

Overlooked Gems: A National Perspective on Low-Income Promising Learners

Conference
Proceedings
from the National
Leadership
Conference
on Low-Income
Promising Learners

Edited by
Joyce VanTassel-Baska
and
Tamra Stambaugh

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Joyce VanTassel-Baska & Tamra Stambaugh, Editors

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Preface

When a field of researchers and educators brings its decades of expertise and knowledge to bear on a single issue, the outcome can be powerful. Such was the case when the National Association for Gifted Children and the College of William and Mary hosted the *National Leadership Conference on Low-Income Promising Learners* in April, 2006. The conference brought together the research community as well as the practitioners who work directly with these target student populations in classroom settings. In addition, presenters and responders from outside the field of education brought a rich dimension to the discussion during the time allotted for small group reflection and action planning.

NAGC and its members have long focused on underserved populations. Many of NAGC's leaders are pioneers in devising strategies to identify and serve disadvantaged gifted learners, some through resources from the Jacob K. Javits Gifted and Talented Students Education Act, which remains the only federal funding that supports the field of gifted education. With strong leadership from NAGC's president Joyce VanTassel-Baska and the Board of Directors, NAGC's most recent strategic plan broadens the focus on diversity and underrepresented populations to include three key areas. First, NAGC is soundly invested in building alliances with other national organizations that serve low-income learners; models such as AVID and POSSE were also featured at the conference, in addition to the direct partnerships with the Jack Kent Cooke Foundation and William and Mary. Second, NAGC has made a strong commitment to enhancing the competency of teachers who work with underserved populations of public school students. The Mary Frasier Diversity Scholars Program, generously supported by the field's own leaders, was also launched this year to build awareness of gifted children in poverty and to provide Title I teachers with the tools to identify and serve them more effectively. Finally, NAGC has begun a long-term effort to become the clearinghouse for resources—a central repository for research and findings on what works for these students, accessible not only to educators, but to classroom teachers and parents as well.

Where do we go from here? In order for these students' needs to be addressed effectively, educators at all levels, as well as parents and the general public, need to better understand the nature of the needs of these students, as well as the multi-pronged educational efforts that can make a difference in their lives. The proceedings from this national forum are one step toward raising awareness and providing practical strategies to help achieve this outcome. In addition, other state and national organizations are planning to replicate the model as well. Many thanks again to Joyce VanTassel-Baska and Tamra Stambaugh from William and Mary, to Jane Clarenbach at NAGC, and to the staff at the Jack Kent Cooke Foundation for investing time and resources in an initiative that can truly make a difference.

Nancy Green
Executive Director
National Association for Gifted Children

Introduction

Joyce VanTassel-Baska
College of William and Mary
President, National Association of Gifted Children

Many things can wait. Children cannot. Today their bones are being formed, their blood is being made, their senses are being developed. To them we cannot say "tomorrow." Their name is today.
– Gabriela Mistral (Chilean teacher 1899 - 1957)

A recent report from The Education Trust (2005) posits that states are shortchanging their low-income and minority students by spending less money per student in high poverty schools, and less money in general for schools with higher percentages of minority students. Based on funding reports from 2003, the United States spent \$907 less per school district of poverty and \$614 less in school districts with high percentages of minority students when compared to districts with high percentages of wealthier or Caucasian students. Moreover, teachers in high poverty and high minority schools were found to be less experienced, were more often teaching out of their field of expertise, and received less money for the job of teaching. Other national reports suggest that the achievement gaps between students of poverty and students of non-poverty continue to exist, especially in reading and mathematics (NCES, 2005).

Calls to action include equity in state funding mechanisms, greater state and national awareness of the issues of poverty, a need for highly qualified teachers in high poverty schools, targeted professional development for pre-service teachers, and a stronger research agenda specific to students of poverty and their achievement attainment. Yet there is no aspect of these reports that focus on the loss of talent among top students in these groups, an area of grave concern to many gifted educators.

Monograph Purpose

This monograph brings together the work of national stakeholders in gifted education and beyond gifted education on the critical issue of child poverty among students who show academic and intellectual promise for positive contributions in various areas of study. It has been compiled in order to provide the field of gifted education with a blueprint for working in schools with children of poverty, for activating community-based opportunities for them, and for forging new partnerships and collaboratives with universities and other agencies to deliver relevant services.

The monograph is organized into eight sections that outline the major presentations from the April 24-25, 2006, national conference hosted by the National Association of Gifted Children and the College of William and Mary and sponsored by the Jack Kent Cooke Foundation. Held at the Carnegie Endowment

for Peace, in Washington, DC, the conference purposes were threefold:

- To understand the current state of the art from research and practice in working effectively with children and youth living in poverty,
- To create bridges between the gifted community and the general education community on collective successful strategies for provision of talent development services, and
- To create a policy and research agenda that addresses the key targets for action in leadership arenas on these issues.

Attended by 80 educators representing 30 states, the conference provided opportunities for participants to hear perspectives on poverty from national, state, and local educator experts charged with the responsibility of providing assistance to such learners. Moreover, the group heard from the foundation world as well, on how program funding has been used to reach this population of interest. After multiple presentations, participants formed cross-disciplinary groups to discuss key issues relevant to crafting an action agenda for the field. The synthesis of these ideas framed by the groups is found in the concluding chapter of the monograph, which highlights the recommendations made regarding the important issues of identification, interventions, transition, and retention as well as other priority concerns.

There are many issues that need to be understood and accounted for in developing and implementing programs and services for promising students of poverty. These issues involve their psychological, physiological, cultural, and educational facets of functioning. From a psychological perspective, these students must be viewed as individuals, as we are well aware of studies suggesting their view of fate control, their sense of self-esteem and efficacy, their attributions for success and failure, their resilience, and their educational aspirations may often be compromised by their circumstances. From a physiological perspective, these students must be considered at risk for appropriate health care at key stages of development and may continue unhealthy intergenerational patterns of early pregnancy, drug abuse including smoking and alcohol, and mental health problems.

From a cultural perspective, these students often represent distinctive minority cultures, with specific orientations and attitudes toward school and learning, often favoring their chances for success. Yet lack of advanced parental education, coupled with lack of financial resources, can conspire to limit the aspirations of such students at critical ages. Cultural values that emphasize group cohesion and family obligations over individual achievement in school and beyond inadvertently set up tensions for these students in making educational choices, in committing time and effort to educational agendas, and to planning their futures in deliberate ways.

From an educational perspective, these students may often be trapped in schools that do not acknowledge the presence of gifted children, that do not offer appropriate level intellectual stimulation, and that do not provide the value-added services necessary to encourage talent development. Moreover, because most programs and services for gifted children still do not begin before third grade, these students lose ground in the early years. Their need for personalized services like tutoring and mentoring is compromised by the lack of connected initiatives to serve them beyond the school. Compounding this problem are rigid identification processes in many school districts that prohibit their identification for special programs.

Thus this monograph was conceptualized as a dissemination tool to advance the conversation on providing opportunities for promising students of poverty across the country. It is intended for both researchers and practitioners at all levels of the educational enterprise.

What is the Context for Understanding Poverty in the United States?

The second section of the monograph contains the keynote presentation of Harold Hodgkinson, noted social demographer, who shared with participants the grim data on the enormity of the poverty problem in the United States. He stressed the importance of acknowledging the problem of poverty as a variable strongly correlated to lack of educational attainment and achievement among all groups. Citing poverty as a “universal handicap,” he shares data documenting that one-third of students born in 2000 will experience poverty that may strongly limit their opportunities in life, and that poverty alone is the most important risk factor because it magnifies all others. He goes on to indict the United States for its haphazard approach to child care and preschool programs that leave development of poor children before school age to chance. Commenting on changing population

demographics that are likely to increase the problems of poverty, he asserts the clear need for a sharper focus on providing early childhood programs to all children as a routine part of our social service network in order to reduce the effects of poverty for succeeding generations.

How is Poverty Intertwined With Issues of Culture?

The third section of the monograph contains three papers responding to Dr. Hodgkinson’s talk, shared from a particular cultural perspective. Dr. Alexinia Baldwin highlights her reactions to the paper by noting surprise at the high rates of poverty in the United States and that the emphasis on “poverty” rather than race takes some pressure off the African American community as the culprit in depressed achievement scores in the nation. She also comments on the urgency of Hodgkinson’s message to find more African American students of poverty for gifted education programs and to provide them opportunities to move to higher levels of educational development at crucial ages.

Dr. Ernesto Bernal cautions readers to ignore multiculturalism at their peril as the Hispanic population is growing into a critical mass within this country. He focuses his response on the need to prepare teachers who can work effectively with students from other cultures by sensitizing them to the cultural competencies necessary to employ in the classroom. He argues that well-prepared teachers can then do a much better job of finding potential among students of color, thus easing the problem of underidentification for gifted programs.

Dr. Margie Kitano, whose work cuts across ethnic groups of color, emphasizes the need for comprehensive ongoing services to this population, noting that results can only be seen after multiple years and multiple types of interventions with students and their families. She also stresses the heterogeneity of the problem of poverty, noting that the severity of income deprivation as well as the educational levels and attitudes of parents in the home impact the nature of services required. Her experience in working on special projects in the San Diego public schools leads her to be optimistic about improving success rates with this population if early intervention and consistent attention through the high school years is provided.

What is the Research Base on Promising Students from Poverty?

The next section of the monograph focuses on the existing research base on promising learners from poverty. Each paper addresses the research and development work of the authors and their major

contributions to the literature, the state of practice in respect to special issues and barriers, gaps in the research that need to be filled, and recommendations for both identification and program protocols that could move local district programs to higher levels of effectiveness.

Dr. Donna Ford highlights her work on the need to abandon deficit thinking and requisite models of intervention in meeting the needs of students of poverty, especially those of color. She notes the problem of overcoming barriers associated with dysfunctional home environments, peer groups that put undue pressure on achieving minority students, and educators who dampen aspirations and expectations. She presents a paradigm for change, based on research in schools that have been successful with students of poverty, noting the critical role of proactive principals, highly qualified teachers who insist on high achievement, and an environment that is conducive to continuous learning.

Dr. Paula Olszewski-Kubilius focuses her chapter on the research by the Center for Talent Development at Northwestern University, collaborating with local school districts to address the needs of students of poverty through content-based interventions in mathematics and science (Project Excite) and language arts (Project LIVE). To date, Project Excite has shown promising results for students taking algebra in middle school, which facilitates their taking calculus while in high school, and thus opens up further advanced opportunities in math and science at the college level. Her observations on what works for students of poverty centers on the need to see families as distinctive, using an individual plan as the best approach to intervention over time, the need to focus on parents as well as students, working in partnership with university and school district resources, and beginning program services early. Lack of financial support and sustained commitment to the problem head her list of barriers in making progress on this issue. Studies needed include those that identify family typologies and those that study the micro-processes that underlay successful interventions. Recommendations for identification stress the use of multiple measures to match ability to programs, the use of parental nomination, and the emphasis on high performance on one measure as sufficient for program participation. Essential interventions advocated include an emphasis on advanced and enriched courses, support structures such as counselors, mentors, or tutors, and a strong program leader to communicate effectively with all stakeholders.

Dr. Frank Worrell presents his research on underrepresented students of poverty in gifted programs who are academically talented and qualify for special programs at the University of California at Berkeley. These students appear to be achieving well in the program despite underachievement patterns in school that are correlated with ethnic and racial identity. Yet concerns about retention remain high as these students return to the program at only a rate of 40%, not unlike their more advantaged counterparts. While at-risk groups may have more negative factors in their profile, they tend to show great resilience and demonstrate as much hope for the future as more advantaged students. Of special importance to issues of poverty, in his view, is the research on value-added assessment, on teacher expectations, and on academic identity as providing a base for change at the practice level. Gaps in the literature include a lack of longitudinal studies, work on underachievement, and on understanding the appropriate academic dosage needed to effect positive outcomes for these learners. He notes that identification protocols should stress the use of traditional and nontraditional multiple measures that favor an inclusionary model.

Dr. Carolyn Callahan shares her research from the University of Virginia as a part of the National Research Center on the Gifted and Talented in the last chapter in this section. Findings from several studies are shared that emphasize the teacher paradox in working with children of poverty. One study reported that, while teachers were open to differentiation practices and to finding students of promise, they did not follow through in practice, especially if students needed advanced instruction in one or more areas. Teachers even resisted the notion of identifying these students as gifted. In the Advanced Placement and International Baccalaureate study, teachers were found genuinely to care about their students and to use effective techniques for their positive growth in subject areas. However, the high stakes testing environment affected the ways in which curriculum was delivered, often at a rote level of learning as opposed to providing experiences in depth, including special projects that emphasize engaged and hands-on learning opportunities, called for in recent reports on learning. Gaps she cites in the research focus on the need for better predictive validity studies of identification instruments to find students of poverty and more comprehensive studies of effective interventions that can be analyzed by variables of race, gender, poverty, and cognitive and social indices. Her suggestions for identification stress professional development of teachers as well as more performance-based measures in addition to assessments with

high technical adequacy. She stresses interventions that emphasize strategy instruction for teachers, the formation of a master adult triad of teacher, parent, and mentor, and tasks that offer creative choice.

What Works in Providing Programs and Services to Students of Poverty?

The fifth section of the monograph focuses on programs and practices that have been found effective with gifted students from poverty backgrounds, including two special federally funded Javits projects carried out in Title I schools in multiple states. These program chapters emphasize the key features of the intervention and the findings to date from related research and evaluation conducted on the implementation of these special programs.

Dr. Mary Ruth Coleman of the University of North Carolina-Chapel Hill's Frank Porter Graham Child Development Center reports on her program entitled U-STARS –PLUS, an intervention aimed at primary age children in 38 districts in five states. The program emphasizes teacher development of high-end learning opportunities, careful observation of students, looking for talent, hands-on science inquiry activities, and family involvement. Findings and lessons learned center on the role of teacher changes in their attitudes toward talent identification and development, the need for high-level curriculum, ongoing personnel preparation, and the need to build systematic capacity at all levels of the educational enterprise. Ongoing challenges include the sustainability of the project, the policies that need to be in place to continue the processes started, and the need for ongoing collaboration to ensure meaningful implementation.

Dr. Bruce Bracken of the College of William and Mary shares “a tale of two studies” that has emerged from Project Athena, a Javits-funded project implemented in seven school districts across three states. Key features of the project include the development and use of assessment tools relevant to finding and assessing the learning of students from poverty as well as the employment of specific integrated units of study in the language arts that have been designed for high-ability learners. Supplemental materials were also developed to augment reading and thinking emphases in the program. Findings from the assessment study suggest that the use of multiple, standardized measures of verbal and nonverbal ability will find many more students from poverty than district-based approaches that employ less technically adequate measures that do not assess cognitive ability directly. Moreover, the study augments other studies suggesting that nonverbal assessment can be effectively used to identify gifted

learners from underrepresented populations. Findings from the curriculum study suggest that students from all levels of ability benefit from a high-powered curriculum, carefully designed for top learners, in the general areas of reading comprehension and critical thinking and in the performance-based areas of unit study in literary analysis and persuasive writing. Lessons learned from the project emphasize the need for on-going teacher training that includes follow-up observation in classrooms and periodic discussions of implementation challenges.

Dr. Robert Gira shares descriptive data and results on the AVID (Advancement Via Individual Determination) Program, available nationwide to middle and high schools as an approach to raising achievement and aspirations of students of poverty and color. The program features three prongs: professional development for school personnel, site-based team planning and action research, and an elective class for students that focuses on accelerative curriculum experiences and structured tutorials in study skills and test taking. Studies done on AVID in eight San Diego high schools have documented program success after three years in sending more low income and minority students to college than found in comparable populations in the district. In other state studies, AVID students outperform their counterparts on high-stakes tests in relevant core subject areas and attend four-year colleges at greater rates than expected. The program is credited by many advocates with promoting school-wide reform, and enhancing the motivation, coping skills, and career awareness skills of underachieving students.

Tommie Sue Anthony of the University of Arkansas at Little Rock presents the case for Advanced Placement as a program that promotes both access and excellence for students of poverty at the secondary level. The program offers coursework in 38 subjects to secondary level students ready to do work calibrated at the freshman level in college. Promoted in half of the states through policy and in others through special regional funding, the program has increased its student participation two-fold over the past several years and has demonstrated results with more students receiving scores of 3 or higher on exams (the level deemed competitive for college placement or credit in the subject area), and more students of poverty and color attaining access to courses and higher level performance on the requisite exams. Pre-AP opportunities provide advanced course options for younger secondary students to ready them for the rigor of AP courses. Success on AP exams is being used as a proxy for grades by many colleges and universities to

judge the level of functioning of prospective students. Thus careful tracking of AP success by states provides a national portrait of rising performance as an antidote to the high rate of remedial education offered by many colleges.

Dr. Linda Brody of the Johns Hopkins University shares the work of the Center for Talented Youth (CTY) at that institution through several initiatives that address the specific needs of promising learners from poverty backgrounds. As one of four talent search centers, CTY provides myriad services to academically talented students and families including testing, commuter and residential programs, and counseling services. Outreach to students of poverty and color has emphasized providing scholarships for attendance at existing programs and special counseling, offered when CTY coordinators in major cities across the country find talented students who qualify for such support. Ongoing communication and support are hallmarks of the follow-up measures employed to keep these students connected to advanced educational opportunities. Follow-up second summer programs and mentorships are also supported by various foundations for these students.

CTY also administers the Jack Kent Cooke Foundation Young Scholars program, focused on finding talented students from poverty during the middle school years and then supplying them with the financial and educational support structures necessary for their success up to entry into college. A fulltime social worker is assigned to each scholar so that an individual plan of study can be developed and activated in concert with the student and parent. Program opportunities are carefully crafted to the student's interests and aptitudes. Counseling and guidance services are also provided. Results from the first group of scholars graduating from high school document the powerful impact on student lives and the very real-world accomplishments they have achieved as a result of these intensive ongoing personalized experiences and opportunities.

What Does This Mean for the Field of Gifted Education?

In the next section of the monograph, we summarize the key ideas brought forth from participants in the conference, highlighting both their thinking and the consensual ideas that emerged. This section offers a blueprint for action at all levels of the educational enterprise. It allows us to coalesce the thinking from the various presentations and filter it through the perspectives represented by the audience, each of whom are leaders in the field of gifted education in

different arenas. This chapter then lays out direction for the field of gifted education in the key areas of identification, interventions, transition services, and other areas of need.

What Do Participants Think?

This section of the monograph contains the submitted reflections of participants on their involvement in the conference, featuring the perceptions of different stakeholders, ranging from state-level directors of gifted education programs to university professors to local school district coordinators of programs for gifted youth. Some reflect on how they will use the data obtained; others, on the enormity of the problem, and still others, on the particularized nature of poverty.

How Do We Learn More?

