, make e-Studies courses a logical extension of Duke TIP's existing educational programming.

Teacher education: AP manuals and teacher workshops

Duke TIP originally developed AP resources and materials for students who had attended the summer program and continued their studies at home through the By-Mail Program. The materials were designed to be used under the direction of a Duke-based mentor. These materials brought about an awareness that resources of this nature were not available to high-school teachers and that there was a need for them. Although participation in the AP program was increasing in the mid-1980s, participating schools were still a minority (30% nationally). In Duke TIP's region, the Southeast and lower Midwest, participation was even lower, with only 17% of schools offering AP courses, Haagen (1988). In response to this realization, Robert Sawyer sought and received funding from the Mary Reynolds Babcock Foundation in 1985 to develop AP materials specifically designed for teachers interested in beginning or expanding an Advanced Placement Program.

During the first year of the grant, manuals were developed in BC Calculus, European History and American History. In the second year manuals for English Language and Composition, English Literature and Composition, Physics and Latin (Vìrgil) were developed. Recognizing the need to train teachers as well as to provide

them with useful materials, a weekend AP Manual Symposium was held at Duke University in May 1987 for teachers wishing to be trained to use the materials. The success of this symposium led to the offering of yearly AP workshops held at multiple sites each year throughout the Duke TIP region. Although Duke TIP sponsored its last AP workshop in June 2004, AP manuals in 10 subjects are still produced and sold to educators across the USA.

Family outreach

From its inception Duke TIP has been committed to providing information and resources to gifted students and their families. Immediately after completion of the initial talent search it became clear that Duke TIP could not provide summer educational opportunities for all of its eligible students. In 1981 the *Educational Opportunity Guide* was created to list summer programs offered throughout the search area. The *Educational opportunity guide* has been a TIP benefit for all talent search participants from the beginning, expanded from a 4-page brochure to a comprehensive 400+ page book covering programs across the USA.

Duke TIP's philosophy of providing materials without charge to talent search participants and their families led to the production of newsletters. In 1981 the *Talent Tabloid* (now called *Insights*) began being mailed to all talent search participants, providing a mechanism to call student attention to available opportunities and to simply 'keep in touch'. The advent of the Grade 4 and 5 Talent Search led to the publication of a comparable newsletter for young children and their families, *The Navigator*. The *Duke Gifted Letter* was initiated by Duke TIP in conjunction with the Duke University Press in 2000 as a scholarly newsletter for parents of gifted and talented children. Published articles include information from top psychologists about social and emotional issues confronting gifted children, advice from other parents concerning the educational challenges they have overcome, reviews of educational products and expert and practical guidance, as well as an array of resources.

In addition to its publications, Duke TIP offers consultation and advice to parents concerned with their gifted child's education or other issues. The *Duke Gifted Letter* also provides a listserv for *Duke Gifted Letter* subscribers and editorial board members to connect and discuss the education and social–emotional development of their children. As another means of providing information to families of gifted children, Duke TIP has hosted an annual Family Conference since 1992 as part of the Grand Recognition Ceremony during which informational sessions are held to provide parents with a foundation upon which they can make future decisions for their highly gifted child. The conference also facilitates networking among the parents who share similar interests and concerns.

Outreach to under-represented groups

Duke TIP has always demonstrated a commitment to identifying and facilitating the intellectual development of students from under-represented and disadvantaged

backgrounds. One of the earliest initiatives in this regard was a concerted effort to increase the participation of under-represented racial minority groups. The first talent search included very few under-represented minority students. After 10 years under Dr Sawyer's stewardship, during which time he formed a special state-wide committee charged with increasing minority talent search participation, the percentage increased many fold. Another principle firmly established during Duke TIP's first decade was that cost should not be a deterrent to any student wishing to attend a summer program. Duke TIP developed a financial aid budget from program funds and gifts and grants from individuals and foundations. By 1985 TIP had awarded more than $330,000 in need- and merit-based scholarships. The total financial aid expenditure increased steadily, approaching $900,000 by the end of TIP's first decade.

Duke TIP now regularly offers over $1,000,000 in financial aid each year. In addition, talent search fee waivers are provided for all students who are on free or reduced lunch, resulting in an increasingly diverse talent search participation pool from which to recruit deserving students. Duke TIP is also a partner along with the other talent searches in the Jack Kent Cooke Foundation Young Scholars Program that provides individualized educational services to a select group of high achieving students with financial need. More recently, Duke TIP has joined in a collaboration with the Center for Talented Youth and the Goldman Sachs Foundation in offering the Next Generation Venture Fund, a program aimed at academically talented students from under-represented and disadvantaged backgrounds. Thus, as evidenced from its earliest day, important tenets of the Duke TIP program still remain embracing diversity and reaching typically under-represented groups of gifted students.

Research

Although not explicitly mentioned to this point, it is important to underscore that research has played a central role in the activities of Duke TIP throughout its 25 years. Research studies at TIP have tended to focus on topics synergistic with the identification and educational programming activities so central to Duke TIP's mission. TIP researchers have examined issues associated with the identification of gifted youth (see, for example, Stephens *et al.*, 1999; Stephens & Karnes, 2000; Jarosewich *et al.*, 2002) and the perceptions and experiences of the students participating in the talent search (see, for example, Jarosewich & Stocking, 2003), as well as gender differences in test scores and course selection (see, for example, Dreyden & Gallagher, 1989; Stocking & Goldstein, 1992; Goldstein & Stocking, 1994; Wilson *et al.*, 1994). TIP studies have also focused on the self-concept and psychological adjustment of gifted children (see, for example, Brounstein *et al.*, 1991; Pfeiffer & Stocking, 2000; Marsh *et al.*, 2001; Plucker & Stocking, 2001; Jarosewich & Stocking, 2003; Pfeiffer, 2003). Educational programming opportunities for gifted children have been a focus of TIP research as well (see, for example, Sawyer, 1984; Sawyer *et al.*, 1987; Goldstein & Wagner, 1993; Pleasants *et al.*, 2004; Matthews, 2004).

Conclusion

In summary, 25 years have elapsed since the initial 'transplant' of the talent search model to Duke University occurred in 1980. The success of Duke TIP stands as a truly remarkable tribute to Julian Stanley and to the robustness of the talent search model that he created at Johns Hopkins University. Although the specific types of programs and initiatives may have taken different forms at Duke TIP, the underlying philosophy and commitment to identify and further the development of gifted and talented youth remains steadfast.

Acknowledgements

The authors are indebted to Dr Robert Sawyer, Dr Julian Stanley and Mr Tom Ulmet for the invaluable historical information they provided.

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