

Addressing the Achievement Gap Between Minority and Nonminority Children

Increasing Access and Achievement Through Project EXCITE

by Paula Olszewski-Kubilius

The Achievement Gap Between Minority and Nonminority Children

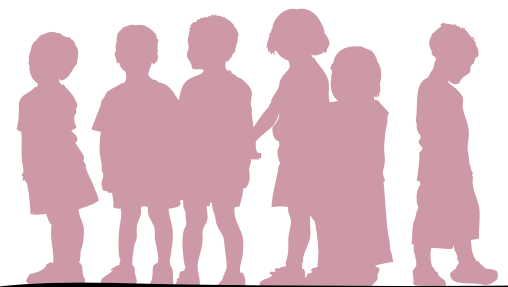
The most significant educational problem in the U.S. is the fact that the achievement of minority children lags behind that of nonminority children. This is true whether one is talking about suburban or urban school systems and low-income or high-income families. On almost every indicator of achievement including grades, standardized achievement tests, college attendance and completion, minority children do not achieve at the same levels as nonminority children.

The “achievement gap” between minority and nonminority children

has existed since the 1960s. The disparities closed somewhat through the late 1980s after which progress in achieving parity slowed. Comprehensive statistics illustrating the disparities between minority and nonminority students in terms of many different indices of academic achievement are documented in the College Board Report “Reaching the Top” (1999), which uses data from the National Assessment of Education Progress (NAEP) study. A similar report that documents the achievement gap specifically for minority and nonminority *gifted* children was recently released from the National Research Center on the Gifted and Talented and is titled “Promoting Sustained Growth in the Representation of African Ameri-

cans, Latinos, and Native Americans Among Top Students in the United States at All Levels of the Education System” (Miller, 2004).

The reasons and causes for the achievement gap are many and varied. They include poverty; lack of access to supplemental educational programs and other educational tools, including technology; poor quality schools, including underprepared teachers; low teacher expectations due to bias and racism; low levels of parental education and involvement; cultural and language differences; negative peer influences; geographic mobility over the summer months; and lack of tacit knowledge about higher education (Arnold, 1993; Ford, 1996).



Minority Children and Gifted Programs

One of the contributing factors to the achievement gap, particularly for top students, is that children of color are underrepresented in gifted programs (Bernal, 2002; Borland & Wright, 1994; Ford, 1996; Ford & Harris, 1999; Gallagher, 1994; Grantham, 2003; Maker, 1996; Morris, 2002). They are less likely to be nominated by teachers as potential candidates for gifted programs (Ford, Harris, Tyson, & Trotman, 2002) and if nominated, less likely to be selected for the program (Saccuzzo, Johnson, & Guertin, 1994) particularly when traditional measures such as IQ and achievement tests are used for identification (Ford et al.). A considerable amount of literature in the gifted field deals with the issue of altering identification procedures to increase minority students' access to gifted programs (Baldwin, 1994; Bernal; Borland & Wright; Ford; Ford & Harris; Frasier, 1987; Hiatt, 1994; Sarouphim, 1999; VanTassel-Baska, Johnson, & Avery, 2002) with proposals being put forth for using performance-based assessment measures based on Gardner's theory of multiple intelligences (e.g., Baldwin; Sarouphim) or other models (VanTassel-Baska et al.), and nonverbal ability assessment such as the Naglieri Nonverbal Ability Test or Raven's Matrix Analogies Test (Ford et al.; Naglieri & Ford, 2003). Some of these efforts appear to be successful (see Naglieri & Ford; VanTassel-Baska et al.), although controversy about them still exists.

Programs for Narrowing the Achievement Gap

There have been numerous intervention programs aimed at address-

ing and fixing the achievement gap between minority and nonminority students. These have included early childhood and preschool programs such as Head Start, supplementary educational programs, and programs aimed at comprehensive school reform (College Board, 1999). However, even

proven or promising school-level strategies tested with minorities have targeted disadvantaged students who are at risk of being low achievers. These strategies have typically not been explicitly designed to promote high achievement among disadvantaged minorities, nor have they targeted middle and high SES minority students. (College Board, p. 23)

One direction educators have taken to close the achievement gap among gifted students is supplemental educational programs that are growing in number, particularly for urban school children.