The final section of the monograph contains an annotated bibliography of relevant studies on gifted students in poverty. For readers of the monograph as well as conference participants, it represents a compendium of information on these students and the educational issues that surround their talent development processes.

Section II

The Culture of Poverty in the United States

Leaving Too Many Children Behind: A Demographer's View on the Neglect of America's Youngest Children

Harold Hodgkinson

Introduction

Fellow citizens, why do you turn and scrape every stone to gather wealth, and take so little care of your children, to whom one day you must relinquish it all? - Socrates

Long before children knock on the kindergarten door—during the crucial period from birth to age five when humans learn more than during any other five-year period—forces have already been put in place that encourage some children to “shine” and fulfill their potential in school and life while other forces stunt the growth and development of children who have just as much potential. The cost to the nation in terms of talent unfulfilled and lives of promise wasted is enormous. Certainly, efforts to even the playing field from kindergarten onward are useful, but they have to begin by dealing with the deficits created in many children from birth to age five.

No common structure exists in the United States to serve all children *before* their fifth birthday, although this is the most vulnerable period in terms of the forces that can hinder or promote social, psychological, and intellectual development. Waiting until kindergarten to control these forces *is simply too late* because, at that point, they are thrust into a huge system of 15,000 school districts, 95,000 schools, over 2 million teachers, and robust structures of accreditation and quality control. A formal preschool structure is essential if we are to ensure that all children in the nation have the opportunity to fulfill their potential and truly succeed.

Using demographic data on those children captured in Census 2000—what we call the “Children’s Class of 2000”—this paper examines forces like poverty and family instability and how they work to prevent equality of opportunity in school and in life. It presents some of the programs and techniques that effectively reduce the effects of these forces and concludes with recommendations for increasing the nation’s concern for improving the quality of infant and child care and making high quality programs available for *all* infants and young children throughout the nation, as is done in virtually every other developed nation. I hope the reader will come to some understanding of why, in the wealthiest nation in the world, we invest such a pitifully small percentage of our resources *and our concern* in the early years of the people who will obviously inherit the nation—our youngest children.

Who Gets Born Every Year? The Children’s Class of 2000¹

In an average year, about 3.9 million women in the United States give birth. If we look at our “class” of almost 4 million births, we find that white females give birth to 60.8 children per 1,000 women of childbearing age; black women give birth to 62.9 children per 1,000; and Hispanic women produce 84 babies per 1,000 females of childbearing age. (Note how the population becomes more diverse ethnically through time even without immigration.) By state, Utah wins the birth game by producing 93 babies per 1,000 females of childbearing age while Maine, Vermont, and New Hampshire each produce only 50 babies. By family income, the poorest families with income under \$10,000 per year produce 73 births per 1,000 females while those who earn over \$75,000 produce only 50 babies.

Now, we have introduced our first, and most pervasive, inhibiting force in the lives of our “class”—poverty. Poverty is a universal handicap, affecting one-third of our “class” overall; but it is by no means the only factor affecting the future of our nation’s youngest citizens. The list also includes such factors as infant and child health, household income, transience, and quality of day care. So what do the demographics say about the lives—and chances—of our Children’s Class of 2000?

A. Families Into Which They Are Born

In 1999, 33% of births were to unmarried parents: 26% of white births, 68% of black births, 42% of Hispanic births, 58% of Native American births, and 5% of Asian births. This percentage is up overall from 26% in 1990. Today, due to a large increase in the number of mothers who have *never* married, the number of births to divorced and unmarried women is almost the same. For every racial/ethnic group, the child in our “class” who is being raised by a single mother is *two to three times* as likely to be raised in poverty as a child being raised by both parents.

In general, about 7% of babies have low birth weight; however, for infants born to black mothers, the proportion is 13%. That demographic has remained unchanged since 1990. Even well-educated, middle-class, black mothers produce more low birth-weight babies than the norm for all groups. Low birth weight can produce serious defects of the central nervous and immune systems, certainly qualifying as an inhibiting

¹To ensure consistency, all data in this “class” section are from the *Statistical Abstract of the United States: 2001*, the national data book of the federal government.

factor for normal, healthy infant growth. Here is *another* negative force affecting children from birth, especially black children.

About 12% of our “class” are born to teenage mothers: 10% of white births, 20% of black and Native American births, 16% of Hispanic births, and 5% of Asian births. This percentage is unchanged since 1990. Children of single or teenage mothers are subject to *multiple risks with many combinations*. Having a teen mother almost guarantees that a child will be raised in poverty; and, because the mother may not have finished high school, it is unlikely that she will read to her child, especially in infancy. It is also more likely that the language spoken in the home will not be English.

Another “new family” concerns the role of grandparents. Four million children of all ages now live with one or more grandparents, and one million children of all ages are the sole responsibility of their grandparents. An estimated 100,000 of our Children’s Class of 2000 will be living with their grandparents alone. A number of factors have created this group, such as parents who are in jail, in drug rehabilitation centers, or those who simply are not capable of raising their children. The problems of raising young children when you are 65 years old are severe—yet, for many grandparents there is no alternative.

The *Statistical Abstract of the United States, 2002*, indicates the following family types and percentages that are raising children under 18 years old: 46% of married couples; 43% of unmarried couples; 60% of single women; 22% of gay couples; and 34% of lesbian couples. Several of these categories are new for the Census (e.g., unmarried, gay, and lesbian couples), and little is known about how many children are being raised by each type. However, many teachers report an increase in the number of children being raised by same-sex parents. Nothing is known about the success of these households in raising their children—the categories are too new to have longitudinal data. In addition, a “new family” area that will be in the Children’s Class of 2000 is that of children from foreign countries who are adopted by U.S. citizens. The U.S. leads the world in the number of international adoptions, now about 20,000 each year.

This brief review of the different household conditions into which our “class” has been born shows that about one-third of them have been highly favored simply because of the family circumstances of their birth. They have done nothing to merit having the cards stacked in their favor, but they are. Another third (especially those in family situations associated with increased poverty),

through no fault of their own, have the cards stacked against them. It is true that some of the “bottom third” children will have the resiliency and stamina to become successful in school and life, and some in the “favored third” will not do well, but these are exceptions. Given these *birth conditions*, the notion of waiting *five years* to begin equalizing opportunity when our “Children’s Class of 2000” knocks on the kindergarten door seems like an absurdity.

B. The Deaths of Children

There is one group of casualties, a surprisingly large group in fact, who will never even get to the kindergarten door. Infant mortality for babies under the age of 1 was 681 deaths per 100,000 in 1998. The mortality rate drops to 31 deaths per 100,000 for children ages 1 to 4; and it drops further to 16 deaths for every 100,000 children ages 5 to 14. In the first year of life, the white infant death rate is 571 per 100,000 while the rate for black infants is an amazing 1,363 per 100,000—twice the infant death rate for all groups (i.e., 681 per 100,000). The large number of low birth-weight, black babies is a contributing factor, but that fact by itself cannot explain this very high death rate for black infants. Of our full “class,” 27,240 don’t survive their first birthday.

Even more disturbing is a study by Child Trends (reported in *The Washington Post* in December 2002) showing that the homicide rates for Americans ages 15 to 19 was 9 per 100,000 in 2000, *exactly the same rate as for infants under age 1!* Youth homicides have been decreasing for a decade and infant homicides have been increasing for 30 years. On the day of their birth, infants are *10 times* more likely to be murdered than on any other day. Babies are more likely to be killed by the mother in the first week. After the first week, the perpetrator is usually a male, often the father or stepfather. Boy babies are murdered more often than girls, usually as a consequence of shaken baby syndrome.

Why is so much visibility given to teen homicides and so little known about the killing of our most vulnerable—children under 1 year of age? One speculation is that an individual who kills or abducts a teenager is a threat to the larger society (i.e., they could hurt *us*) while the act of killing or abducting a baby raises darker issues that are often left hidden. While teen deaths are front-page news, *invisibility* surrounds the data on infanticide.

If we look at the deaths of all children from birth to age four in 1998, we find that of the 33,622 infants and toddlers who died, 2,689 died in accidents and 721 were murdered—the two leading causes of death

within that age group. Again, showing the extreme vulnerability of black, male children, their murder rate was 31.3 per 100,000 while the rate for white, male children was 8.4 per 100,000.

If we look at accidental deaths in childhood, we find a strong link to poverty. Virtually all households that have children but not telephones are in poverty-stricken and isolated areas. In Oklahoma, 15% of children have no phone at home and in New Mexico 17% are without phones. An accident can easily become a fatality if you can't dial 911 and get help. Again, household income data tell you almost everything about who will die before they can enter kindergarten. Our Children's Class of 2000 has lost thousands of members without any national concern or outcry. A majority of these 33,622 deaths could have been prevented.

C. Population Concentration: States and Diversity

Census 2000 reports 19,176,000 children under age five living in the United States; however, because Hispanics are not a "race" but an ethnic group, they are usually double-counted as whites in the total. The actual number of children in our preschool total is 15.4 million. *One-third* of them live in only four states: California (2.5 million), Florida (0.9 million), New York (1.2 million), and Texas (1.6 million). These states also represent the future in terms of ethnic diversity. The total population of California is 32.4% Hispanic (not a race, an ethnic group), 10.9% Asian, 6.7% black, 1% American Indian, 16.8% "other," and 4.7% "mixed"—for a total "nonwhite" population of 72.5%. If you add Hispanic to white, the "white" population goes to 59.5%, but that is misleading.

In a little over a decade, the total number of children in the nation under age five will show no ethnic group with a *majority* of children. The same will be true of *all* Americans before the year 2045. (The term "minority majority" makes little sense, as there are very few things to which all "minorities" would agree.) The most diverse group in the United States is our youngest children, and they will make the nation more diverse as they age. Almost 9 million young people ages 5 to 17 speak a language other than English in their home and 2.6 million of them have difficulty speaking English. For our Children's Class of 2000, we could estimate that almost one-half million are being raised in families that speak no English at home, and that at least 125,000 will need special attention in preschool and kindergarten to learn to speak and read English.

D. Population Transience: Enemy of Community

Of the 281 million people who live in the United States, 43 million move each year—the highest known migration level of any nation. Each year, 22% of our

15.4 million children under age five move to a different house: 14% within the same county, 4% within the same state but to a different county, and 4% to a different state. Low-income young children move more often than their middle-income peers. (See *Inequality at the Starting Gate* (Lee and Burkam, 2002), a new book from the Economic Policy Institute.)

This high level of transience makes it extremely difficult to provide services for a rapidly changing clientele. Eighty percent of the people who live in Pennsylvania were born there, making education and health care easier to provide since the client group is very stable. But in Florida, only 30% of the residents were born in the state. Large numbers of teachers may start and end the year with 24 students, but 22 of those 24 are different from the students they welcomed the first day of school. The same could be true for daycare centers. A daycare center in Pennsylvania will be a more stable place in terms of child and staff turnover than a similar center in Florida. Transience is a reality we cannot afford to ignore.

In a little over a decade, the total number of children in the nation under age five will show no ethnic group with a majority of children. The same will be true of all Americans before the year 2045. (The term "minority majority" makes little sense, as there are very few things to which all "minorities" would agree.) The most diverse group in the United States is our youngest children, and they will make the nation more diverse as they age.

Work, Infant and Child Care, and Preschool

In every developed nation, a majority of women are in the workforce. For our Children's Class of 2000, 75% are children who have at least one parent who works full time; 90% live in two-income households; 47% live with a single working mom; and a smaller percentage lives with single dads, 70% of whom work full time. The increasing number and percent of working mothers is generating a significant need for infant and child care for preschool children. One reason for this increase is the federal requirement that low-income mothers must work to receive anti-poverty funds. Of the 3.8 million three-year-olds in 1999, 30% were taken care of by their parents alone, 25% by relatives, and 45% by "center-based programs" including daycare centers, Head Start programs, preschools, prekindergartens, and nursery schools. Included in this group of preschools are 105,564 licensed child care center providers and 304,700 licensed family child care providers. (Remember that "preschool" is a *time frame* and not a *program*.) Some of these child care centers are located in public schools. There is no quality control for child care, so *we don't know whether these programs*

are damaging children in terms of physical, social, and intellectual development. No other developed nation would allow such an uneven hodgepodge of programs for children birth to age five. The nation *truly* is at risk.

A. Child and Infant Care and Poverty

About one-third of our black and Hispanic children are being raised in poverty while 10% of non-Hispanic whites live in poverty. However, the largest *number* of poor children are white while the highest *percentage* of poor children are black and Hispanic. Of the 14 million children ages birth to 18 living in poverty in 2000, 9 million were white and 4 million were black. Four million Hispanics were living in poverty, but were included in both white and black totals, as Hispanics are not a “race.” Regardless of race, the children in married couple families are much less likely to be poor (about 8%) while 29% of white children and 52% of black and Hispanic children who live with a single mother are likely to be poor. Almost half of these single mothers are working, usually at very low-wage jobs.

Of the 281 million people who live in the United States, 43 million move each year—the highest known migration level of any nation. Each year, 22% of our 15.4 million children under age five move to a different house: 14% within the same county, 4% within the same state but to a different county, and 4% to a different state. Low-income young children move more often than their middle-income peers.

Some federal programs provide assistance for child care for low-income families. The federal Child Care and Development Block Grant (CCDBG) provides money to the states to fund child care assistance for low-income working families and families striving to get off welfare. In FY 2002, federal funding for the CCDBG was \$4.817 billion. In addition, states are allowed to use federal funds from the Temporary Assistance for Needy Families (TANF) block grant—the welfare program—to help pay for child care assistance. In FY 2001, states spent approximately \$3.65 billion of their TANF funds on child care. Social Services Block Grant (SSBG) funds also can be used to support a wide variety of social services including child care assistance. In FY 2002, federal funding for the SSBG was \$1.7 billion of which it is estimated 5–10% was spent on child care nationally.

But even Head Start, the most documented success story in the field, has seldom been able to reach even half of eligible children. In 2000, 858,000 children were enrolled in Head Start at an average cost of \$5,951

per child. They were taken care of by 180,000 paid staff and 1.2 million volunteers. In FY 2001, funding for the program was \$6.2 billion and the program served 905,000 children, including 55,000 infants and toddlers in Early Head Start. The average cost per child was \$6,633. Programs employed 195,000 paid staff and relied on 1.35 million volunteers.

B. Very Young Children at Risk—A Summary

It is important to stress that many children in our “class” have been at risk of not achieving their full potential *from the day of their birth*, if not in utero. Figure 1 contains a list of risk factors for children that are associated with poor adult outcomes. Race is not included in this list; but, it does matter. However, the most important criterion of all, without question, is *poverty*. Most of the factors listed are related to poverty, and *all* poor children, regardless of their race/ethnicity, are at risk of not fulfilling their potential.

Figure 1. Risk Factors for Young Children

- Poverty
- Infant and child mortality
- Low birth weight
- Single Parents
- Teen mothers
- Mothers who use alcohol, tobacco, or drugs
- Transience
- Child abuse and neglect
- Lack of quality day care
- Low wage jobs for parents
- Unemployed parents
- Lack of access to health and medical care
- Low parent education levels
- Poor Nutrition
- Lack of contact with English as the primary language

The Luxembourg Income Study of 1995 (see Figure 2) showed that although the United States is the richest nation in per capita wealth, we had the highest discrepancy relative to youth poverty rates of any of the advanced industrial democratic states (28) included the study. In 2000, 16.9% of all children in the United States were poor, while only 9.7% of people over age 65 and only 11.8% of all Americans lived in poverty. The second poorest age group in the United States in 2000—after 18- to 24-year-olds at 17.3%— was our youngest citizens, at 16.9%.

It is also important to recognize that while poverty is only one of the risks that many children are exposed to, it magnifies all other risk factors. For example, one of every six children in our Children's Class of 2000 lives with at least one parent who was born *outside the United States*. These immigrant children are much more likely to be poor, to have problems with English, to have health-risk factors, and to have educational development issues. Another frequent multiple risk combination is seen in those children who are black, male, and poor; they are more likely to be enrolled in special education programs.

Why So Little National Concern for Our Youngest Children?

Given the alarming data on young children at risk, why haven't alarm bells sounded? By ignoring our youngest citizens, aren't we, as a nation, eating our seed corn? Yet, the state of our nation's youngest poor remains an "invisible issue" today. Why?

The foremost reason there is no national concern for the quality of life of our children is that most people

have no regular contact with them. Of Census 2000's 105 million households, only 34 million had children under age 18.² These children do not vote, they do not work and generate income or taxes, so they don't have a voice. They are politically invisible. But people over 65 vote more often than anyone else. They bring their concerns to national attention. That may be why, over the last three decades, we have cut the rate of elderly poverty in half while the percentage of children in poverty has grown (see Figure 3) The percentage of seniors in poverty declined from 21.6% in 1971 to 10.1% in 2001; the percent of children in poverty rose from 15.3% in 1971 to 16.3% in 2001.