One thing we do know, however, is that many high-achieving students from all racial and ethnic groups are beneficiaries of extensive formal and informal supplementary educational opportunities over time, many of which are provided directly or paid for by their parents. We also know that some of the most academically successful groups in our society have created a network of supplementary opportunities for their children that might best be described as a parallel educational system (College Board, 1999, p. 25)

Some data regarding the effects of supplemental gifted programs designed specifically to boost the academic achievement of gifted minority

children have become available recently in large part due to the federal Javits program, although most often this is about increasing access to gifted programs rather than achievement in them. A notable exception is Project Synergy (Borland & Wright, 1994), in which economically disadvantaged, potentially gifted kindergarten children from New York City were identified and provided services to enable them to eventually place into school-based gifted programs. Demonstrated positive effects of the intervention included significant gains on standardized tests after a full year of involvement in the program (e.g., children moved from the bottom quarter to the top third compared to the norming population on tests of reading and mathematics) and gains in IQ scores.

Project EXCITE

Project EXCITE was developed and implemented specifically to raise the achievement of gifted minority students in a large suburban school district of Chicago so that they could qualify for advanced programs and accelerated tracks in high school in mathematics and science.

Achievement Gap in the School District

Evanston Township High School (ETHS) is a large suburban (population > 75,000) high school in the Midwest. It serves a diverse population of students consisting of 45.6% Caucasian, 43.7% African American, 7.1% Latino, and 2.5% Asian. ETHS has always been known for the richness of its curricular offerings, which include Advanced Placement (AP), honors, and regular and vocational classes. The science department offers a special program known as the

Chem/Phys Program. In this program, Advanced Placement Chemistry and Physics are taught as an integrated science to accelerated students with a marked talent for mathematics and science. In general, only students in the upper 5% of the student population of the high school are invited to join the Chem/Phys Program. A small portion of students in this advanced program are involved in science research for the National Science Talent Search Competition initially known as the Westinghouse Science Talent Search and now known as the Intel Science Talent Search. Although the mathematics department does not have a similar program, it does offer advanced math courses such as BC Calculus and Multivariable Calculus.

Although the school has been racially integrated since the late 1960s, the number of minority students in the advanced math and science classes is very small. Minority students make up only approximately 5% of the students in the accelerated Chem/Phys Program. They also make up only about 11% of the students in the Multivariable Calculus and 8% of the students in the BC Calculus classes (data for 2002).

There is a wide disparity for other indices of academic achievement between minority and nonminority students, including grades and placement in tracks; the majority of Black and Latino students are in regular classes (J. Levinson, personal communication, January 28, 2004). Project EXCITE was created to address this gap in achievement that results from poorer access to and preparation for advanced classes for minority students.

Strategies Used to Help Close the Achievement Gap

It was recognized very early that if Project EXCITE was to succeed

in closing the academic achievement gap, the program had to devise strategies that would deal with the major factors that affect student achievement including expectations for achievement, peer pressure and peer support for achievement, parental and family support for achievement, and access to supplemental educational programs and opportunities. For example, the program had to bolster existing support structures within the family and school and create new areas of support (e.g., a peer group) that would foster and promote high academic achievement among students. Parents had to be integrally involved if Project EXCITE was to succeed, and their participation was as vital as that of the students. Parents needed to set very high expectations for achievement, monitor and assist students with homework, and make sure students were attending extra enrichment classes on Saturdays and in the summer. Parents needed to become aware of the opportunities, programs, and strategies that middle- and upper-middle class nonminority parents use to provide educational advantages and access, and they had to use those opportunities for their child.

Teachers had to recognize the children's abilities and respond by setting high expectations, providing appropriately challenging work in class, and creating an environment within their classroom that rewarded and recognized high achievement. Though Project EXCITE took place largely outside of school walls, classroom teachers were invited to attend and assist with after-school sessions, were given curricular materials used in afterschool sessions, were informed of students' progress in Saturday enrichment classes, and participated in the advisory board for the project.

Peer pressure was another factor that had to be addressed. Students should be able to grow up believing that it is very normal to be a minority and academically successful. Role models were needed if positive changes were to be made in students' perceptions and expectations of themselves. Successful minority high school and college students were recruited to serve as role models for the Project EXCITE children to help them visualize the path they were expected to take and to prepare for. They served as teaching assistants for afterschool sessions, tutored selected students, and spoke to students and parents about their experience of achieving in high school. In addition, Project EXCITE students were grouped within classes in their middle schools to encourage peer support and camaraderie for achievement and to inoculate students against negative peer pressure.