A. Increasing the Concern for Very Young Children

As this is being written in early 2003, it is clear that economic decline is affecting some people far more than others. Study after study has pointed out that there is an ever-growing gap between the people in the wealthy and poor ends of the economic divide (see Figure 4). Partly because of consistently declining state revenues, several states are unable to put up the state "match" dollars required for the Child Care and

Figure 2. Child Poverty in 17 Developed Countries

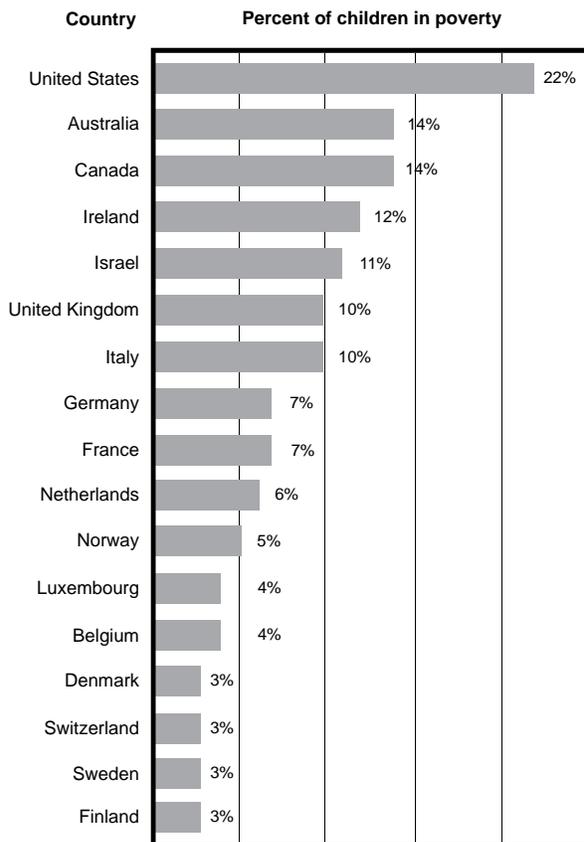
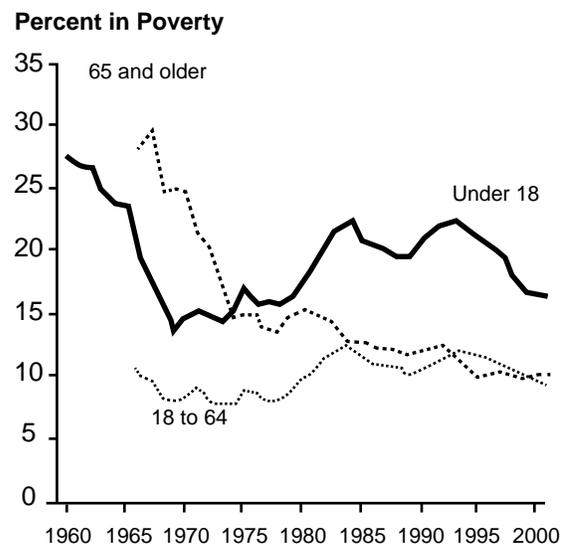


Figure 3. Poverty Rates by Age, 1959-2000



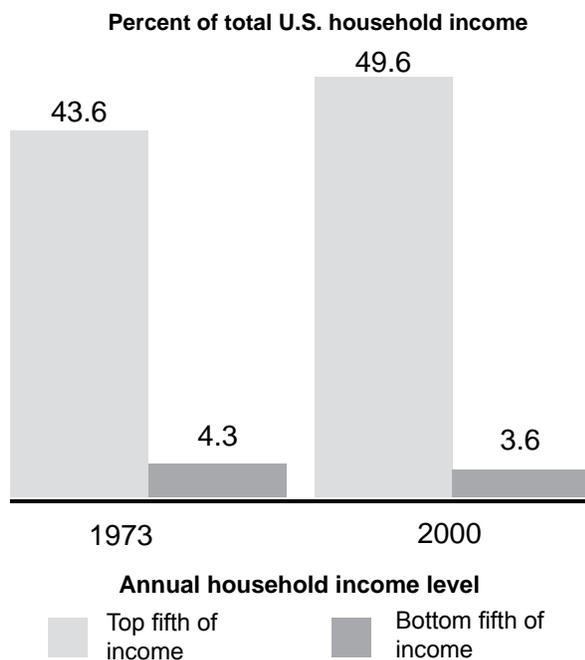
Source: U.S. Census Bureau, "Poverty Status of People by Age, Race, and Hispanic Origin: 1959 to 2000" (www.census.gov/hhes/poverty/histpov/hstpv3.html, accessed March 29, 2002)

² A "household" has one or more residents unrelated by blood or marriage; a "family" has two or more people who are related by blood or marriage

Development Block Grant funds from the federal government, thereby losing millions of dollars for child care. The kids that are getting hurt the most are those in “working poor” families whose income is just enough to make them ineligible for most state and federal poverty-based programs. There is little data on the impact on children of the millions of parents who are now unemployed. As the Children’s Defense Fund found in September 2002, the number of poor children is increasing in most states while the dollars available for all child care, from infants and toddlers to prekindergarten, are not increasing proportionately.

B. Changes in Where and How We Live—Census 2000
 Census 2000 revealed some major changes in how we organize communities into metro areas of cities and their suburbs. About one-quarter of us live in small towns and rural areas, another quarter in big cities, and about half in suburbs, although suburban residence is increasing. In the 1990 Census, cities were home to minorities, immigrants, and poor people; inner-ring suburbs housed whites, older people, blue collar workers, those with few children and little diversity; and outer rings housed the Baby Boomers and their

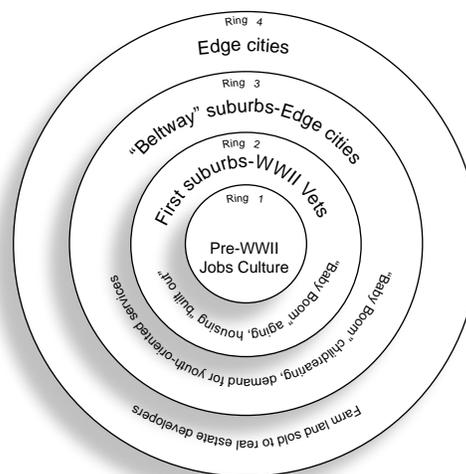
Figure 4. Total Income For Richest and Poorest Fifths of U.S. Households, 1973 and 2000



kids with high demand for youth services. The “edge cities” were places where no one ever went “downtown” and farmland was being sold to real-estate developers for future development (see Figure 5).

All that has changed now. Today, poverty, diversity, money, and education are spread through *all* rings of the metropolitan areas—city and suburbs. In many metro areas, a majority of black and Asian residents are living in the suburbs. Immigrants are joining their former countrymen in the suburbs. And downtown cities often are home to the wealthy who can afford to pay for the high priced housing, entertainment, and security. (However, these people seldom have children who will attend public school.) After decades of decline, many big cities are growing. The clean distinctions of Census 1990 are replaced with the blurring of Census 2000. As we look for very young children at the greatest risk, we can no longer look only in inner cities, we must look *everywhere*, including wealthy suburbs and rural areas. In most states while the dollars available for all child care, from infants and toddlers to prekindergarten, are not increasing proportionately.

Figure 5. Population Movement from Metropolitan Areas as of 1990



Note: A majority of jobs have been created in the suburbs. Income of city workers steadily declined compared to that of suburban workers. The typical commute is from a suburban home to a suburban job. One quarter of commuters are going from a suburban home to a “downtown” job.

C. Changes in “Race,” Changes in People—Census 2000

Census 2000 has also changed our definition of who people are by race. For the first time in our history, Census 2000 allowed people to select as many racial categories as they needed to describe their racial background. As a self-proclaimed Cablinasian, Tiger Woods alone would require four categories to describe his background (CAucasian-BLack-INDian-ASIAN)! Although we have long recognized the vast differences contained *within* categories like “Asian” or “American Indian,” we have assumed since the 1960s that a person who was “black” was *all black*. This assumption was

probably necessary to pass the civil rights legislation of the Kennedy–Johnson era. Of the 7.9 million people who said they were “mixed race” in Census 2000, 3 million were children, the highest percentage for any age group.

Given that no two consecutive Censuses have used the same racial categories, it is time to recognize that race is not science. Knowledge of race, especially black and white, is still important politically, economically, and historically, but knowledge of nationality is more useful. The European immigrants of the 1900s are now thoroughly assimilated into the national culture. Only 15% of Europeans in the United States today are Italians married to Italians, Germans to Germans, etc. Their great-grandchildren have lost almost all touch with the “old country” as *today’s* immigrants from Asia and South/ Central America are discovering with their own children and grandchildren. Blacks in the United States are not always “African American” for exactly the same reason. Haitians are a major component of the “black” population, yet they do not think of themselves as African. Race will continue to be more complex and blurred, as school leaders may have to provide for 64 racial combinations of existing U.S. Census categories to describe their students in return for federal funds!

D. Changes in Population Age—Census 2000

We are also seeing a blurring of the traditional outlooks associated with *age*. In 1900, the average American was 21 years old and was expected to live to 47. In 2000, the average American was 37 and expected to live to 78. Census 2000 discovered that 59,000 of us were over 100 and 1.4 million of us were in our 90s. The Baby Boomers, 70 million strong and born between 1946 and 1964, will live into their 80s, and a third of them will live past 85! The onset of serious chronic disease is coming later in life, meaning that the Boomers should live their 60s and even early 70s in physical and fiscal independence. Even though most Boomers claim they will keep working after age 65—not only because hard economic times will demand it, but because they like to work and don’t plan to give anything up—only time will tell.

Clearly, age 65 will not remain the economic, psychological, and geriatric watershed it has been in the past. Currently, about 13% of our citizens are over 65, but 70 million Boomers are poised on the edge. As they turn 60, then 65, their interest in youth and education may decrease. If they vote their self-interest, why would they support the expansion of Head Start and child care legislation to include all eligible children? The large concern about prescription drugs for the elderly, virtually the only health care issue with

visibility in the months before the 2002 elections, makes clear the power of the vote and the lack of interest in the health care of those who don’t vote—especially our youngest citizens.

Health Care, Nutrition, and Small Children

According to the World Health Organization (June 20, 2000) the United States ranks 24th in life expectancy and 32nd in *variation in life expectancy*. The United States spends more on health care than any other nation (14% of our GDP), yet achieves very mixed results. The major issue is economic disparity. In the United States, the richest tenth of our citizens make about six times that of the poorest tenth—the widest income discrepancy of any of the 13 nations in the Luxembourg Income Study of 2000. So our wealthy citizens can buy some of the world’s best health care, while the poorest get some of the worst—if any at all.

Census 2000 reported that the states varied greatly in the percentage of citizens with no health insurance—just under 25% in Texas and Arizona, 22% in California, and 21% in New Mexico compared with only 9% in Nebraska, Iowa, Minnesota, and Vermont. In September 2002, the Census reported an increase over 2001 in the number of Americans without health care. Among poor children, one in five had no health insurance, even though more of them were enrolled in Medicaid and their state’s Children’s Health Insurance Program (CHIP). More than one-third of Hispanic children lacked health insurance, the highest of any racial/ethnic group. Most other developed nations pay a higher tax rate for high quality, *across-the-board* health care for all citizens, especially the youngest.

The United States has implemented a large number of programs that combine health care and screening with nutrition, such as Temporary Assistance for Needy Families (TANF), mentioned earlier, and Women, Infants and Children (WIC), a feeding and nutrition program often assessed by the General Accounting Office as one of the best-run programs in the federal government. Another program, Head Start, has become famous for its educational features as well as the groundbreaking idea that a comprehensive program including health, nutrition, education, parent involvement, and social services provided the most effective strategy in helping low-income kids to do well in school and life. While Head Start is still located within Health and Human Services, not in the Department of Education, many changes are being considered that may affect both the program and its location in the future.

Our poverty indicators allow us to see its relationship with health and nutrition. The two most used poverty

measures are the Orshansky Formula, basically a “market basket” number describing the income needed to buy food for a family of a certain size, and the federal free or reduced-price lunch eligibility program used in schools. Other school meal programs like breakfast and snacks also link poverty with nutrition. Note again, that by not ensuring all our children benefit from Head Start-type programs, we are neglecting the large number of children who are very close to the poverty line.

One of the major benefits of some preschool programs is that they allow screening for a variety of health-related problems early enough that there is still time to reduce their negative effects. (One out of every 12 kids in our “class” will be in special education programs when they are in public schools, most of them screened long before they enter kindergarten.) However, once one looks beyond Head Start programs, which served 905,235 children in 2001, and Early Start, a promising program for children under age three, and looks at the rest of child care programs, which enroll more than 4 million children from infant to age four, it is harder to guarantee that *all* programs screen for health and developmental risks equally well. The lack of standards and an integrated reporting system across all centers and family-based child care programs, even with the fine efforts of the National Association for the Education of Young Children, is a major roadblock to increasing quality and decreasing damage.

A. Head Start: Half a Jewel in the Crown

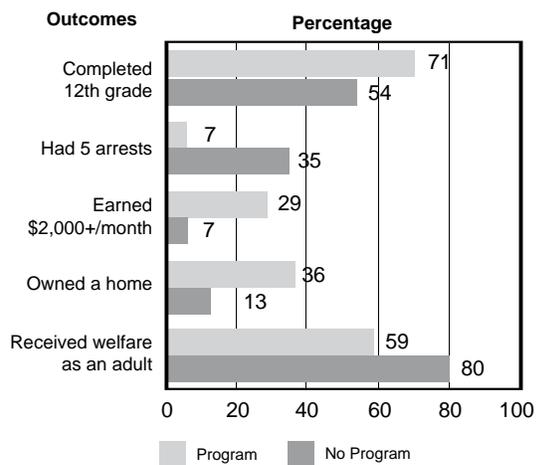
In 2000, Head Start celebrated its 35th anniversary. The genius of the program is in large part the recognition that *a variety of factors interact in the lives of young children*, and that we must deal with this combination to promote healthy intellectual, social, and emotional development in all children. This seems obvious in 2002, but it was a radical idea in 1965. The four major components of the program are health, education, parental involvement, and social services. In addition, Head Start programs work to meet local community needs and provide training and technical assistance to service providers.

Although the program was geared mainly for three- and four-year-olds, the 1994 reauthorization of Head Start, based on increasing evidence of the importance of the earliest years of life, created Early Head Start to serve pregnant women and mothers of infants and toddlers. Today, Early Head Start serves more than 55,000 children nationwide. There is early evidence of success, although only perhaps 5% of eligible children are currently being reached.

One of the reasons for Head Start’s durability is a consistent pattern of assessment of results. Gerald Bracey (2003) summarized three major evaluation studies of early childhood programs. The first study represented the work of the High Scope Foundation in Ypsilanti, Michigan. Three- and four-year-olds from low-income households were randomly assigned to either a control group or to the Perry Preschool, which is not a Head Start program but has many similarities. At age 27, the Perry Preschool cohort showed remarkable differences from the control group in educational attainment, home ownership, incarceration, and employment (see Figure 6). The second evaluation study involved the Chicago Child-Parent Center Program. When its preschoolers turned 21 in 2001, the assessment revealed results similar to the Perry Preschool study. In addition to providing evidence of the effectiveness of the preschool programs, both studies also pointed out that a dollar invested in preschool saved the taxpayer \$7 in costs for later services such as jails and drug detoxification centers.

The third study, the Abecedarian Project, was conducted by researchers at the University of North Carolina, Chapel Hill. Low-income children in this study, identified at birth, received full-day care for at least 50 weeks a year. Some stayed in the program only until age 5, others until age 8. In addition to receiving high-quality educational intervention, the children were also given iron-rich formula and were assigned to service agencies if their development was slow. Some children also were admitted to other high-quality, child-development programs. Differences in treatment given

Figure 6. High Scope/Perry Preschool Project: Major Findings at Age 27



Source: Gerald Bracey. “Investing in Preschool,” *American School Board Journal* (January 2003, pp. 32-35).

to the children yielded variable results—nevertheless, the findings still emphasized the importance of high-quality child care programs beginning in infancy.

All three projects emphasized parent participation and the linkage of personal, cognitive, and social growth—factors all closely linked to Head Start. Some recent studies have downplayed the impact of Head Start on later school performance, but because Head Start is a poverty-based program, comparisons should be made with other poor children who have *not* been in a Head Start-like program. That has not always been the case with comparative studies.

Early Head Start may or may not provide a “kicker” that will improve Head Start’s long-term impact. Overall, the evidence that high-quality education before the child’s fifth birthday can yield lifetime benefits is undebatable. We know how to do it. Why don’t we make such programs available to all? There are few federal programs in *any* agency that can support results like these, yet Head Start enrollment has usually hovered below 50% of those eligible. Thus, it is only half a jewel in the crown.

B. New Knowledge

The new, aforementioned book from the Economic Policy Institute, *Inequality at the Starting Gate*, documents that recent attempts to close the “achievement gap” in all levels of schooling are happening much too late, that disadvantaged children start *kindergarten* with the same level of disadvantage one finds later in the educational system (see Figure 7, p. 15). The book supports the pressing national need to close the gap well before children start school, providing even more support for increasing Head Start funding and programs.

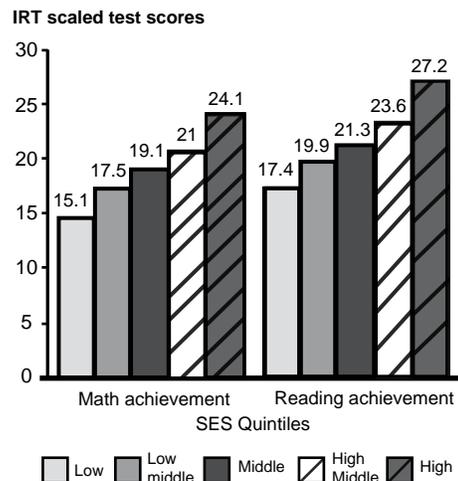
By comparing kindergarteners from the richest fifth to those from the poorest fifth they found that kindergarten children from the poorest fifth came from families that:

- Owned just 38 books compared to 108 in the top fifth
- Read to their children much less often: 63% versus 93% were read to three or more times a week
- Were much less likely to have taken their children to a museum, public library, a play, or to have them participate in dance, art, music, or crafts classes
- Spent the most hours a week watching television (18 hours versus 11 hours)
- Had only one parent (48% versus 10%)
- Had moved around more (48% of lowest fifth had lived in at least three different homes *by the time their children entered kindergarten*, while 80% of

the kids from the richest fifth had lived in only one or two homes).

While the findings are not entirely new, they support the view that the first years of life are the most important in terms of cognitive and social/emotional development. These findings should help to build support for the notion that *every child eligible for Head Start should be enrolled in a program*. The longer we wait to repair these deficits, the more we will pay and the

Figure 7. Math and Reading Achievement by Social and Economic Status (SES) at the Beginning of Kindergarten



Source: Lee, V. and D. Burkam. *Inequality at the Starting Gate*. (Washington, DC: Economic Policy Institute, 2002), p. 18.

less satisfying the results will be. In 1996, The National Association of State Boards of Education (NASBE Commentaries, 1996) asked the question, “Where is it written that education begins with the kindergarten experience? Schools must be actively involved in working with parents and their young children in the formative preschool years—envisioning programs between birth and age five as *educational components*, not as an appendage to the school’s responsibility.”

It is important to mention that some gains can be made even if the work doesn’t start until kindergarten. In October 2002, Jerry Weast, Superintendent of Schools for Montgomery County, Maryland, announced the results of a two-year study of 16,000 students in an all-day kindergarten program compared to students in half-day kindergarten programs (reported in *The Washington Post* on October 1, 2002). The full-day kindergarten program offered a longer school day, smaller class sizes, revised curriculum, and additional teacher training. The results showed major gains—mostly in early reading skills—for students at all economic levels. Low-income students in full-day

kindergarten showed the most improvement and the gap between income groups diminished. The gap between white and Asian student achievement compared to black and Hispanic student achievement also narrowed consistently. Only those with poor English skills failed to improve. Furthermore, this study thoroughly refuted the argument that middle-class students' achievement will decline if they are in school with low-income children. Of course, gains might have been even stronger if combined with a good preschool program. Quality child care programs, kindergarten, and first grade should work together.

C. Transition from Child/Day Care to Kindergarten

Many books have been written about the transition from secondary school to college, and the College Board has worked for decades to make this transition more successful for students. However, it now appears that the *most* crucial educational transition is at the other end of the age range. Just as there are prerequisites for college admission, there are prerequisite *learnings* and skills that are essential for good performance in kindergarten, including the children's social, emotional, and academic development and the parents' involvement in the education of their children. Putting your young child on the school bus for the first time can be just as intense a family adjustment as putting them in the dorm at college and driving away. It is also clear from many studies that if a child does not do well in kindergarten, it becomes less and less likely that he or she will catch up later. National Assessment of Educational Progress (NAEP) data suggests that 34% of fourth graders cannot read at even the "basic" level (reported in *Education Week's* "Quality Counts—2001" issue, January 11, 2001). Repairing this damage in fourth grade will be far more expensive and risky than guaranteeing good prereading skills in preschool and good beginning reading skills in kindergarten for *every child*.

And just as we are beginning to calibrate secondary school curricula with the college freshman year, preschool content and instruction must be linked with that in the kindergarten. We have known for some time that preschool children were capable of learning a wide variety of content. Current problems include content variation in the center-based programs that are providing preschool for most of the low-income kids who are not enrolled in Head Start programs, plus the inevitable variation in training among the 50,000 Head Start teaching staff. The latter problem stems in part from the fact that states do not require higher teacher credentials because they are not willing to pay for them. This is an issue throughout the early childhood system.

An additional problem involves the heavy preoccupation with reading and math readiness skills and abilities in the early years of schooling. While these skills are obviously important, factors that are less focused on academics, such as self-confidence, resilience, caring, emotional development, and supportive family members may be just as important. This is the theme of a recent publication, *Set for Success* (The Kauffman Early Education Exchange, 2002). Given the national preoccupation with "high-stakes testing" as the *only* measure of student, school, district, state, and perhaps national educational success, and the constant testing of those areas that are most easily measured, such as reading and math subskills, a preschool program that has also emphasized social/emotional development may be seen as "soft" or "afraid to face facts."

Although it seems overdone, elementary schools right down to kindergarten in a few cases are being assessed by student scores on NAEP, Iowa Test of Basic Skills, IQ, or the state achievement tests. (One of the hidden agendas here is that educational success will be defined by the student's ability to take standardized multiple-choice tests.) Half of the elementary schools in Fairfax County, Virginia, are evaluating their kindergartners using an 11-page report card, assessing language, reading, writing, math, science, social studies, health, movement, art, and music as well as social and emotional development. Rather than checkmarks for "sometimes," "usually," and "consistently," parents are encountering terms such as "preearly emergent," "early emergent," "emergent," and "novice." Some parents may have a hard time grasping these assessment results. They will need some help to understand the difference between seeing an "A" on their child's report card and looking at a child's stage of development, regardless of the advantage of getting a better feeling of what students are *really* learning. Unless parents are prepared for this change, the desirable shift to see learning as growth, using a *variety* of clinical and statistical measures, may not catch on.

Scholars have said for decades that any assessment should improve both teaching and learning. Most of the current testing does neither. We are eliminating a number of assessments of students because they are not easily counted. This will become a crucial issue in assessing the progress of youngsters under age 6. There is simply no "Dow Jones" in education! A test is simply a snapshot of what is really a motion picture. It is clear that the number of high school dropouts is increasing, especially in states that demand a "high stakes" test for high school graduation (Amrein and Berliner, 2003). Students who are forced to repeat a grade because of

a state test are significantly more likely to drop out. What will happen to them? Why not increase the resources available to young students who show early problems to maximize the chance of their succeeding?

D. New Program Developments

Some interesting developments in linking preschool to elementary school include Georgia's state lottery-funded *universal* preschool throughout the state—not just for low-income youth. (While Head Start is limited to children in poverty, Georgia and other states have discovered that many children who don't do well in kindergarten are not in poverty.) Although limited to four-year-olds only (for one year), the program has shown real promise. Other states are beginning to see the advantage of preschool for all, particularly since mothers of the majority of school kids work outside the home. Longitudinal studies in Georgia show great parent satisfaction with the program, although parents see the preschool as academic in nature. Research shows that a child-centered preschool approach is much more effective in producing academic work later on.

- Although it's not new, the Schools of the 21st Century (developed by Ed Zigler, of Yale University and one of the founders of Head Start) is one of the most successful models for putting together all of the factors we've discussed that contribute to the positive academic, emotional, and social development of young children. Those factors would have to include:
 - school-based programs
 - strong links between early childhood and schools
 - strong parental support and involvement
 - universal access
 - focus on children's physical, social, emotional, and intellectual development
 - strong staff training and development
 - serving working families.

The program is now offered in over 1,400 schools in a wide variety of communities across the nation. Although the core components mentioned above are always present, the program is flexible enough to maximize the program's success in the unique "fingerprint" of each community setting.

Schools of the 21st Century is a year-round service center, providing what today's families need. Open from 6 a.m. to 7 p.m., the program offers high-quality preschool programs, before- and afterschool programs for school-age kids, and even health services and guidance for parents, from third trimester of pregnancy until the child is three years old and enters preschool. Because the program is usually housed in public schools,

the "transition" issues often disappear, as preschool and school become the same place. (Of course the school principal and the 21st Century School coordinator have to be able to work together.) Because all children are able to attend, the income segregation of schools with *all* low-income or all middle-income children can be avoided. (Income segregation in a school can be worse than racial segregation, as can be seen in Title I "pull-out" programs when all the poor students stand up and leave to go to special classes.)

Conclusion: The United States Gets an "F"

Decades of research have proven that humans learn more in the first five years of life than during any other five-year period. It is also clear that children living in poverty tend to not do well in school or life and often perpetuate the poverty cycle. We also know how to reduce the development gap between low-income kids and the rest, and it must start well before children knock on the kindergarten door. Middle-income parents usually have the opportunity to enroll their children in the best preschool programs at ages three and four. Some parents stay up all night to hold a place for their child at one of the highly regarded preschools or even offer large donations to secure a spot. But the *low-income kids who need preschool the most are the least likely to be enrolled*. To enroll them all, we would have to double Head Start funding, programs, and openings. Head Start currently serves only three out of five preschool-aged children (i.e., three- and four-year-olds) in poverty, and Early Head Start reaches only 5% of poor infants and toddlers. Many more low-income children just above the poverty line are not even eligible for Head Start and lack access to state-funded pre-kindergarten programs. But if Georgia can provide pre-K for every one of its three- and four-year-olds, why can't every state?

This author has two grandchildren in Paris, both of whom attended school at ages three and four (as do all children in France). Their teachers all had master's degrees and were paid the same as elementary teachers. As education reporter John Merrow (2002) pointed out, the same could be said for England, Luxembourg, the Netherlands, Greece, Spain, Germany, but not for the United States.

A. Why Is It So Difficult for Us, Yet Easy for Other Developed Nations?

Here are a few reasons:

1. A higher percentage of our youth are living in poverty than any developed nation.
2. Other nations tend to have a centralized ministry of education. We have a "crazy quilt" of 15,000 local

school boards; uncountable county, city, and state education agencies including chief state school officers and state boards of education; and the federal government, which contributes only about 7% of education funding but lately has been issuing orders with no funds to get the jobs done. A centralized ministry is *not* a solution for us.

3. Even when programs are successful, like Schools of the 21st Century, there is no “scale-up” procedure to get from their 1,400 schools to the nation’s 54,000 elementary schools. It would be equally difficult to “scale-up” 49 states to adopt Georgia’s universal preschool program. In France, it could be done with the stroke of a pen, but here in the United States, we probably would not like being ordered around like that.

4. Only one household in four has a child in public school. For the rest of the population, the preschool issue has no direct effect on their lives.

5. With 43 million of us moving each year, it gets difficult to sustain a local or even a state campaign for universal preschool, although it would be easier in Pennsylvania than in Florida, given Pennsylvania’s less mobile population.

6. The biggest issue is the reluctance of Americans to feel any responsibility for the children of the poor—those who cannot afford to send their kids to preschool, thus sharply reducing their chances of going to college as well. Yet, to paraphrase *A Nation at Risk* (U.S. Department of Education, 1983), if we discovered a plot that would reduce the learning potential of one-fifth of our youth, we would consider it an act of war. The reality is that it actually happens every year, *at birth*.

7. There is no “silver bullet” that will immediately eliminate all the effects of poverty on a young child. Yet, we know that early health care; nutrition; parental involvement; and skilled teachers—working in small classes from a preschool curriculum that combines prereading and math with social and emotional development—can actually reduce the achievement gap, in school and life, between low- and middle-income young people. It’s complex; it takes time and resources.

8. As young people decline as a percentage of all Americans, we will have no “throw-away” kids. *All* these kids need to do well since they comprise the (smaller) workforce that will provide retirement benefits for 70 million Baby Boomers! Although a majority of Baby Boomers are white, the workforce that provides their retirement benefits will be made up of today’s and tomorrow’s children and will have no racial/ethnic majority group.

9. Although we do not know how to reduce poverty (it just seems to *happen*) there is an abundance of research on how to successfully reduce the *effects* of poverty on our youngest children. We simply don’t have the will to implement what we have learned.

Scholars have said for decades that any assessment should improve both teaching and learning. Most of the current testing does neither.

B. The Good News

On the positive side, virtually every state has sponsored *some* sort of preschool activity. However, of the 44 states that have pre-K programs, only 10 invest substantial resources (Children’s Defense Fund, 2002). Still, the issue is at least on the radar screen. School leaders are slowly becoming aware of the necessity of linking preschool, kindergarten, and first grade, although it may not happen on their watch. If Montgomery County, Maryland, is right, when low- and middle-income kids attend the same preschool, the low-income kids do very well and decrease the gap, while the middle-income kids do as well if not better than middle-income kids in settings that are not economically diverse. If Georgia is right, it is in the state’s short- and long-term interests to have *all* four-year-olds in a high-quality preschool *together*, hopefully moving down to three-year-olds as well. If 21st Century Schools supporters are right, a “community school” with preschool programs and services could easily be grafted onto an elementary school with outstanding results for students and parents. And Head Start plus Early Head Start is a package that works, but only for half of those it could benefit, and perhaps 5% of the Early Head Start children. (The President’s 2003 budget will allow no increase in the number of Head Start kids, and “upgrading” will consist of four days of prereading training for only 2,500 Head Start teachers, after which they are to somehow pass this training on to the remaining 47,500 teachers who didn’t get the training! That is *not* how we train our surgeons in new surgical procedures!)

Most important, the basic structure of a universal system of quality early care and education already exists. *Not by Chance* (Kagen & Cohen, 1997) describes the nature of quality programs, quality staff, quality parent collaboration, and financial support, with tasks for all the key players. In many ways, state leadership may be the vehicle for getting at least all low-income kids into preschool programs. A number of impressive state conferences dealing with the issue have occurred and, although state budgets have seldom looked so

lean, programs can always be cobbled together from existing budget items if the need is strong enough. The trick is to keep the issue in people's consciousness as long as possible. In addition, there are many individuals and groups concerned with this issue who never have a chance to meet others who share their concern. How could we get local, state and national leaders together to create high quality programs for *all*? We close with a list of things to be done.

Although we do not know how to reduce poverty (it just seems to happen) there is an abundance of research on how to successfully reduce the effects of poverty on our youngest children. We simply don't have the will to implement what we have learned.

Action Steps

Recommended actions include the following:

1. Fully fund Head Start
2. Provide quality, universal child care
3. Provide federal incentives to promote high-quality programs like Schools of the 21st Century
4. Promote *all-day* kindergarten
5. Pay a competitive wage to child care and daycare workers
6. Convene a national Governor's summit on this issue
7. Ensure health care and resources for *all* children
8. Promote parent education
9. Implement the recommendations in

Not by Chance.

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Section III
Multicultural Perspectives on Poverty

The Untapped Potential for Excellence

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Prologue

The reality of the numbers of children that are in poverty in this country make Mr. Hodgkins' quote from Socrates- Fellow citizens, why do you turn and scrape every stone to gather wealth and take so little care of your children, to whom one day you must relinquish all?- an important one for us ponder today. Personally, the impact of the data that show the extent of poverty in the USA and the future impact these data will have on the future affected me greatly.

These data are alarming and reflect the issue of intelligence testing and heritability which have been my concern and interest as an advocate for the gifted with a focus on minority students, especially those of the African American community, for a long time. The early development of the brain and the impact of poverty and isolation on the development of potential has been the basis for my work. A recent article citing a study that links distinctive physical changes to intelligence pointed out that environment plays an important part in the very early development of the cortex of the brain. (*Hartford Courant* Thurs, March 30, 2006, A34) In poverty situations, it is clear that children who are born with potential will be affected by poor environmental situations that limit optimal brain development. A child of poverty can have inherited the same amount of potential as a child of more advanced means, but the poor child's potential might not be recognized because his or her environmental influences did not provide the necessary nurturing.

Another aspect of Hodgkinson's presentation that caught my attention was his careful separation of race and ethnic groups from a focus on poverty. My continuing concern with the hierarchical listing of groups according to race has been expressed in my refutation of the ideas that have emerged from the writings of authors such as Jensen (1998). The data collected and analyzed as it was in the Herrnstein and Murray's book *The Bell Curve* (1994), for instance, ignored the internal and external stratification of ethnic groups. As the speaker noted, not all persons of dark brown color are African Americans. Can we trust the census data when the categories do not allow for any distinction? Increasingly the category of "other" is used by persons answering questionnaires. In Connecticut, the effort by administrators of some schools to comply with the need to have a certain percentage of Caucasian students in their schools, reclassified mixed-race students to White instead of Black. How can analysis of the data given by these schools be reliable? It is time for the politics of race and socioeconomic position to be

removed from the processes needed to give children at poverty levels a chance to accomplish the best that they can. Governmental funding and proper categorization of students according to socioeconomic levels only are both needed.

The third aspect of the Hodgkinson paper that I responded to was the ranking of the United States as the country with the highest poverty level of developed countries. Oprah Winfrey and Bill and Melinda Gates are waging a campaign to have our nation address poverty concerns. They are urging states to hire teachers and create schools that provide the best education available to diminish the effects of poverty. What have other industrialized countries done to address their poverty levels? Are there ideas we can get from them? It is amazing that a country such as ours with such a high per capita wealth resource would have such a high poverty level.

It is time for the politics of race and socioeconomic position to be removed from the processes needed to give children at poverty levels a chance to accomplish the best that they can.

Over the last two decades, much has been written about underachieving children in schools throughout the nation. Federal policy, and accompanying funding, for No Child Left Behind (NCLB) law has caused school districts with large minority populations to focus on increasing the scores of minority students. Little attention is being paid to finding and supporting the child who meets the requirements of the tests of the NCLB and is ready to move to higher levels of achievement. It appears that the emphasis is on equity of outcomes instead of placing the emphasis on having all children reach their highest potential. Although data show that the largest percentage of children living in poverty are minorities, it is a fact that a large percentage of the majority group are also living in poverty. Overlooking this fact continues to place the problems of low expectations on one group - minorities. In the case of African Americans, skin color has already been the precursor to establishing stereotypes; therefore, retrieving children from poverty MUST include all children. Teachers and planners need to adjust their attitudes about those children who are poor and also those qualities that are indicative of high academic potential.

My research over the years has focused primarily on African American children and has implored educators to look further than traditional IQ scores to discover the "diamonds" in their classes. The area caus

ing the most angst among decision-makers is that of identification. Scott, Deuel, Jen-Francois, and Urbano (1996) point out that “in the United States of America, children from culturally different and/or low socioeconomic environments constitute a growing percentage of all students, yet assessment tools that effectively evaluate their academic potential are lacking” (p. 147).

My personal efforts in this area have included a system that I thought would help find those students who were being marginalized due to the IQ score requirement for entry. This idea germinated out of the experiences that I had as a teacher of the first class of African American gifted students in Alabama. These students who had IQ scores from 100 to 180 and an enriched learning environment, caused many doubters to adjust their opinions. The Baldwin Identification Matrix (Baldwin, 1984), was developed and used by school districts that were trying to find ways to include minority students. Reports from school districts and groups that used it (Blackshear, 1979; Dabney, 1983) indicated that the highest contributors to the selection process were nominations from peers, parents, and teachers. At the next level of analysis, it was found that peer nominations, mathematics, and parent nominations were the items most predictive of entry into programs for the gifted. Among the children identified as gifted using the matrix system, it was found after four years of observation that high levels of leadership skills appeared to be predictive of success both in the program and in college entrance requirements.

There are some assumptions that must be made regarding the students on whom we are focusing - their potential for high promise and concomitant socio/economic status. These assumptions should be considered as an important part of attitude adjustment.

They are:

- Giftedness expressed in one dimension is just as important as giftedness expressed in another.
- Giftedness can be expressed through a variety of behaviors.
- Giftedness in any area can be a clue to the presence of potential giftedness in another area, or a catalyst for the development of giftedness in another area.
- A total ability profile is crucial in the educational planning for the gifted child.
- Carefully planned subjective assessment techniques can be used effectively in combination with objective assessment techniques.
- All populations have gifted children who exhibit behaviors that are indicative of giftedness.

These assumptions should be kept in mind as procedures for developing programs that provide an equal opportunity for students of all economic and ethnic backgrounds to develop their potential abilities.

Hébert and Beardsley's (2001) case study of a rural Black male who overcame the inhibiting factors in his environment indicated how rural poverty could have a debilitating influence on students. In spite of these obstacles, students who grow up in impoverished backgrounds often display the ability to rise above these circumstances. The important element in the rise above circumstances is the strong support of a mentor, parents, and the community. These children can and must be salvaged from the limitations of their environments.

Some recommendations that are necessary to consider in addressing the needs of poor talented students from diverse backgrounds include the following:

1. There should be a media blitz throughout the nation that will draw attention to the poverty crisis and its effect on the next generation. This could include a mailing campaign to legislators at the federal and state levels, to consider plans for tax disbursements for education that are not dependent upon the local wealth of a district.
2. Consideration should be given to modeling early Head Start programs after the work done by currently successful programs included in this discussion. Dr. Merle Karnes (1984) was a pioneer in such programs. Her model included regular work with the parents of children who would be eligible for Head Start. Parents were given information on how to stimulate the innate abilities of children and health care information on nutrition.
3. There should be a provision for pre-kindergarten schools with qualified teachers similar to the French system, where children officially begin their education at ages two and three. There should also be a certification program for teachers of these classes.
4. Diversity training that will help teachers become sensitive to students from different cultures that might be in their classes should be included in teacher education programs. This training should also enable teachers to incorporate multiculturalism and knowledge about different representations of abilities into their curriculum and instruction and knowledge about different representations of abilities.
5. Administrators should be encouraged to cooperatively create an environment for change and growth by providing articulation opportunities for teachers and students.
6. Planned programs during and after school hours designed to focus attention on strengths as well as weaknesses that reflect the populations being served are

needed. Instruction must take into consideration the different learning styles of students and include problem-solving activities that tap creative potential. Further, the evaluation of processes, both formative and summative involved in the delivery of appropriate educational needs to students in all educational settings must be carried out.