Finally, Project EXCITE had to ensure that the children and families had the same access to educational advantages as other segments of society. That would include supplemental, outside-of-school educational programs for gifted students, as well as technology tools such as home computers and educational software, so that students could compete successfully for placement in advanced and accelerated programs.

Project Partners

Project EXCITE is a collaborative program of Northwestern University, a major, private university, through its Center for Talent Development (CTD); Evanston Township High School District; and the elementary school district in the suburb. Each of the partner institutions contributes funds, personnel, and other resources (e.g., space) to the project.

Project Goals

The general long-range goal of the program is to close the gap in academic achievement between minority and majority students by bolstering the achievement and success of gifted minority children. The specific long-term goal is to increase the number of minority students in the advanced math and science programs at the high school such as the Chem/Phys program and AP and honors classes. Currently, the program is pursuing the following immediate goals to achieve the general and specific long-term goals: (a) the identification of minority children in early elementary school (by grade 3) with talent and ability in mathematics and science; (b) the provision of supplemental educational opportunities to ensure that selected students complete algebra and have a significant science laboratory experience by the end of eighth grade; (c) increased support for high achievement and talent development through significant and sustained interactions with older student role models and with teachers and other adults; and (d) the cultivation of a positive peer culture in the elementary and middle schools by encouraging the formation of a supportive group of peer program participants.

Eligible Students

Students become eligible for the program in the third grade if they (a) are from the underrepresented minority groups in mathematics and science; (b) have the potential to achieve at high levels as demonstrated by their ability to think critically and engage in problem solving; (c) demonstrate the ability to work beyond their current grade level; (d) demonstrate a high level of interest, curiosity, and

enthusiasm for learning mathematics and science; and (e) come from families that have limited experience with higher education (i.e., children would be first-generation college attendees). Students had to meet all criteria with the exception of (e). Students were not selected on the basis of family income and there is an unknown range of socioeconomic status (SES) levels among Project EXCITE participants, although most students were perceived to be of low to modest family incomes. The rationale behind the decision not to use low income as a qualifying criterion was the research cited previously that showed that the achievement gap between minority and nonminority children exists at all SES levels, even high ones.

Program Components

There are several key components of Project EXCITE aimed at addressing the major factors contributing to the achievement gap. These four components are parent education and support, peer support, academic enrichment, and individualized talent development.

Parent Education and Support. Project EXCITE uses school-based parent meetings and seminars for the education and support of Project EXCITE parents. Three parent meetings are held each year by the staff of Project EXCITE. Motivational speakers and experts in the talent development of gifted minority students are invited to speak to parents at these meetings. These talks focus on ways in which parents can cultivate high achievement, create a home environment that supports achievement, and work with schools to ensure that students are performing at high levels in school. Parents are also invited to attend parent workshops organized by

the Saturday Enrichment Program (SEP) at the CTD, which also consist of 8–10 talks annually by experts in gifted education. Project coordinators meet with parents upon request, typically to deal with parental concerns about an individual child. Other kinds of sessions are held with parents as needed. For example, as families receive a home computer as part of their participation in Project EXCITE, training classes on Internet use and word processing have been offered.

Peer Support. To provide role models for high-achieving, successful minority (and nonminority) students, high school students are used as helpers in the afterschool classes for third graders and at the parent meetings. These high school students assist EXCITE students with completing the afterschool learning activities by leading small groups. They also serve as tutors for students who need extra help, meeting students after school in the local library or on Saturdays.

Project EXCITE students are cluster grouped together in classes within their elementary and middle schools after the third-grade year to encourage support and bonding. Students attend parent meetings to hear motivational speakers consisting of successful minority leaders from the community and high-achieving minority students.

Academic Enrichment. Project EXCITE students participate in academic enrichment activities beginning in grade 3 after school or in the summer. Third graders participate in afterschool sessions held at the high school, consisting of integrated math and science experiments. Students in grades 4, 5, and 6 take classes on Saturdays through the CTD's Saturday Enrichment Program (SEP). These consist of two 8-week sessions of Saturday classes in fall and winter.