7. There should be family and community involvement in planned programs.

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The Plight of the Culturally Diverse Student from Poverty

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The focus of this paper is on children from nondominant ethnic groups, whose plight—especially for Blacks and Hispanics—has not significantly improved in programs for the gifted over the last thirty years (Kitano, 2006) and who are still overrepresented in programs for special education even after the issue was raised over forty years ago (Harry & Klingner, 2006).

That does not mean that I will fail to acknowledge the considerable contribution that one of my favorite authors, Hal Hodgkinson, made to this conference's proceedings. The emphasis of his work, particularly on the consequences of the first five years of life, cannot be denied. It is just that the work of the school in the pre-kindergarten and kindergarten years—and in the years thereafter, for that matter—have been so thoroughly misguided that the brightest of the culturally or linguistically different (C/LD) gifted children have mostly been unidentified, under-identified, or misidentified; and those that have been selected or identified for programs of the gifted and talented (GT) have mostly been underserved, misserved, or deracinated, while others have elected to drop out of such gifted programs altogether. These conditions require me to posit a possible solution to the continuing problems that Black and Hispanic and other C/LD gifted children still suffer in public and private schools in this country.

Identification for Gifted Programs

When it comes to finding, nominating, testing, and selecting C/LD children for the gifted program, many educators have developed a lack of faith in the educational process to produce extraordinary outcomes. Two current examples:

- a Hmong child who would not be nominated by a teacher who loved dogs;
- a Moslem male adolescent who would not be nominated by a female teacher because he held very traditional views about women.

The continuous belief—part of the educational institutional culture, actually—about the cultures that C/LD children and their parents represent, assumes they are inherently inferior morally, physically, psychologically, educationally, artistically, and/or motivationally. Dr. Hodgkinson's paper describes some of their conditions of desperation very well. Among the common teachers' complaints: These children are too undereducated for their age; they are inarticulate (monolinguals), don't speak either language well (bilinguals); they can't seem to be tested with our

instruments; the parents are afraid to come to school; it is difficult to motivate these children. What is also very important, the children and their parents do not at first seem very physically attractive nor do they appear to move or dress in very pleasing ways. They are too quiet, too awkward, too shy, too frank, too big, too aggressive, too rough, too "hyper," too "laid back," and some even have peculiar body odors. They are too short, too tall, too skinny, too fat, too dark, too tattooed; they may have too many body piercings or strange hairdos. What is more, we as gifted educators who read the popular gifted literature expect that they suffer from the same problems that White children present, such as complexes from being too heavy or the typical "deprivation" of coming from a large family.

Today, there are proponents of gifted education who advocate that we only pay attention to formal, test-based qualifications for admission to GT programs. Some, in fact, would have us look as narrowly as possible at one test-based criterion, the IQ, as have the parents who have recently berated the New York City Director of Gifted and Enrichment Programs for wanting to broaden the criteria for screening children through the use of multiple indicators (*CEC SmartBrief*, March 22, 2006). Clearly these individuals have not examined the number of "furloughs" that subsequent experience has required gifted programs to make for children admitted under such narrow criteria! One wonders if such a stance is not intended to keep gifted programs White. If we were to consider other factors, like social intelligence or creativity, or personality factors, like maturity, then even we might have to pay attention to parents—even to C/LD parents—as important sources of information on other types of performances. Who knows, we might even find that the child who serves as the translator for the immigrant parents discussing the nomination of a child to the gifted program is the very one who should be nominated (Valdés, 2003)!

When it comes to finding, nominating, testing, and selecting C/LD children for the gifted program, many educators have developed a lack of faith in the educational process to produce extraordinary outcomes.

All of the above tells me that these gifted educators have an insufficient grasp of their own culture, of what it means to be White or to be a part of a White-dominated institution, the school. These teachers really need to learn not to educate C/LD children as their special mission in life. Unfortunately, these teachers nominate only those C/LD who are already very

acculturated (Masten & Plata, 2000¹), and these are often the ones who do least well academically in the long run (Valenzuela, 1999), which serves to reinforce the negative stereotypes.

What many White teachers need to learn is how to *see*, how to *assess what they see*, and how to *educate without deracinating the C/LD child*. They must have the *only* acceptable reason to *want* to educate these children, namely because they actually *like* them, because they have come to see them with other eyes. Just as the really good White teachers see the ugliness of White children but look beyond it because they also see the compensating goodness inherent in each of them, so must they learn to see C/LD children in the same way, else the C/LD children will never be accepted on their own terms but will always be compared to White children.

All of the above tells me that factors of ignorance serve to block both *access* to gifted programs for these children and *equity* in their education *even if* they happen to be selected for the program. For equity to happen, their teachers must genuinely like and come to know them.

Curriculum/Education

The proper education of gifted children who are culturally and linguistically diverse (C/LD) children is not easy. It requires the acquisition of a personal multicultural perspective followed by the acquisition of a professional multicultural perspective so that every major topic that the teacher introduces into the classroom is enriched and magnified by other cultural perspectives (current or historical, American minority, or international). Science teachers and mathematics teachers are not exempted from this process; as it is not the exclusive domain of the social studies and the literature/reading teachers. However, until this is done, until we discover and convey to the C/LD gifted students that they have worthwhile philosophical, intellectual, moral, spiritual, artistic, and literary traditions, we will have our own American version of the Iron Curtain, not because of censorship, but because simple ignorance has kept both the next generation of White and C/LD GT children *alike* from profiting from the best education we might provide them (Nieto, 2000).

We can talk about the moral virtues of multicultural education and of the cognitive advantages of dual-language education, as has been done many times in the past, but fundamentally four conditions need to be met if we are ever going to provide quality education to all of the gifted children in our multicultural society.

We must first realize that merely modernizing our identification processes will not suffice, for it is not sufficient to *admit* more C/LD children to the gifted program if we then deracinate them in the process of educating them. The psychological and social costs to many of these children are simply too great to sustain, ethically and morally.

Second, we must understand that some new teachers and many older teachers working by themselves or attending a few workshops will have a real stretch to become sufficiently multicultural unless they make a substantial effort beyond the few hours of training per year required in most states to get their gifted endorsement. Many teachers coming through teacher education programs today have been spared the experience of segregation, but certainly not all.

Who knows, we might even find that the child who serves as the translator for the immigrant parents discussing the nomination of a child to the gifted program is the very one who should be nominated (Valdés, 2003)!

They will have to learn the contributions of other ethnic groups historically and other ethnic groups within the U. S. contemporaneously to be able to teach their disciplines in a multicultural manner. How will teachers do this? On the one hand, teachers can learn a little at a time. Both elementary and secondary teachers can organize, with the help of their staff development specialists, to gain knowledge on the fast track and in different fields. On the other hand, they can count on their students to provide some of the learning for them. Students can share family and cultural lore and can find interesting data on the Internet. But in every case teachers can be expected to behave like professionals and not hide, as one participant put it, by reacting in a manner that comes naturally. People who react “naturally” are laypersons, not educators.

Third and most importantly, teachers will have to come to *like* the various C/LD children with whom they work! This is perhaps the most difficult hurdle of all, especially since some C/LD children *want* to acculturate. It is the one who wants to *maintain* her/his ethnic identity or who wants to *biculturalize* who must become the touchstone of our actions. Learning to care about all gifted children, and therefore to educate and guide them lovingly and firmly with *their* best interests in mind is what is demanded here. Teaching English to a smart Serb-speaking child who would rather forget Serbian is relatively easy; it is a much more delicate issue to explore with the child the

¹ Masten & Plata also found that frequently used rating scales tend to select only acculturated Hispanic students.

option to become bilingual, to maintain some part of an ethnic identity and a linguistic relationship with her/his family into adulthood, and to decide at a more mature age whether to acculturate, instead of having to do so by default, because the decision was made too early and perhaps too eagerly.

Finally, the whole enterprise will become infinitely easier to accomplish if we first take the step of preparing more C/LD teachers of color to place in our gifted programs, particularly on campuses where the majority of students are White. We can start with one or two, but then we can consider offering an option within gifted education, such as the dual-language option, if we have set the groundwork effectively on a campus or two.

In any case, once the gifted program faculty gets integrated, many of the problems currently seen as insurmountable in identification are likely to disappear quickly (Bernal, 2002), and the issues of finding multicultural materials in mathematics and biology will not seem so difficult. The physics teacher may find American Blacks who have contributed to the sciences, and even the “pure” Spanish instructor may discover Sandra Cisneros or Carmen Tafolla, American authors of “quality” Spanish literature (and English literature, for that matter). Meanwhile, gifted children will wrap their minds around such diverse topics as alternative forms of democracy practiced in America by certain indigenous tribes *before* the time of Columbus; why we in the Western world might never have heard of the most prominent Ancient Greeks if it were not for the Moslems; when the Mayas invented the zero; how slavery works economically, how it worked for different groups in history, and what it does to the enslaved; how cultures shape our tastes and how these tastes change over time and why, are all educational issues that would not be possible without teacher expertise in multicultural perspectives.

Maybe then we can have a gifted program that can model as well as produce the kinds of critical thinking that will ensure the rigor that gifted education presently only dreams about, that it presently only finds in rigid prescriptions about *what* not *how* to study and *whose perspectives* to bring to bear (Ford, 1999).

Summary

To make a difference in the identification of C/LD children into the gifted program, which is to say, to broaden the selection of C/LD children proffered placement in the gifted program, and to retain these children in equitable proportions, a multicultural gifted curriculum must be offered to all gifted students, not just those who are C/LD, since this will ensure a

rigorous gifted program beyond what can be achieved now and will make possible the eventual solution of some of the perennial social problems that have beset the United States and affected our schools.

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To accomplish this realistically, more teachers of color will have to be hired to teach the gifted and to help train their White counterparts in multicultural education. Some may also be able to offer special gifted options for all gifted students as well, such as dual-language immersion programs (as opposed to modern or “foreign” language classes) (Bernal, 2002). The inclusion of more diverse teachers will also make inclusion of a greater diversity of parents easier to accomplish.

The most important point to be made, however, is that the inclusion of more diverse teachers may also precipitate a greater liking for more diverse students and parents. Getting the teachers in the gifted program to see the culturally and linguistically diverse gifted student with different eyes is *really* what it is all about!

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Poverty, Diversity, and Promise

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Poverty. Oh it's the absolute truth. It had to do more with the impact on your self-concept. I wore hand-me-down clothes. . . It was a struggle just to look nice every day. You look at folks, and I knew I was smarter than they were, but they had so much more. That was probably one of the biggest obstacles, along with favoritism toward young women with long hair and light skin.

First off it was my mother [who encouraged me] and the fact that she thought education was important and then she instilled that in us. Secondly it had to be my aunt and uncle who valued that and wanted it. And thirdly it had to have been my teachers. Their expectations were high. They were very strict. They demanded a lot. They gave you a lot of love. You knew that they really cared about you. Even when they being what we call 'mean.' They were my role models.

These quotes come from a participant in a study of gifted women of color (Kitano, 1998, p. 273) as she recalled obstacles and supporting factors during her high school years. Her words capture the emotional impact of poverty on a gifted adolescent's life, the additional influence of race in her perceptions, and the power of family and teachers to promote success despite the odds.

Currently, I work with Open Gate (Fox, 2001), a partnership between a large urban school district and a private philanthropic organization dedicated to supporting the school achievement of gifted culturally and linguistically diverse elementary-age children who qualify for free or reduced lunch. Our evaluation of program outcomes (Kitano & Lewis, 2006) suggests that three years of academic and social services interventions support group achievement, yet that some individual students continue to underachieve.

I appreciate the opportunity to share what I have learned from these and other experiences (e.g.,

directing a preschool program for gifted children) about developing potential among children and youth from economically impoverished backgrounds. My perspectives also reflect personal experience, having myself grown up with economic challenges. What I've learned is that schools, families, and communities can have significant influence on poor children's academic achievement and adult outcomes, and that comprehensive, intensive, early intervention will be required for poor students with multiple risk factors.

Heterogeneity

One feature of children who live in poverty that may account for differences in academic outcomes is the heterogeneity of this population in terms of both external circumstances and personal characteristics. Poor children constitute a highly diverse group with respect to the severity, timing, and duration of poverty; race, ethnicity, and primary language; country of origin; geographic region; mobility; family structure (e.g., single or teen parent, foster care); parental employment status; and parental level of education. The National Center for Children in Poverty (Douglas-Hall & Koball, 2006; Fass & Cauthen, 2005) describes three levels of severity (see Table below).

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Severity, duration, and timing of poverty are critical variables in determining effects on cognition, with extreme poverty throughout the first four years of life significantly depressing IQ test scores (Duncan & Brooks-Gunn, 2000). Low English skills, homelessness, neglect or abuse, parental unavailability (e.g., through depression or substance abuse), lack of access to health care or adequate nutrition, and having special learning needs constitute additional risk factors. Economic segregation in high-poverty

Level	Definition	Annual Income	Percent of 73 Million U.S. Children
Low- Income	Family income two times the Federal Poverty Level	\$40,000 for a family of four	About 22% or 16 million
Child Poverty	Family income below the Federal Poverty Level	\$20,000 for a family of four	About 11% or 8 million
Extreme Child Poverty	Family income below half the Federal Poverty Level	\$10,000 for a family of four	About 7% or 5 million

schools also increases risk for underachievement (Orfield & Lee, 2005).

Using the above definitions, between 35 and 39 percent of poor and low-income children are White (Douglas-Hall & Koball, 2006; Fass & Cauthen, 2005). Being Black, Latino, or of immigrant parents increases a child's chances of being poor; 33% of Black children live in poverty, 28% of Latino children, and 26% of children of immigrants compared to 10% of White children (Fass & Cauthen, 2005). Having a primary language other than English compounds the effects of poverty on achievement. The majority of children in low-income and poor families are children of color who face the additional burden of racial discrimination. Steele (2003) suggests that stereotype threat, which can depress test performance of students of color, is especially salient for those who are highly motivated.

The critical effects of poverty during the early years suggests the need for universal infant and preschool programs (Hodgkinson, 2003). Given the range of individual differences within children and families of poverty, one model (e.g., Early Head Start) may not be effective for all, including those with multiple risk factors (Knitzer & Lefkowitz, 2006), those with fewer risk factors, and those with advanced knowledge and skills. Intervention studies should detail participants' income levels, ethnic and language backgrounds, family structure, and beginning knowledge and skill levels, and, where possible, disaggregate data along these variables.

Challenges and Opportunities for Promising Children of Poverty

Challenges in serving promising children of poverty include voluntary under-participation in programs for the gifted following identification, resources for educational and non-educational needs, special needs of persistent English learners, and policy-related structural issues. Despite these obstacles, intervention studies and literature on promising practices support the conviction that we can improve outcomes for children of promising children of poverty.

I work with San Diego City Schools, a large urban district serving 133,000 students, of whom three-fourths are students of color. Over a quarter (27.5%) are English learners, 53.5% qualify for free or reduced price meals, and 71.7% participate in federal Title I or state compensatory education programs. About 22,500 (16.5%) are identified gifted and talented. The district's most recent Gifted and Talented Education Program (GATE) Program Evaluation report (San Diego City Schools, 2005) indicated that approximately one in three students identified as gifted did not subsequently

enroll in a gifted program, and that non-participants were more likely to qualify for free or reduced lunch (35.1% of non-participants vs. 25.0% of participants). One structural barrier concerns the availability of gifted programs in schools serving low-income neighborhoods. Informal interviews with parents and families of non-participants suggest a range of reasons, including a desire to keep children (especially young girls) in the neighborhood school, satisfaction with the current program, concern about undue pressure, communication barriers, conflicting advice from school personnel, and lack of accommodations for disabilities.

A family's decision to decline opportunities for a student to participate in programs for the gifted may result in lower achievement. Programs designed specifically for children from economically disadvantaged families can enhance learning and life circumstances. For example, Open Gate provides students with tutoring in reading from third- through fifth-grade, extra field trips and materials, transportation, and parent programs as well as a variety of social services based on need. The district evaluation report concluded that students in Open Gate classrooms "generally outperformed" similarly qualified students served by regular gifted programs in the same schools. Our investigation of reading strategies employed by Open Gate tutors (Kitano & Lewis, 2006) suggests that tutoring in decoding and higher level reading comprehension strategies supported gains in reading fluency. Unfortunately, tutoring, transportation, and social services are not currently supported by district funding and require partnership with a private foundation.

With special programs, some students make moderate to significant improvement, and some make little progress. Based on individual Open Gate cases, what appears to make a difference between high achieving and underachieving gifted poor children is the presence of multiple risk factors, including undiagnosed disabilities and an unstable environment (e.g., incarcerated parent, family violence, gang violence). Children with multiple risk factors require a broadened conception of education, with schools that provide a range of health and social services for children and their families (Mathis, 2005).

Many gifted English learners make rapid progress in acquiring conversational and academic English (Bernal, 2005). Our data suggest that those who continue English learner status into fifth grade appear to need interventions other than tutoring to improve reading achievement and may benefit from earlier identification, evaluation, and services. For gifted

students from culturally and linguistically diverse backgrounds, delayed development of English fluency relative to gifted peers may signal a need for early and extensive intervention.

Based on their analysis of the National Assessment of Educational Progress (NAEP) data, the Education Trust (Haycock, 2006) urges continued access to interventions and opportunities throughout the high school years. The data indicate that student achievement in most subject areas is improving in elementary and middle schools but declining in high schools. Lower expectations, less challenging curricula, and policies that result in low-income and students of color receiving fewer resources contribute to declining high school scores.

Nevertheless, there are children and youth from poor families who succeed. Duncan and Brooks-Gunn (2000) describe as mitigating factors a home environment characterized by warmth and stability of mother-child interactions and opportunities for learning (e.g., books and an adult who reads with the child); quality of care outside the home; and a neighborhood with resources for children and youth (e.g., parks, sports venues, and after school programs). These findings give support to recommendations for early training in parenting and community support.

Successful programs have high and clear goals for student learning, frequent assessment, a rich and rigorous curriculum articulated with standards at all levels of schooling, and strategic deployment of human and fiscal resources.

Some schools and districts across the country are demonstrating both increased achievement among all groups of students as well as narrowing or closing the achievement gap (Haycock, 2006). Schools effective in raising the achievement of culturally diverse, low-income students point to the need for teachers (1) who are experts in subject matter and pedagogy, (2) who understand the experiences of children and youth who live in poverty, and (3) who hold high expectations for their achievement (Gehrke, 2005). Successful programs have high and clear goals for student learning, frequent assessment, a rich and rigorous curriculum articulated with standards at all levels of schooling, and strategic deployment of human and fiscal resources (Education Trust, 2003a, 2003b; Haycock, 2006).

A promising well-studied personal characteristic associated with positive outcomes among children in poverty is resilience as operationalized by employing effective coping strategies. Our studies on gifted women from a U.S. (Kitano, 1994/1995) and international sample (Kitano & Perkins, 1996) identified a number

of positive, culturally related coping strategies that participants used to overcome an array of hardships such as limited resources, poor English vocabulary, dysfunctional family situations, and discrimination. Coping strategies for discrimination variously employed by Black, Latino, and Asian women in our study of gifted American women included armoring, ignoring, working harder, “showing them,” persisting, reframing, and confronting. Families appeared to teach these strategies either explicitly or implicitly, through family stories. A number of experts in resilience suggest that teaching for the development of self-efficacy and coping strategies can enhance the life success of children and youth at risk (Kitano & Lewis, 2005).

Schools effective in raising the achievement of culturally diverse, low-income students point to the need for teachers (1) who are experts in subject matter and pedagogy, (2) who understand the experiences of children and youth who live in poverty, and (3) who hold high expectations for their achievement

Advice to Those Who Work with Culturally Diverse, Low-Income Students

The literature suggests several interventions for supporting short and long-term success of culturally diverse, low-income students.

1. Universal access to high quality early childhood programs (Hodgkinson, 2003), not necessarily Head Start, should intervene in the lives of the most vulnerable children--those who face extreme poverty in the first four years of life. Programs should provide a challenging multicultural curriculum (Wang, Haertel, & Walberg, 1998) as well as early literacy development, opportunities for expanding and pursuing interests, and support for critical and creative thinking. Health and social services and guidance on parenting would help address multiple risk factors. Frequent, criterion-referenced, curriculum-based assessment is especially beneficial in the early years given within-group and within-child variability in background knowledge and skills.
2. Studies of effective programs suggest the need for preparation of teachers for infant to adult programs who are content and pedagogy experts, understand the experiences of children and youth who live in poverty, and hold high expectations for their achievement (Gehrke, 2005).
3. Development staff (or administrators) should seek public and private support for needs not typically addressed by public school funds, such as field trips to build background knowledge and experience, tutoring, translators for parent participation, support

for family emergencies (medical, housing, legal) to keep children in school, and workshops for parents on types of programs and scholarships available and how to complete financial aid applications (Fox, 2001).

4. The relationship between reading competence and resilience (Werner, 2000) argues the need for primary and English language development and early identification of and intervention for language-related disabilities.

5. Research supports the positive effects of out-of-school activities on educational attainment for students living in poverty (Olszewski-Kubilius & Lee, 2004). High quality after-school, Saturday, and summer programs offer physical and emotional safety as well as opportunities for intellectual challenge.

6. School and out-of-school curricula can integrate positive coping strategies, self-efficacy development, and a strong achievement-related ethnic identity (Kitano & Lewis, 2005).

Working together, the school curriculum, families, and communities can enable positive, culturally consonant coping strategies and enhance self-efficacy in ways that acknowledge social realities while building the competence to overcome them.

In short, the theoretical and growing empirical literature provides direction for programs dedicated to improving the school achievement of promising children of poverty: frequent curriculum-based assessment, challenging multicultural curriculum matched with assessment results, high standards and expectations with support for meeting the standards, and additional interventions targeting multiple risk factors, including English language development. Working together, the school curriculum, families, and communities can enable positive, culturally consonant coping strategies and enhance self-efficacy in ways that acknowledge social realities while building the competence to overcome them.

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Section IV

*What Do We Know About Promising
Students of Poverty?*

Diamonds in the Rough: Recognizing and Meeting the Needs of Gifted Children from Low SES Backgrounds

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I am honored to have been invited to contribute to the discussions and writings on assessing and serving gifted and talented students who live in poverty. I applaud the National Association for Gifted Children, the College of William and Mary, and the Jack Kent Cooke Foundation for having the interest, commitment, and vision to hold a conference and to publish its proceedings. Leaders and organizers of the project clearly recognize that gifts and talents must not be defined or dictated by socioeconomic status and other variables that negatively affect one's quality of life.

In this paper, I attempt to shed light on several topics germane to this population in the context of gifted education. The first section focuses on the context, providing the background and rationale; why must educators give greater attention to this student population? The second section focuses on key issues and barriers to identifying or assessing gifts and talents among low socioeconomic status (SES) students; the final section focuses on recommendations for more effectively assessing and serving these students. Because a disproportionate percentage of Black and Latino students live in poverty, issues of race and culture are discussed, where appropriate.

Background and Rationale

Several years ago, while teaching an introductory course on gifted education, a female student expressed concern that few of the assigned readings and little in her literature searches discussed giftedness among low SES students. I recall referring her to the works of Howard Spicker who focused extensively on gifted students in rural areas. But she wanted more, arguing, persuasively so, that, while many rural areas are economically disadvantaged, rural poverty may not be the same as urban or inner city poverty. Thus she questioned whether findings about rural poverty were applicable to urban contexts. It was also discussed that "rural" is often a proxy for low SES White students and "urban" is often a proxy for low SES Black students and, now, increasingly with low SES Latino students.

I took her concerns as legitimate and was challenged to find articles, studies more so than literature reviews, on gifted low SES students. The search was labor intensive because so little had been – and has been – published on this student population. Ironically, a vast body of research exists on poverty and achievement, but work on gifted students in poverty is scant. Unfortunately, there has not been a consistent, proactive voice for low SES gifted students. For those who are not familiar

with the field of gifted education and the goals of the Javits Act of 1988, for example, low SES students might be viewed as the proverbial "stepchildren" of gifted education.

"Outsiders" reading our work in gifted education might readily conclude that scholars in gifted education are blind to the powerful impact of SES on one's opportunity to develop and then nurture gifts and talents. In other words, children living in high SES environments have qualitatively and quantitatively more opportunities to develop their gifts and talents than other children (U.S. Department of Education, 1993). A litany of studies reveals that SES definitely matters (e.g., Rothstein, 2004; Wilson, 2000). For example, the longitudinal work of Hart and Risley (1995) illustrated that higher SES families talked more with their children, used more sophisticated language with their children, and exposed them to more educational learning experiences than low SES families. By the age of three, the children's IQ scores varied from 79 (low SES) to 117 (high SES). In a different study, Smith, Constantino, and Krashen (1997) focused on access to literature in the homes and schools of three California communities. Students in Beverly Hills had an average of 199 books in their homes and an average of 392 in their teachers' classroom libraries. Conversely, students in Watts had an average of .4 books in their homes and Compton had 2.7. Equally troubling, teachers had few books in their classroom libraries, 54 and 47, respectively. The federal government has found similar results in large-scale studies comparing race, SES and literature or literacy access (U.S.D.E., 1998).

The gap in academic achievement between White, middle-class students and their minority and lower-class counterparts is widely recognized as one of the most significant challenges facing educators and families (e.g., Rothstein, 2004; Wilson, 2000). The toll that poverty takes on students' academic achievement is clear and will not be repeated here. There are always exceptions, but there is, indeed, a strong and negative correlation between poverty and school achievement – the greater the poverty, the lower the academic achievement (e.g., Eamon, 2002).

What are the implications for gifted education? According to the U.S. Department of Education (1993), students whose income was in the top quartile represented 47% of those identified as gifted, compared to 9% of students in the bottom quartile. Further, as will be discussed next, low SES students are less likely to have access to rigorous curricula, including AP classes

and college preparatory work, and are more likely to be in remedial classes.

Low SES Students: Access and Opportunity Stifled

The inequalities of children’s cognitive ability are substantial right from “the starting gate.” Disadvantaged children start kindergarten with significantly lower cognitive skills than their more advantaged counterparts. These same disadvantaged children are then laced in low-resource schools, magnifying the initial inequality (Lee & Burkham, 2002, p. 1).

Most reports on low SES and gifted students seem to center attention on students at the secondary level, specifically high school. At this grade level, attention targets participation in AP classes in particular. The findings suggest that there is an “opportunity gap” between low SES students and others:

- African Americans and Latinos were almost twice as likely as White students to be in a remedial mathematics class;
- Low SES students were more than twice as likely as high SES students to be in a remedial mathematics class;
- Nearly 50% of high SES students reported attending algebra or advanced classes, compared with 28% of middle SES students and only 15% of low SES students;
- High SES students were more likely than low SES students to report conducting experiments in science classes daily (19% vs. 9%) (NCES, 1992).

More recently, a report by the Gates Education Foundation (2003) found that only 28% of low SES students are enrolled in college preparation classes, compared to 49% of middle SES students and 65% of high SES students.

What factors contribute to these unacceptable conditions of under-representation in gifted education classes, AP, and other rigorous classes? Influences and

motivations for all kinds of children’s behavior, including study habits and personal academic development, come not only from their peers, but also from their parents, teachers, and others with whom they come into close contact (Johnson, 2000, p. 2). Hence, in addition to lack of resources and less access to rigorous learning experiences, expectations – from educators, families, peers and students – themselves lie at the heart of under-representation. Stated another way, a form of deficit thinking (Ford et al., 2002) about children in poverty blinds educators from seeing strengths – gifts and talents – in these students (also see Haberman, 1991). Teachers in high-poverty schools often settle for a curriculum that aims at the most basic elements of content to be learned, on the assumption that no more can be managed and that mastery of the basics is an important accomplishment. In high-poverty classrooms, it often appears to the student that relatively little is expected of her, and students often come away without a clear understanding of how the instruction is meaningful in their lives (Haberman, 1991; Knapp et al., 1991; Knapp & Turnbull, 1990).

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Deficit thinking exists when differences are interpreted as deficits, disadvantages, or deviance. The deficit thinking paradigm places the blame for poor outcomes within the students, as if they are somehow inherently inferior or substandard. Conversely, the difference paradigm considers how the environment affects opportunities, development, and outcomes. Here, the outside (environment) rather than the inside (genetics) is given greater consideration relative to explanations and interventions. Teachers who operate from a deficit thinking paradigm cannot possibly see strengths in low SES students; but they readily see shortcomings and are not likely to refer students for gifted education screening. Other distinctions are cited in Figure 1.

Figure 1: Deficit Versus Difference Paradigms

Deficit Paradigm	Difference Paradigm
<ul style="list-style-type: none"> • Medical model • Deficits exist within the individual; you <i>are</i> deficient, disordered, disabled) • Neurobiological focus with little attention to social/cultural influences • Pessimistic view (change is difficult) • Focus on genetics and inherited ability (thus, change is difficult) • Treatment = medication 	<ul style="list-style-type: none"> • Social and cultural model • Environments influence learning and thus, difference is not evidence of a disability (students with differences; e.g., you <i>have</i> a learning difference) • Optimistic view (change is possible) • Focus on skill improvement (thus, change is possible) • Treatment = instruction + supports

Likewise, when low SES families, specifically parents and caregivers, have low or diminished expectations and aspirations, they are likely to communicate this to their children (e.g., Hart & Risley, 1995). When family expectations for achievement are low, children find themselves developing poor attitudes to school and poor work habits (e.g., Ford, 1996; Steinberg, 1996).

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Of course, not all caregivers who live in poverty have low aspirations. In fact, many believe in the importance and utility of education, but they may not have the economic capital to open doors to meaningful and high-quality educational experiences. For example, they may not be able to afford trips to museums, to travel extensively, to purchase a computer (Eamon, 2004), to pay for Internet services, and so forth. They have the right attitude, but inadequate resources.

A litany of reports has discussed the ominous effects of peer pressures, namely low expectations, on students. Researchers have been discussing the link between social interactions among peers in school and academic outcomes for over 40 years. The extensive literature notes that a child's peer group influences social and academic development and that these influences begin at the very start of formal education. Because of the sheer amount of time the typical child spends each day with his or her friends, the peer influence on a child can be substantial (Ladd, 1990; Johnson, 2000, p. 2; Steinberg, 1996; Wentzel, 1998).

Recent studies have also focused attention on negative peer pressures facing gifted students in general (e.g., Peterson, 2006; Peterson & Kay, 2006; Rimm, 2003) and gifted Black students in particular (Ford, 2006). Findings suggest that gifted students may be more vulnerable to negative peer pressures than other students, as demonstrated by their decreased achievement attitudes and behaviors when pressured. Thus, we see the atrophy or under-use of gifts and talents among otherwise capable students. Few low achievers or underachievers, including those who succumb to negative pressures, are likely to be viewed as candidates for gifted education screening and placement, even if they are capable of doing well in such classes.

A Paradigm Shift (No Excuses: Nurturing Diamonds in the Rough)

The less we know about each other, the more we make up.

As this section is titled, to recognize and nurture the gifts and talents of students in low SES situations, we must move beyond and eliminate excuses. Yes, poverty negatively affects achievement, as do low expectations; and while educators cannot change a family's income, they can change their own expectations of children from that family. In *No Excuses, Lessons from 21 High-Performing, High-Poverty Schools*, Carter (2000) identified seven common characteristics of schools that are experiencing success with low SES students. These findings have been reported elsewhere, but for purposes of brevity, I rely on this source extensively in this section. In summary, high-performing, high-poverty schools:

1. Have principals who advocate aggressively and proactively for their students. They hire highly qualified teachers, recognizing that teacher quality is the single most accurate indicator of students' achievement (Barton, 2003; Peske & Haycock, 2006; Sanders & Rivers, 1996); their funds are allocated to initiatives (professional development, curricula, books, programs) that raise achievement and test scores;
2. Have principals who use measurable goals to establish a culture of achievement. Further, once goals are set, administrators hold staff accountable for reaching goals;
3. Have master teachers, highly qualified teachers, who deliver rigorous and engaging instruction and hold high expectations of students (Peske & Haycock, 2006; Sanders & Rivers, 1996);
4. Have regular and rigorous testing that leads to student achievement. Testing is used as a diagnostic tool that enforces school goals, and is used to improve teaching and learning;
5. Have principals who work actively with families to make the home a center of learning. Administrators recognize that families are indeed their educational partners and the chances for improving achievement increase with efforts are collaborative;
6. Believe that achievement is the key to discipline. In other words, when students are challenged, and when students are taught self-control, self-reliance, and self-esteem, they have less time to become disinterested/bored, and to act out or misbehave. Thus, more time can be devoted to instruction; and
7. Have principals and teachers who recognize that teaching takes effort and time. Educators demand that students work hard and they also work hard, putting time into teaching beyond the regular school hours.

Thus, summer school, before-school and after-school programs, weekend programs, and others are provided to promote learning.

Ultimately, to identify and serve more low SES gifted students, several minimal components must be in place. Our efforts must be collaborative, which means that educators, families and community members should join forces and pool their resources, to help low SES students. It is also essential that educators receive extensive and ongoing preparation to work with low SES and culturally diverse students. While such training begins in teacher education programs, it cannot end there. Professional development will be necessary for all educators (teachers, counselors, psychologists, etc.) and should have rigor as the foundation for all workshops. The ultimate goal of educator training is to raise expectations for low SES students and to provide them with challenging curricula.

It is also essential that educators receive extensive and ongoing preparation to work with low SES and culturally diverse students. While such training begins in teacher education programs, it cannot end there.

In addition to educator development, we must ensure that assessments are valid and reliable for use with low SES students. I and others have urged educators to avoid assessments that are culturally insensitive when working with Black and Latino students (e.g., Ford & Whiting, 2006; Naglieri & Ford, 2003; U.S. Department of Education, 1993; Whiting & Ford, 2006). Relatedly, we must be mindful that poverty hinders test performance.

I strongly support programs that are literacy based. In gifted education, scholars are advocating for talent development programs, which also operate on the premise that we must prevent school failure early on and nurture gifts and talents as early as possible. Finally, from a definitional and philosophical perspective, I think it behooves educators and decision makers to be mindful of the 1993 federal definition of gifted:

Children and youth with outstanding talent perform or show the potential for performing at remarkably high levels of accomplishment when compared with others of their age, experience, or environment. These children and youth exhibit high performance capacity in intellectual, creative, and/or artistic areas, and unusual leadership capacity, or excel in specific academic fields. They require services or activities not ordinarily provided by the schools. Outstanding talents are present in children and youth from all cultural groups, across all economic strata, and in all areas of human endeavor (U.S. Department of Education, 1993, p. 3).

As I have written elsewhere, a mind is not only a terrible thing to waste (United Negro College Fund motto), a mind is a terrible thing to erase. We can and must do a better job of recognizing and nurturing gifts and talents among children who live in poverty.

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Working with Promising Learners from Poverty: Lessons Learned

6
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I have been involved in a number of projects that serve low income, gifted students over the last 23 years, but I would like to focus on two current ones: Project Excite, which involves working with underrepresented youths who are primarily African American and Hispanic and low income, to prepare them to enter advanced science and mathematics tracks in high school, and Project LIVE (Launch Into Verbal Excellence), which involves providing enrichment to average and above average readers in middle school so as to boost their achievement up to levels that qualify them for high school honors classes in English. Project Excite is in its sixth year of operation, identifies students with talent in mathematics in second grade via parent nomination and using traditional achievement tests as well as a nonverbal ability measure, and involves them in science and math enrichment classes after school, on Saturdays, and during the summer for a six-year period, until students enter high school. Other components of the project include parent support and education, individual tutoring, and psychological services for students who need them.

There are currently 6 cohorts of students involved in Project Excite, each about 15 to 20 students in size. Students are recruited from 7 schools in a school district where 50% of the students are minority but only 5 to 10% of students in the most advanced track in math/science track are minority. Project Excite is a collaboration between Northwestern University, the local elementary school district, and the local high school district. It is funded by all three partners and by corporate and foundation money.

Project Excite has increased the access of low-income minority students to advanced classes. In two middle schools, Project Excite students make up half of all low-income minority students enrolled in Algebra Honors. In a third middle school, 80% of all the low-income minority students enrolled in Algebra Honors are Project Excite students, and Project Excite students make up two-thirds of all the low-income minority students enrolled in Algebra Honors in a fourth middle school. Achievement results to date include that 15 out of 17 students in the first cohort, who are now eighth graders, will complete Algebra I or Algebra I and Geometry before they go to high school, almost all with grades of B or above. This represents a 300% increase in the number of low-income minority students entering 9th grade having completed Algebra I from these schools over previous years. The four students in geometry as 8th graders represent two thirds of the minority students in geometry. Over 80%

of current 6th and 7th grade Excite students are on track to complete Algebra before Grade 8. While most of the Project Excite students are moving along paths that will enable them to enter high school with at least Algebra I completed so that they can take Calculus while in high school, it is also true that achievement of Project Excite students has been more variable than expected during the years of the project, often alternating between quarters of A or B grades and quarters of C grades (see Olszewski-Kubilius, 2006; Olszewski-Kubilius, Lee, Ngoi & Ngoi, 2004).

Project LIVE starts with students who have completed Grade 6 and provides supplemental enrichment in language arts after school, on Saturdays, and in the summer until Grade 8. LIVE is modeled after Project Excite. Students were identified via teacher recommendation, a lengthy application that included student essays and parent statements, and scores on state tests and district curriculum assessments. Students had to be at least average readers with potential to achieve at higher levels. Project LIVE students are a diverse group. The majority of students are minority with an average family income of \$38,000 in a community where the average income is \$75,000. Program components include parent education, cultural enrichment, and test preparation. LIVE is at the end of the first year of implementation so we do not have any results as yet. However, on a recent administration of the Explore tests, some of these students already score high enough to qualify for the honors English track at the high school.