SEP is designed to offer enriching and challenging courses to students from preschool to ninth grade. In grade 4, Project EXCITE students are grouped together in a special Saturday class to promote friendships and connections between Project EXCITE students who come from five different schools. Beginning in grade 5, students choose a math or science class from the array of classes offered in the SEP. The EXCITE students can opt for courses only in math and science. Participation in the fall and winter session of the SEP is mandatory for Project EXCITE students but participation in the spring SEP session or summer programs of the Center is optional (prior to grade 6). Beginning in the summer of grade 6, students are also required to participate in the CTD summer program as commuters. Summer classes are either enrichment or accelerative (e.g., Algebra for sixth and seventh grades) in nature in the areas of language arts, science, mathematics, social science, and the fine arts. Project EXCITE students can choose either a math or science summer course from the array of courses offered to students at their grade level. Project coordinators assist students in selecting an appropriate course.

Additional Support. Additional supports are provided to Project EXCITE students as needed. These have included a review class held in the spring on Saturdays to help fifth graders prepare for a district administered prealgebra placement test; supplemental classes in the summers for students who were not working consistently at grade level in reading or mathematics; monthly, in-school lunch meetings of sixth grade students who qualified to study prealgebra to encourage peer support and increase motivation and commitment; and individual referrals for other kinds of professional services. The program coordinators

meet with parents as requested typically about achievement and school performance issues.

Evaluation Activities

Since the program has been implemented, the elementary school district has changed the tests that it uses to assess districtwide achievement. They have used a well-known norm-referenced test, then online tests in key academic areas, and now rely primarily on state-level, criterion-referenced tests. We have collected any kind of test information available from the district on Project EXCITE students, but no one test has been used consistently across the 5 years of the program. Currently, performance on state-mandated tests is all that is available, and these are used only to identify areas of weaknesses among our students—so as to provide additional tutoring if needed. All fifth graders are given a district-designed test to assess their readiness to study prealgebra in grade 6 or 7 (in preparation for algebra in grade 7 or 8). Scores on this test qualify students for the accelerated math program called Gateways Math. A test designed by the high school is given to all students after the completion of algebra to assess mastery of algebra and placement into geometry. In addition, students' performance on math chapter tests and the end-of-the-year math cumulative test, as well as report card grades, are regularly monitored and collected by Project EXCITE staff.

Project Staff

Project EXCITE involves 32–36 experts who monitor and assist the EXCITE students with their academic progress. Staff members consist of 2 project cocoordinators; 10 advisory

board members (representatives from the high school, elementary schools, middle schools, university, and district-level administrators); 5 school liaisons (principals or teachers); 4–8 instructors for Project EXCITE classes (teachers from high schools and elementary schools); 2 psychologists (from the two middle schools); 8–10 students (high school student mentors or aides); and 1 contact person/translator for Hispanic families.

Selection Procedures for Project EXCITE

Project EXCITE has been in existence for 5 years. Each year, a new cohort of third graders is recruited into the project. For the most part, recruitment has been conducted as follows. Firstly, third-grade teachers in five elementary schools were asked to nominate minority children who they perceived as talented in science and mathematics. Nomination procedures varied by school; some schools did this in a group meeting of teachers, while others left it up to the principal. Secondly, teachers completed a form for each nominated student that asked them to rate students' problem-solving skills, verbal reasoning and analytical skills, work and study habits, conduct and behavior in class, interest in the subject area, and family support for school achievement. Thirdly, nominated students were given the Naglieri Nonverbal Ability Test (NNAT) in an afterschool or in-school session. The students with the best scores in each cohort were accepted into the program, which meant that most students had a stanine of 6 or higher on the Naglieri Test, received a positive recommendation from the school regarding work habits, achievement, ability, and interests, and performed at a "reason-

ably high level” on the state-level criterion-referenced (Illinois Standards Achievement Test [ISAT]) or standardized norm-referenced (Iowa Test of Basic Skills [ITBS]) tests the district was using at the time. There was no absolute criterion for “reasonably high level.” Generally, we used 80% as a cutoff for performance on a reading or math subtest of the ITBS or a “meets” or “exceeds” standard for performance on a subtest of the ISAT. A selection committee consisting of representatives from each of the partner institutions reviewed all student information and made selections from nominated students for each cohort. On average, students were 8.6 years old at the time of recruitment. There is no information available for students’ SES levels except that of the students currently enrolled in Project EXCITE, 48.7% are on free or reduced lunch and 51.3% are not (R. Blair, personal communication, April 13, 2004), although this may be an underestimate as students may be reluctant to use free lunch even if they are eligible.