Based on my experience with both Excite and LIVE, the results of both of these projects so far, and earlier efforts in working with promising students from poverty, some lessons and implications are:

- There is a great variation among poor families in terms of the reasons that they are poor. Some families are low income because, while parents are educated, they are new immigrants and cannot work in their professions in this country. Some parents simply work in low-income jobs such as church ministry. In other families, parents are not well-educated, work at minimum wage jobs, and both employment and living arrangements are very unstable. These variations have tremendous implications for what kinds of assistance and interventions are needed to ensure talent development for a child.
- Partnerships between universities and school districts for the purpose of identifying and sup-

porting low income, talented youths can be very effective and powerful. These partnerships work because commitment and common goals override anything else, including turf and money. Because power is shared among the members of the partnership, all partners are equal contributors of both human and material resources. Yet ensuring equal participation is a challenge.

- Working simultaneously with parents and other family members as well as children in any intervention designed to foster talent development is critical. The family is the most important support to the student. Building relationships with each family based on mutual respect and understanding is the most important aspect of working with parents.
- Intervention projects must start with children when they are young and provide support over the long term. Programs designed to work with more at-risk groups of students must especially start early and provide long-term support.
- When working with children from poverty, program experiences need to be crafted to engender motivation and peer support for high achievement and provide experiential background that may be missing. Classroom activities that will be successful with more affluent gifted students may not work with low-income children.

Issues and Barriers

One of the most important findings about the factors that positively affect the academic achievement of low-income children comes from the work of William Sampson (2002). Sampson studied the families of average, above average and below average achieving children. All of the families were low income and African American. He found that there were few differences between the families of average and above average children and these families differed greatly from the low achieving families. One of the findings was the great variation among the families. Sampson characterized the average and high achieving families as having middle class values towards education. These students' families made education and educational achievement the center of family life. They provided a quiet place to study, monitored homework, assigned their children household chores, supported their involvement in extra-curricular activities, and cultivated a positive self-image, discipline, an internal locus of control, a sense of responsibility and cooperation, and a future orientation. Families of low achieving students may have espoused values conducive to achievement but did not follow through with supportive actions.

Sampson believes that efforts to close the achievement gap and promote achievement for low-income students must focus on strengthening the families. This idea is not being translated into current policy or funding initiatives.

One of the barriers to developing the talents of children of poverty is inadequate resources, both financial and in terms of personnel. Developing the talents of any gifted child requires resources for special programs, classes, and support services such as counseling or testing. For children of poverty, even greater amounts of support are needed to help with basic needs of families as well as additional support services such as psychological services for children and families and social workers to assist families with issues surrounding housing and basic subsistence.

When working with children from poverty, program experiences need to be crafted to engender motivation and peer support for high achievement and provide experiential background that may be missing. Classroom activities that will be successful with more affluent gifted students may not work with low-income children.

Another obstacle to implementing programs and services that will develop the talents of gifted children of poverty is lack of sustained commitment. Successful interventions will be those that persist with supports for students and families over extended periods of time. Changes in project personnel and funding agencies tendency to limit support to a few years and work against sustainability.

Another obstacle to the success of interventions for gifted, low-income children is an attitude of "one size fits all" in programming. In a field that stresses how individual gifted children are, we tend to construct programs aimed at groups and at the typical low-income child. But, there is no typical child as the circumstances that lead to poverty are many and varied. There are at the very least, several different "types" of low income families as noted before.

Every family in poverty has strengths and weaknesses, features that support the talent development of their child and features that work against it. Strengths of even the poorest of families can include the unconditional love and support of a family member for a child or the incredible resilience and psychological strength of a child. Interventions need to recognize, affirm, acknowledge, and take advantage of strengths, and identify, understand, and compensate for weaknesses. I think that a more productive approach to assisting talented children of poverty is one that constructs a support plan for each child, based on a profile of the strengths and weaknesses of each family

(see Olszewski-Kubilius, Grant & Seibert, 1994). Interventions for individual children and families range from tutors, mentors, enrollment in after-school clubs, weekend programs, psychological services, part-time jobs, internships, etc.

Needed Research

There are two critical types of studies that need to be done on the issue of promising learners living in poverty. One of these would be a study of the nature of disadvantage. Among low-income families, what are the varying profiles of strengths and weakness in terms of a family's ability to develop the talents of their children? What factors cluster together and are their family "types" that might assist practitioners in crafting matching interventions?

A micro-analysis of the processes underlying successful intervention programs also needs to be undertaken. Most research on intervention programs report aggregate data on macro-level measures such as achievement levels of students, parent participation in school events, course taking patterns, etc. What is needed and missing are qualitative studies that examine the processes that occur within the family, within peer groups, within schools, and within classrooms that underlie macro-level changes. For example, identifying children and labeling them as academically gifted may raise the achievement-related expectations of parents, which results in greater supervision of homework, provision of more enrichment in the home, and greater involvement in school. Similarly, identifying a child as talented may raise teacher expectations regarding achievement and result in interactions between teacher and child within the classroom that result in higher levels of learning and engender increased motivation. For example, Project Excite families, as a result of being made aware of supplemental educational opportunities, sought these programs for their other children and began to ask questions about other programs available in the area for their children. When parents of younger Project Excite families found out that a few students in the oldest cohort of Excite students were taking Geometry as eighth graders, they asked how that could be possible for their child. We need to understand better how interventions work before we continue to spend more money on them.

Promising Practices in Identification and Programming

Over the years, we have changed the procedures used to identify children for Project Excite. We initially used only the Naglieri Nonverbal Ability Test because research had shown that it identified gifted minority children at higher rates than traditional achievement

tests. We did not find this to be the case. Based on several trials, I now believe, given current knowledge and test instruments available, multiple tests should be used including, for example, a combination of nonverbal and domain-specific measures. The greatest weight in selection should be given to those measures that best match the focus of the program of intervention. For Project Excite, we selected children who had high scores on either the Naglieri or the mathematics subtest of the Iowa Test of Basic Skills. We also examined reading scores on the ITBS and required at least grade level performance, reasoning that good verbal ability was needed to read materials in advanced science classes. Cutoffs on tests used for selection need to be determined based on the performance levels of other students within the school or district of the target group, particularly when working in a school or district with overall lower levels of achievement.

Interventions need to recognize, affirm, acknowledge, and take advantage of strengths, and identify, understand, and compensate for weaknesses. I think that a more productive approach to assisting talented children of poverty is one that constructs a support plan for each child, based on a profile of the strengths and weaknesses of each family.

If parental support is critical to the success of the intervention such as parents' getting students to and from supplemental classes, monitoring homework, etc. then some indicator of parent commitment is important. In our case, we invited all low-income students to test on a Saturday for Project Excite. We assumed that parents who made an effort to get their child to the testing on a weekend, were committed to participating in the program and would be willing to provide other kinds of support. Initially we relied on teachers to nominate students for Project Excite, but consistent with the literature regarding the unreliability of teacher identification, especially when untrained in gifted education, we found this to be unsuitable. Parent nomination was more effective, resulting in a larger, more qualified pool of students who were more successful in the program. Teacher feedback was, however, critical to getting an assessment of students' work habits such as completing assigned work and homework, perseverance, etc. and classroom behavior. Generally, if teacher recommendations were negative, we investigated them further by actually talking to the teacher to determine the nature of the problem more specifically.

For Project LIVE, because we were not able to test children, we relied on achievement data available from the district. We primarily focused on areas of language arts such as reading comprehension, vocabulary, and

writing. In this case, we did not look at achievement data in other content areas as we did not think they were relevant to the goals of the program nor needed for success in the program. We did require a lengthy application that included essay type questions from students, which were designed to gauge writing ability. We also used essay-type questions to assess parental support.

We need to understand better how interventions work before we continue to spend more money on them.

In summary, identification procedures and criteria need to be tailored to the population of interest and to the program design. As with all gifted programs, multiple measures should be used so as to get a clear picture of children's abilities, both intellectual and non-intellectual. Measures of cognitive skills should match the subject areas being dealt with in the program and several measures of each ability is preferable. Children should be able to qualify on the basis of high performance on one of these cognitive measures. Measures of parental support and commitment should be used if these are relevant for success in the program. Parent or self-nomination is preferable to teacher nomination, but teachers can provide important information about students that can help program planners design an appropriate program, particularly in the areas of class achievement, work habits, ability to work in groups, etc.

Finally, working with students in poverty requires a clear sense of direction and focus in order to make a difference. Thus, interventions need to be tailored in the following ways:

1. High-level enrichment and advanced classes with other gifted students. Setting the bar very high is critical, even if the expectations somewhat overwhelm students initially. Additional support in the form of tutoring or supplemental classes either before or during the intervention, should be provided to students rather than giving them lower level classes than other gifted students.
2. A set of supports tailored to the needs of the student and family, which may include a mentor, a tutor, psychological counseling, the provision of a family computer, etc. as opposed to a "one size fits all" program, and
3. A project leader who has the skills to develop significant and personal relationships with each family in order to build trust so that families will allow program administrators to assist them with services and supports.

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Identifying and Including Low-Income Learners in Programs for the Gifted and Talented: Multiple Complexities

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I would like to thank the National Association for Gifted Children and Joyce VanTassel-Baska for inviting me to participate in this conference on children of poverty and gifted education. I would also like to commend them for focusing the attention of educators and researchers on this longstanding and complex issue in a national forum. Gifted and talented education (GATE) programs have traditionally served students who are drawn disproportionately from the upper half of the socioeconomic distribution and have been criticized for being elitist and exclusionary.

Criticizing such programs on the basis of the populations that are most often served is premature and a bit unfair. As identification for these programs is often based on cognitive ability, and there is a moderate positive correlation between SES and this variable (Brody, 1997), students from low SES backgrounds are inevitably identified at lower rates than their more affluent peers, and thus underrepresented in these programs. Race and ethnicity also complicate identification. African American, Latino, and Native American students have, on average, lower academic achievement than their White and East Asian peers (College Board, 1987; Lee, 2002), and are also more likely to live in poverty (C. Lopez, V. Lopez, Suarez-Morales, & Castro, 2005; Worrell, 2005). Thus, African American and Latino students are even less likely to be represented in GATE programs (Baldwin, 1985; Ford, 1995; Worrell, 2003).

Although seldom acknowledged explicitly, much like special education programs for students with some type of learning difficulty, GATE programs are intended to provide an appropriate education for students who are at the upper end of the distribution in terms of performance. Whether one believes that these programs should serve the top 2% or the top 20% of students, gifted education will always have to deal with the issue of identification, which is further complicated by the multiple definitions of giftedness in the literature (e.g., Sternberg & Davidson, 1986, 2005). In a recent article, Ceci and Papierno (2005, p. 149) pointed out that global interventions often “have the surprising effect of widening preexisting gaps between disadvantaged youth and their advantaged counterparts.” In other words, increasing our ability to identify and serve children of poverty in GATE programs is an extremely difficult task with multiple complexities. Using the framing questions provided, I will address some of the issues that we face.

Personal Research Initiatives Related to Low-Income Learners

Much of my work focuses on students who are identified as academically talented, a classification that is related to acceptance into the University of California at Berkeley’s Academic Talent Development Program (ATDP). ATDP is a program that serves about 2,000 students every summer, ranging in age from students who have completed kindergarten to those who have completed Grade 11. The elementary division of

One of the ongoing concerns about underrepresented students in GATE programs is retention. Students may be identified for a program, begin attending, but may not continue to participate in the program. From the perspective of a summer program like ours, returning for multiple summers is important, as talent development occurs over time.

the program offers a variety of enrichment courses in the areas of science, mathematics, and writing, and the secondary division offers both acceleration and enrichment courses across several departments, including Computer Science, Fine Arts, Languages, Mathematics, Natural Sciences, Social Sciences, and Writing and Literature.

The program engages in outreach to local school districts and actively seeks to recruit students from low-income and diverse backgrounds, providing need-based scholarships that can range from paying for a textbook to full financial aid. About 15 to 20% of the students receive some form of financial aid every year. In spite of these efforts, the program profile is quite similar to other programs of this type. For example, in 2005, only 12% of the elementary division students and 11% of the students in the secondary division reported coming from poor or working class backgrounds. With regard to GATE identification, the student body is more diverse, with about 20% of the public school students not being identified for GATE programs in the schools that they attend during the school year.

One of the ongoing concerns about underrepresented students in GATE programs is retention (Ford, 1998). Students may be identified for a program, begin attending, but may not continue to participate in the program. From the perspective of a summer program like ours, returning for multiple summers is important, as talent development occurs over time (Sosniak, 1990, 1995). In 2001, Worrell, Szarko, and Gabelko examined return rates for 492 nontraditional, mostly minority students from an urban district who were

part of an outreach partnership with a local district. All of the students had participated in the program for one summer and were invited to return with full financial aid and social support. Only 44% of the students chose to return to the program, and returnees did not differ significantly from non-returnees on a variety of variables such as SES, incoming academic profiles (GPA, reading, and math scores), and summer program GPA. Moreover, although this return rate

The work on value-added assessments (e.g., Sanders & Horn, 1998) indicates quite clearly that more effective teachers enhance student performance, less effective teachers inhibit student academic growth, and that these effects are cumulative over time.

seems low, the return rate for more affluent students who were not in the special program was only 40%.

In other research on low-income and at-risk populations, I have found that resilient, at-risk students have more risk factors in their lives than academically talented students, and have lower academic achievement, but are similar to their academically talented counterparts on variables like hope and belief in the future (Worrell, 1997; Worrell, Latto, & Perlinski, 1999). More recently, I have been looking at racial and ethnic identity and their relationship to academic achievement across racial and ethnic groups. Although the focus of this research has not been on SES specifically, in ATDP, the mean income for our African American and Latino families is lower than the mean income for our White and Asian families. This research has indicated that ethnic identity has a negative relationship with school achievement, but not with achievement in our program (Worrell, in press). Although this research is still in its early stages, the finding highlights the role of teachers in making classrooms welcoming places where everyone can succeed.

Translation of Research for Practitioners

It is not clear to me that the knowledge that we have from research is being communicated effectively to practitioners, although it is also important to acknowledge that this is not an easy task. The work on value-added assessments (e.g., Sanders & Horn, 1998) indicates quite clearly that more effective teachers enhance student performance, less effective teachers inhibit student academic growth, and that these effects are cumulative over time. Moreover, teacher effects are independent of parent involvement effects. Nonetheless, teachers of all groups including GATE-identified students often do not know about or believe that they have an impact on student academic performance that

is independent of parent involvement.

A second area of research that teachers do not know is in the area of teacher expectations. Sally Dobyns from the University of Louisiana shared this anecdote with me at the conference. One of the teachers supervising a student teacher of Sally's reported to her that the student was using talent development materials in the class. The teacher ignored the increased student interest and growth across all of her students and told Sally that the student teacher was wrong to use these materials because in this teacher's 17 years in that classroom, she had never seen a gifted student come through the door. Thus, from this teacher's point of view, there was no possibility that any of her students could qualify for a GATE program. From a more data-driven perspective, research has indicated that teachers treat students who are *perceived* as less capable or are from stigmatized groups differently than those perceived as more capable and that this differential treatment has deleterious effects on performance (Weinstein, 2002; Weinstein, Marshall, Sharp, & Botkin, 1987; Weinstein & McKown, 1998). Moreover, there is some evidence that minority students are more susceptible to teachers' messages than their majority counterparts (Jussim & Harber, 2005).

Students' academic self-efficacy is affected by their teachers' perceptions, but may also be affected by the view that society conveys to students about their competence. Negative communications about competence and the ability to be successful in academic tasks are much more likely to be communicated to students from low SES backgrounds than their more affluent peers. Thus, the students who have the lowest rates of access to GATE programs may also receive the message that these programs are not appropriate for them.

Another variable that is related to this issue is academic identity. Students' academic self-efficacy is affected by their teachers' perceptions, but may also be affected by the view that society conveys to students about their competence. Negative communications about competence and the ability to be successful in academic tasks are much more likely to be communicated to students from low SES backgrounds than their more affluent peers. Thus, the students who have the lowest rates of access to GATE programs may also receive the message that these programs are not appropriate for them. The impact of negative societal stereotypes on academic performance is particularly deleterious to the students from stigmatized groups who care the most about doing well academically (Aronson, 2002; Steele, 2003).

Gaps in the Current Research

There are several research agendas that are particularly promising in helping us more effectively serve low SES families in GATE programs. One important methodology that should be used more frequently is the longitudinal study. In keeping with the talent development model, several programs, including ATDP, have stopped using IQ tests and the SAT as the major or sole criteria for identification. We do not yet have data comparing the outcomes between students who are GATE-identified and those who are not on performance in talent development programs, nor in achieving life goals or in making substantial contributions as adults.

Research has indicated that teachers treat students who are perceived as less capable or are from stigmatized groups differently than those perceived as more capable and that this differential treatment has deleterious effects on performance (Weinstein, 2002; Weinstein, Marshall, Sharp, & Botkin, 1987; Weinstein & McKown, 1998).

Another gap in the research related to identification involves the increasing base of literature on gifted underachievers—defined as students whose intellectual scores indicate superior functioning but whose academic performance is substantially lower than the scores would predict. If we adopt a definition of giftedness that encompasses task commitment as suggested by some researchers (e.g., Renzulli, 1978), we should be refining measures of motivation, self-regulation, and self-efficacy to include in identification protocols and looking at the short and longer-term accomplishments of students chosen using traditional measures and ones where selection includes these psychosocial factors. This strategy may also have implications for the definition of underachievement in the gifted field.

We have a substantial literature indicating the relationship of academic engaged time on achievement outcomes. It is plausible to hypothesize that there is an academic dosage effect, particularly for students from low-SES backgrounds. If we identify students in the early primary grades and provide both school-based enrichment activities during the school year and supplemental enrichment in the summer (Sosniak, 2005), do we increase the probability of low SES students staying in GATE programs in middle and high school, attending college and graduating? And how many students from low SES backgrounds and stigmatized social groups are affected by phenomena such as stereotype threat? Finally, we need focused research on whether gifted identification is based on *qualitative* versus *quantitative* differences in

performance. This question has been a source of contention in gifted research for a long time.

Research-Based Identification Practices

Any research-based identification in gifted and talented education needs to begin with a clear statement of the talent domain (e.g., mathematics, writing, music, basketball, leadership), as this will have implications for the identification. My focus in this paper is on identifying academic talents in students. First, multiple indicators, including standardized and non-standardized instruments, should be used. We should also provide opportunities in school to allow for having a bigger pool to select from. This can be accomplished by having enrichment sessions each school year that are at least two weeks long. These sessions should begin in Grade 1 and should be distinct from the regular curriculum. There should be different emphases across the two-week period to allow for the major talent domains to be covered across the first two years. Teachers should be looking for talent all year long, but particularly in these special sessions. Teachers should be asked to rate students on behaviors and attitudes related to learning (e.g., persistence, motivation, flexibility, use of strategies), rather than on so-called *gifted* characteristics, because the latter are not supported in the research literature, generally result in halo effects, and are also more likely to be affected by unconscious biases.