Over the years, we have tried to refine the selection criteria and procedures based on our experiences with the students. In 2004, we invited all minority students in grades 3 at the five elementary schools to take the NNAT (rather than relying on school nominations, which we worried missed some truly gifted students). Students then took the test on a Saturday morning. We reasoned that only students whose families really valued the program would make sure they were at the testing session on Saturday and thus this procedure served as a proxy for assessing parental support. In addition, we were not wholly satisfied with the NNAT, because, while it identified students high on nonverbal reasoning abil-

ity, some of those students were low on reading skills or math skills that impeded their success in the program. Therefore, we added the ITBS into the assessment. We then selected students who had either a high NNAT coupled with good achievement on the ISAT or ITBS, or relatively high achievement on the math and reading subtests of the ITBS. The changes in the identification procedures resulted in more students with high (stanines of 8 and 9) scores on the NNAT and students with more even profiles across math and verbal abilities that are relevant for success in advanced courses of study.

Increasing Access

Table 1 shows the number of students nominated for Project EXCITE each year, the number and percentage selected, and reasons for attrition. In general, while we lost a fair number of students each year, it was not because of lack of performance in the program or lack of interest, but typically due to family mobility. We did suspend one student from the program for bad behavior, but even this student can return to the program if, after counseling, his behavior improves.

Project EXCITE has definitely increased the access of minority children in the district to advanced classes such as algebra.

- In two of the middle schools, Project EXCITE seventh graders make up half of all minority students enrolled in Algebra Honors.
- In a third middle school, 80% of all the minority students enrolled in Algebra Honors are Project EXCITE students.
- Project EXCITE students make up two thirds of all the minor-

ity students enrolled in Algebra Honors in a fourth middle school.

- Of the first cohort of 19 fifth graders, 12 (80%) qualified to be placed in prealgebra in grade 6 on the basis of a district test given to all fifth graders. In the previous year, only three minority students qualified for prealgebra from the four schools. Thus, the 12 students represented a 300% increase in the number of minority children who qualified for advanced math in the district.
- Of the second cohort of 14 fifth graders, 5 (36%) are in the regular math program, and 9 (74%) were placed in prealgebra.

In summary 74–80% of the students in each of the first two cohorts qualified for placement into prealgebra in grade 6, which puts them on track to complete algebra by grade 9.

Improving Achievement

The EXCITE students are required to take Saturday classes through the fall and winter sessions of the CTD Saturday Enrichment Program. With rare exception, students have complied and participation has been excellent. Although students do not receive grades for the Saturday classes, a review of narrative reports on performance prepared by their teachers showed that achievement within the Saturday classes has also been good for most students and that generally the EXCITE students have fared comparably to the other gifted students within the program. Thus far, only a few students, fewer than five, were reported to have had problems, either in terms of behavior or academics, in their Saturday classes, and these were temporary in nature.

Addressing the Achievement Gap Between Minority and Nonminority Children

Achievement in the summer class was good to excellent. Students who took Algebra 1 received grades of B or higher and completed an entire semester of work in 3 weeks. They held their own in this fast-paced, accelerated class. Students who took enrichment classes in the summer had positive evaluations from teachers. Some students initially obtained low quiz grades but worked hard and improved their grades to an excellent level by the end of the course.

The achievement of Project EXCITE students in school, as evidenced by grades in prealgebra and algebra, has been variable (see Table 2).

Of the 12 students who entered prealgebra in grade 6, 9 did well enough in to continue on to algebra in grade 7, and 3 went on to Prealgebra 2 (Prealgebra 1 covers the first half of prealgebra and Prealgebra 2 covers the second half). Two of the nine students placed in algebra failed to maintain a grade of C in the first semester and were dropped back to Prealgebra 2. The remaining seven are on track to complete Algebra 1 and geometry before they enter high school. Both of the students who were dropped were very bright and capable; one got a stanine of 9 on the NNAT. Their low performance was due to psycho-social factors such as being distracted away

from achievement by peers and parents who were ambivalent about them being in the program and not strongly supportive. They both remain in Project EXCITE and can still complete algebra before grade 9. We have tried to assist one family by recommending and finding affordable counseling, but the family has thus far not taken advantage of this resource.

In addition, 88% to 100% of each cohort of students (third graders, fourth graders, etc.) was deemed proficient by the school district in reading and mathematics based on curriculum-based assessments conducted by the district. This far exceeds district averages for minority children.

Table 1
Statistics for EXCITE Cohorts

	Year 1	Year 2	Year 3	Year 4	Year 5
Nominated	48	71	71	60	131
Selected	24	19	27	24	21
Percentage	50%	27%	38%	40%	16%
Tests Used	NNAT	NNAT, ITBS (given by district)	NNAT, District Online Test	NNAT	NNAT and ITBS (given by EXCITE staff)
Dropped	5	5	8	5	None so far
Reason Dropped	- 1 moved out of town - 1 changed to private school - 1 conflict with religious practice - 1 family conflicts - 1 no reason given	- 3 moved out of town - 1 no reason given - 1 changed to private school	- 4 moved out of town - 1 never began participation - 1 not minority - 1 changed to private school - 1 dropped due to excess absences	- 3 moved out of town - 1 not minority - 1 no reason given	

Note. NNAT = Naglieri Nonverbal Ability Test; ITBS = Iowa Test of Basic Skills.

Because some students were getting grades of C or lower, tutoring was arranged for them. Currently 4 fifth graders, 1 sixth grader, and 5 seventh graders are receiving individualized tutoring from NU undergrads and graduate students and students from the high school.

Some Unanticipated Effects

One unanticipated outcome of the program has been the extent to which parents have used the Center for Talent Development for additional program opportunities beyond those provided by Project EXCITE for their children, including siblings of EXCITE students. Parents have involved their students in the summer program

when this was not required, additional sessions of the Saturday Program, and the talent search program.

Some Continuing Areas of Challenge

Students received a home computer as part of participating in the EXCITE program. However, only a few students were really knowledgeable about using them, and they were not being used at home. Students were not connecting to the Internet to check out the EXCITE Web site nor were they using their e-mail accounts, also paid for by the project. As a result, we began to offer evening and Saturday classes for parents and families to assist them with word pro-

cessing and accessing the Internet. We also began to provide technical assistance to families in their homes.

Some of the students are not achieving at the level they should given their tested abilities, particularly in math and science. As reported earlier, we have found tutors for several students, and we have also instituted some major changes in the structure of the academic enrichment provided to students. Specifically for fifth, sixth, and seventh graders, students will attend a special Project EXCITE class (rather than the SEP) on Saturdays in the fall that will provide enrichment to bolster and complement their in-school math program. Part of this class will also be spent on building students' computing skills so they

**Table 2
Grades of Sixth- and Seventh-Grade Students
(Cohorts 1 and 2) in Project Excite**

Seventh graders	Algebra	Prealgebra I	Prealgebra II	Regular sixth-grade math
A	1	4	2	
B	2	1	1	
C	4	1		
D	1	1		
Dropped	(2)			
Sixth graders				
A		3	1	1
B		2		2
C		1		2
D		1		

can more effectively utilize the home computers that the project provides to them. Students who are achieving at a grade of B or above in their in-school math class can enter the regular SEP in the winter and spring terms and choose a math or science class of their own liking. Because we felt that the district's science program was weak, we were reluctant to place EXCITE students into an accelerated science class in the CTD Spectrum program as originally planned. Instead, the summer program between sixth and seventh grade will be held at the high school and will consist of one week of physics, one week of biology, and one week of chemistry and will be heavily laboratory based. EXCITE students will still have the opportunity to participate in the Spectrum program during the summer after their eighth-grade year.

We have seen some of our best students falter in their achievement due to difficult family situations, peer influences, and other complex situations. We have done a number of things to counteract this, including referring individual families for counseling, constituting a support group for students within their schools, and connecting families with community experts on minority achievement. This kind of individualized support is absolutely critical to students' success.

While we feel that Project EXCITE has increased minority students' access to accelerated and advanced programs, we have learned that accomplishing high achievement commensurate with students' abilities within those programs is more difficult. More support is needed to overcome the pull of peers away from achievement and to help students and families remain focused on high achievement. Yet, we are bolstered by the fact that many students remain on track and some have been rescued from underachievement. One

of our students, a talented athlete, was for a time unenthusiastic in his participation in Project EXCITE, preferring basketball to Saturday classes. However, through continued work with his very supportive and concerned mother, he is now showing a very strong performance in his algebra class. As we conduct Project EXCITE, we continue to learn about the factors that contribute to the achievement gap and what is needed to close it. **GCT**

References

- Arnold, K. D. (1993). Undergraduate aspirations and career outcomes of academically talented women: A discriminant analysis. *Roeper Review, 15*, 169–175.
- Baldwin, A. Y. (1994). The seven plus story: Developing hidden talent among students in socio-economically disadvantaged environments. *Gifted Child Quarterly, 38*, 80–84.
- Bernal, E. M. (2002). Three ways to achieve a more equitable representation of culturally and linguistically different students in GT programs. *Roeper Review, 24*, 82–88.
- Borland, J. H., & Wright, L. (1994). Identifying young, potentially gifted economically disadvantaged students. *Gifted Child Quarterly, 38*, 164–171.
- College Board. (1999). *Reaching the top: A report of the national task force on minority high achievement*. Retrieved October 15, 2003, from <http://www.collegeboard.com/research/abstract/1,,3876,00.html>
- Ford, D. (1996). *Reversing underachievement among gifted Black students: Promising practices and programs*. New York: Teachers College Press.
- Ford, D. Y., & Harris, J. J., III. (1999). *Multicultural gifted education*. New York: Teachers College Press.
- Ford, D. Y., Harris, J. J., III, Tyson, C. A., & Trotman, M. F. (2002). Beyond deficit thinking: Providing access for gifted African American students. *Roeper Review, 2*, 52–58.
- Frasier, M. M. (1987). The identification of gifted Black students: Developing new perspectives. *Journal for the Education of the Gifted, 10*, 155–180.
- Gallagher, J. J. (1994). Current and historical thinking on education for gifted and talented students. In P. O. Ross (Ed.), *National excellence, a case for developing America's talent: An anthology of readings* (pp. 26–40). Washington, DC: U.S. Department of Education.
- Grantham, T. C. (2003). Increasing Black student enrollment in gifted programs: An exploration of the Pulaski county special school district's advocacy efforts. *Gifted Child Quarterly, 47*, 46–65.
- Hiatt, E. L. (1994). Promises to keep: The story of Project Promise. *Gifted Child Quarterly, 38*, 85–88.
- Maker, C. J. (1996). Identification of gifted minority students: A national problem, needed changes and a promising solution. *Gifted Child Quarterly, 40*, 41–50.
- Miller, L. S. (2004). *Promoting sustained growth in the representation of African Americans, Latinos, and Native Americans among top students in the United States at ALL levels of the education system*. Storrs, CT: The National Research Center on the Gifted and Talented, University of Connecticut.

Morris, J. E. (2002). African American students and gifted education: The politics of race and culture. *Roepers Review*, 24, 59–62.

Naglieri, J. A., & Ford, D. Y. (2003). Addressing underrepresentation of gifted minority children using the Naglieri Nonverbal Ability Test (NNAT). *Gifted Child Quarterly*, 47, 155–160.

Saccuzzo, D. P., Johnson, N. E., & Guertin, T. L. (1994). *Identifying underrepresented disadvantaged gifted and talented children: A*

multifaceted approach. San Diego, CA: San Diego State University.

Sarouphim, K. M. (1999). DISCOVER: A promising alternative assessment for the identification of gifted minorities. *Gifted Child Quarterly*, 43, 244–251.

VanTassel-Baska, J., Johnson, D., & Avery, L. D. (2002). Using performance tasks in the identification of economically disadvantaged and minority gifted learners: Findings from Project

STAR. *Gifted Child Quarterly*, 46, 110–123.

Author Note

This article is based on the following article:

Olszewski-Kubilius, P., Lee, S. Y., Ngoc, M., & Ngoc, D. (in press). Closing the gap between minority and nonminority achievement. *Journal for the Education of the Gifted*.



Center for Creative Learning™

More Than Three Decades of Leadership and Service

- Creative Problem Solving (CPS)
- The LoS (Levels of Service) Approach to Talent Development
- VIEW: An Assessment of Problem-Solving Style

New CPS Distance Learning Module: preview at: www.creativelearning.com/cpsdemo

Creative Learning Today Newsletter – **Free** subscriptions for electronic delivery (PDF format). Send an email message to: don@creativelearning.com with the title, "Subscribe to CLT."

Summer Professional Development Institutes in Sarasota:

LoS Approach to Talent Development: July 6-8, 2006

CPS in Education: July 10-12, 2006

4921 Ringwood Meadow • Sarasota, FL 34235 • (941)-342-9928 • Fax: (941)-342-0064

Visit us on the web at www.creativelearning.com