Working with students and their parents on goal-setting and having high educational aspirations is another important component of any program that wants to have a meaningful impact on the probability of enrolling and retaining low SES students in gifted programs.

Districts can also use patterns of academic achievement in specific subject matter domains both on teacher-made assignments as well as on standardized tests. In the Los Angeles Unified School District, a student can be referred for screening for the GATE program if he performs at the 90th percentile in either reading or mathematics for three years, or at the 95th percentile for two years. I also recommend the use of IQ tests with well-validated scores for identifying academically gifted students, but only as one of several criteria. Moreover, if these tests are used, we should err on the side of inclusion rather than exclusion. Finally, working with students and their parents on goal-setting and having high educational aspirations is another important component of any program that wants to have a meaningful impact on the probability of enrolling and retaining low SES students in gifted programs.

Conclusion

As indicated in the title of this paper, serving low SES populations in gifted and talented programs will not be easy, but it remains a noble goal that we must strive to attain. Sosniak (1998, p. 12) summarized this argument quite eloquently, and I will use her words here:

For many individuals, the development of talent seems much a matter of chance. There are fortunate circumstances of birth, and fortunate matches between a child and his or her proximal communities.... Part of our work as educators is to understand how to create conditions that allow ever larger portions of our youth to work toward the development of talent, irrespective of where and to whom they were born.

In a country that promises to all of its citizens, “life, liberty, and the pursuit of happiness,” and in a field of study that is concerned with developing talents wherever they occur, we cannot shirk this difficult but necessary task.

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What Can We Learn from Research About Promising Practices in Developing the Gifts and Talents of Low-Income Students

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The insidious and persistent issues of identifying and providing effective educational services for low-income, promising learners has been one of the major foci of work at the University of Virginia site of the National Research Center on the Gifted and Talented. The body of work completed thus far has produced some important information about the ways in which these problems may be addressed effectively, but studies have also raised significant issues to be considered as the field moves forward.

Talent Development in Very Young Children in High Poverty Schools

Not surprisingly, teacher knowledge, attitudes, and behaviors were identified as central to the process of developing students' gifts and talents. In Project START, a collaborative project with the Charlotte-Mecklenburg Public Schools, insights into teachers' roles in addressing the issues relating to nurturing and recognizing talent and the difficulties underlying change in teacher practice were produced (Callahan, Tomlinson, Moon, Tomchin, & Plucker, 1995). First, the results of the study document that teachers learn the language of differentiation easily, and the intentions of teachers are readily directed toward the creation of classroom environments conducive to student engagement. Responses of teachers in this study document that the theory of Multiple Intelligences can be a powerful tool in broadening teachers' conceptions of talents. The assessment tools developed by Project START staff, based on MI theory and used to identify potentially gifted kindergarten and first-grade students, made teachers very optimistic about student performance and created wide-spread acceptance among teachers of a broad range of talents in students. In addition, when the conception of high potential is broadened from one of "giftedness" to one of specialized abilities, teachers are more likely to become advocates for students in high poverty schools in the process of nomination and identification for gifted services. In other words, teachers were more likely to speak of children as "having talent potential in spatial abilities" or "quantitative areas" than they were to adopt the language of "potential giftedness." The use of the term giftedness, and even potential giftedness, remained a barrier to the recognition of talent and nomination of students for further consideration for the gifted program.

However, teachers had great difficulty in translating their knowledge into practice in the classroom. While the use of new conceptions of giftedness combined with extensive staff development on differentiation

expanded the teachers' repertoires to include teaching strategies that resulted in more student movement in the classroom, increased student-student interactions, and the use of varied instructional materials, teachers resisted differentiation by readiness and relied primarily on interest or learning style as the basis for their differentiation. Their concepts of "fairness" prevented them from accepting the need to extend the curriculum for some learners.

Finally, it became evident that the success of the students in this study was greatly enhanced by a multiple-pronged support structure. In this case, a combination of teachers, parent, and mentor was critical. When "successful" students were studied, we found that their success was dependent on the way in which one or another of the triad would step up when one "leg" of the triad was weak.

Talent Development in High School Advanced Placement and International Baccalaureate Programs

In examining the success of students from minority cultures and high poverty, urban environments at the high school level, we identified modifications to the curriculum, the instructional strategies, and the support structures that helped students develop a sense of success and develop a readiness to take on the challenge of college level work (Hertberg-Davis & Callahan, in press). First, the teachers' genuine concern for these students and their progress, as demonstrated by their classroom behavior, was at the core of success. Second, teachers maintained high academic standards but recognized that minority students and students from impoverished environments may require more and different kinds of support. "We're not 'dumbing down'; what we are doing is giving support in order to make sure they [the students] can maybe believe [in themselves]." As part of this support they adopted such strategies as chasing kids down at lunchtime, not giving up on them, providing extra time for instruction, giving frequent feedback, engaging in culturally responsive teaching, and having very strict policies. One teacher said, "I stay after school every single day. I spend a lot of time helping kids...going through their essays with them and talking one-on-one. I put up their grades every two weeks." Other examples of critical support included extra study halls, a summer course focused on developing study skills, opportunities for practical experiences such as internships at nearby research institutions, and the provision of some form of support group, and college tours. Importantly, teachers seemed also to appreciate

that their students' intellectual grasp of material may substantially exceed their expressive skills ("They need extra help for missing skills, such as paragraph writing, writing an argumentative essay, note-taking skills, and speaking in front of classmates."), but were willing to provide extra help. A further critical factor was the existence of a "master adult," someone or some group in the school with whom the student formed special connections: "They are like three parents on your back, but unlike parents, they actually know what is going on."

Effects of High-Stakes Testing on Talent Development

The high-stakes testing movement was a pervasive element in all the settings in which studies were conducted. The impact can be paradoxically described as both a boost and an inhibitor. On the one hand, the degree to which the testing movement has served to ratchet up the curriculum in schools where the focus had been on low-level curriculum, it has served the students positively. On the other hand, we also identified a considerable narrowing of the curriculum to teaching only reading and mathematics. If the talents and interests of students are in other domains, those interests and abilities would likely lie fallow. Further, the academic potential of those students who do not respond positively to traditional, test-driven instruction, may be masked by these students' lack of engagement in the learning activities in the classroom. A second negative impact resulted from school in which the focus of instruction shifted to only those students who were failing or were on the "bubble." And, in many cases, emphasis was merely on achievement of minimum standards instead of on valued-added assessment (with value measured in terms of achievement of higher quality and more complex thinking rather than just getting more of the same low level items correct).

The success of the students in this study was greatly enhanced by a multiple-pronged support structure. In this case, a combination of teachers, parent, and mentor was critical. When "successful" students were studied, we found that their success was dependent on the way in which one or another of the triad would step up when one "leg" of the triad was weak.

While overall we found the focus on tests and test scores resulted in test-driven instruction, these effects were most pronounced in schools serving students from the lowest SES groups. In those settings teachers are most likely to alter curriculum to "teach to the test" and little else, most often responding to administrative pressure to raise test scores (Moon, Brighton & Callahan, 2003;

Hertberg-Davis & Callahan), Teachers commonly expressed frustration that the time pressure imposed by a standardized test-driven curriculum (in both the schools involved in Project START and the Advanced Placement and International Baccalaureate courses) leaves them unable to explore topics in the depth required to maximize student learning or to allow students to pursue areas of scholarly interest. Many teachers indicated that the strict pacing and sequencing guidelines of the mandated curriculum force them to skim over material and move on whether or not students have achieved deep levels of understanding (Callahan, Tomlinson, Moon, Tomchin, & Plucker, 1995; Hertberg-Davis & Callahan, in press). Further, these students and teachers feel that the focus on basic skills and test preparation in their classrooms is boring and repetitive. Students express frustration with the routine teacher lecture and repetition and are irritated by the lack of challenge available to them as they are expected to repeatedly demonstrate their knowledge of previously learned material. "When you taught it, you taught it. Go on, keep on going. But they teach it over and over. We are on the same subject for two weeks."

While overall we found the focus on tests and test scores resulted in test-driven instruction, these effects were most pronounced in schools serving students from the lowest SES groups. In those settings teachers are most likely to alter curriculum to "teach to the test" and little else, most often responding to administrative pressure to raise test scores.

Teachers traded time spent for long-term projects and performance-based activities such as hands-on experiments and enrichment activities for greater use of "skill and drill" instruction in impoverished schools, with teachers spending more time on test preparation activities involving practice on multiple-choice and constructed response items that mirror the format of state tests. The narrowing of the curriculum led to the conclusion by other students that the content of the test and curriculum is just not meaningful to them, that the consistent classroom focus on test preparation fails to prepare them for life at college or outside of school, and that the product rigidity forces them to fit a certain mold which limits their creativity. "There's not a lot of room for creativity. They're [AP teachers] mostly focused on content, and I find myself doing better when I can add a little creativity in there. But... that [the AP curriculum] doesn't really leave as much room for you to add insight to your thoughts. It's just sometimes, it's just regurgitating information. And it's not very fun, because you're not really learning it" (Hertberg-Davis & Callahan, in press). In the study

of state testing practices, AP and IB students in all settings expressed a clear preference for learning new and interesting material through hands-on learning and project work. However, teachers feel unable to respond to those preferences. Thus it appears that as teachers make decisions in a climate of high-stakes testing, they often prioritize standardized curricular requirements and test preparation over individual student interest, academic readiness, or learning preference—ignoring the literature on motivation and learning (Moon, Brighton & Callahan, 2003; Hertberg-Davis & Callahan).

Unfortunately, this emphasis on drill and repetition that seems to emanate from testing situations inhibits transfer and runs counter to the recommendations offered by *All Students Reaching The Top: Strategies for Closing Academic Achievement Gaps. A Report of the National Study Group for the Affirmative Development of Academic Ability* (Bennett, et al., 2004). According to this report success for students from high poverty environments is related to:

- Active learning and problem based learning
- Inquiry-based instructional strategies
- Consolidation and automaticity
- Teaching for deep understanding
- Teaching for transferability.

Need for Validity Studies on Assessment Tools

Despite years of calls for adequate measures to identify talent among the populations of minority and low-income students, researchers and test developers have relied on limited evidence of reliability and weak validity studies. The field needs to demand adequate evidence of which instruments will predict success in programs designed to develop and enhance the talent of students from low-income families and schools.

Currently available qualitative studies and correlational research have produced many suggested interventions by carefully investigating those situations in which success is occurring. Now is the time to create quantitative, experimental studies whose first priority should be to construct research programs based on the recommendations from those studies. The design of these studies should allow for:

- the sorting of race, ethnicity and wealth/poverty factors on the outcomes;
- identification of the specific influence of various factors or variables so that practitioners can identify that changes in a program are critical to success (Is it the mentorship which impacts

the outcomes? Or the hands-on, problem-based curriculum? Or the support group? Two of these three? All three?);

- examination of factors that interact with race and poverty over time in a school or school district to identify other variables that are more amenable to change;
- examination of the long-term impact of interventions, particularly on complex and high-level achievement;
- focus on groups of low-income students from *all* race and ethnic groups. As gifted children may be found in all racial and ethnic groups, so poverty exists in all racial and ethnic groups. We must examine whether interventions are differentially effective across and between these groups; and
- examine interventions that combine the social and cognitive factors that affect success, with care to establish designs that can attribute outcomes to individual factors or combinations of factors.

Thus it appears that as teachers make decisions in a climate of high-stakes testing, they often prioritize standardized curricular requirements and test preparation over individual student interest, academic readiness, or learning preference—ignoring the literature on motivation and learning

In addition, the current literature suggests that promise for greater success lies in further study of which components of mentorships most impact the success of students.

Finally, we need studies of current data bases to update our assumptions. It is imperative that the data from the 1988 NELS studies no longer serve as our reference point for the proportion of students in gifted programs from various income and racial/ethnic groups.

Recommendations for Research-Based Identification Protocols and Practices

Based on the NRC studies conducted to date, there are some promising practices that might be emphasized in identification.

- Create staff development and identification protocols that emphasize reformulation of teacher thinking from nomination of gifted students to finding talents in specific areas. Do not allow teacher sabotage of the process. This may be accomplished by demanding that the three most likely students be nominated even if the teacher is not willing to name them as “gifted.”

- Carefully examine the staff development program to ensure that presentations do not reinforce stereotypes of children that can, in fact, lead to less rather than greater belief in the abilities of children from impoverished environments.
- Emphasize performance-based, curriculum-based and/or dynamic assessment.
- Emphasize the use of instruments and data that may *seem* biased but may, in fact, offer valuable information and critically examine seemingly unbiased tests for bias and lack of validity information. (See, for example, Lohman, 2005).

Interventions based on current research evidence that may prove helpful to practitioners include the following:

- Creation of the Master Adult Triad of parent, teacher, and mentor based on the data from Project START and the study of Advanced Placement and International Baccalaureate study. In wealthier homes and schools, these triads exist naturally for many children; for children of poverty where there are questions of teacher qualifications, parent time commitments and understanding of the school requirements, these triads can serve as supports for one another and as the stability in a child's educational development. When one or two cannot serve the child at any given time, the other can be there for the needed support.
- Reformulation of teaching strategies and expectations to include: engaging research projects/ active learning opportunities and problem-solving opportunities, hands-on learning, varied teaching strategies including visual displays of content, and working in groups. Other emphases should include inquiry-based learning with clear emphasis on content, process and product goals, opportunity for increased depth of understanding of content, especially providing opportunity within the learning experience for the expression of many points of view with demands of examination of assumptions and data, and choice with opportunity for creativity. This would not be based on abandoning the focus on important concepts, principles, and generalizations, but rather as a means of enriching the content, process, and products of instruction.
- Begin screening, identification and programming as early as possible. Talent development programs should be instituted in pre-K and primary school classrooms. We cannot assume students will all come to us as gifted. If we expect talent to

emerge from all populations, we must provide the opportunity for high-end learning in the school environment.

- Provide opportunities for “testing out” of already mastered knowledge, skills, and understandings.

While any or all of these strategies and practices may be important to the development of the gifts and talents of children of poverty, most critical is our belief, and the belief of education professionals with whom we work, that it is possible if we forge the commitment to make it happen.

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Section **V**
Promising Initiatives and Programs

Impact of Poverty on Promising Learners, Their Teachers, and Their Schools

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Systemic, generational poverty presents us with many challenges as we work to meet the educational needs of children. Access to excellent educational opportunities for all children is critical to helping children reach their full potential, and yet we know that children of poverty often have limited access to high-end learning experiences and opportunities. The information shared in this article is drawn from over 25 years of work in Title I schools helping teachers reframe their view of children, moving from “at risk” to “at potential.” This work has also focused on capacity building through personnel preparation, policy development, and the integration of existing resources with innovative practices. In this paper we briefly describe the approach we are using with Project U-STARS~PLUS (www.fpg.unc.edu/~ustars), sharing lessons learned based on our experiences. We outline the challenges we see for future work as the needs of promising learners in poverty are addressed.

Brief Description of Project U-STARS~PLUS

Using Science, Talents and Abilities to Recognize Students ~ Promoting Learning in Under-served Students (U-STARS~PLUS) is funded through a Jacob Javits grant from the U.S. Department of Education and is working with 106 schools in four states (North Carolina, Colorado, Louisiana, and Ohio). Table 1 shows the extent of implementation at the end of Year 3 with states, districts/parishes, schools, teachers, and students. The majority of schools involved in this work are Title I schools with high poverty and/or diversity within their student populations.

The philosophy of U-STARS~PLUS is that through establishing a nurturing learning environment for children in their first years of schooling (kindergarten – third grade) we can connect them with powerful learning experiences help them to develop an

achievement orientation. U-STARS~PLUS is centered in the general education classroom and supports teachers to recognize outstanding potential in their students by encouraging teachers’ systematic observations of their students using the Harrison Observation Student Form and then bringing in high-end learning through differentiation and hands-on, inquiry-based science. There are five key components to the U-STARS~PLUS approach:

1. the provision of high-end challenging learning opportunities;
2. teachers’ systematic observations of their students, watching for indications of potential and using these observations to help them inform their instruction;
3. hands-on, inquiry-based science that focuses on exploration, problem solving, higher-level thinking, creativity, and persistence and can be meaningfully integrated across the curriculum;
4. parental and family engagement in school and academic areas of interest; and
5. systemic change through capacity building.

While any one of these components can be implemented as a stand-alone strategy in a classroom or school, there seems to be a synergy when all five components are activated in collaboration. The creation of an environment where high-end learning opportunities are the norm lends itself to *seeing* children through an “at-potential” positive lens; seeing children through a positive lens fosters a climate of expected academic success; this climate of academic success builds further opportunities for challenge and accomplishments. When parents and families are brought into this mix, the child has the wrap-around support needed to sustain her/his progress. Finally,

Table 1: Scope of Implementation of U-STARS~PLUS

States	Number of Districts/Parishes	Number of Elementary Schools	Number of K-3 Teachers	Estimated Numbers of Students
Colorado	9	17	67	1541
Louisiana	9	36	227	4540
North Carolina	15	46	602	13,846
Ohio	5	7	70	1610
Total	38	106	966	21,537

when the infrastructure is put into place at all levels (school, district, and state), the support needed for teachers is in place so that they can sustain their efforts as well.

Lessons Learned from Our Experiences Working in Schools of Poverty

We continue to study outcomes of U-STARS~PLUS through formal evaluations. The lessons shared here are more informal. They have been learned through reflective discussions over the years of development and during the early years of implementation. Our ten most important lessons are:

1. Changing teachers' classroom practice (i.e. changing actual behavior), by moving toward high-end teaching/learning leads to a change in teachers' beliefs about their students' ability to master complex curriculum.
2. As teachers observe their children's success with challenging materials and activities, their view of their students naturally changes from an "at risk" to an "at potential" framework.
3. With young children, the emphasis needs to be on academic nurturing of potential and teachers' recognition of this potential rather than the hard and fast identification of children as "gifted."
4. Once teachers begin to recognize outstanding potential in their students, they intentionally work to increase the levels of challenge they provide.
5. High quality content and curriculum must be the focus of the changes made. Classroom time is precious and, for children of poverty, every minute of teaching/learning time is critical and must be used carefully.
6. Parental and family engagement is critical to the long-term success of children and the effort spent on building strong relationships with parents will have a major dividend for students across the years.
7. Change must be approached systemically, and new approaches must be integrated into the existing structures so that efforts can be supported and sustained.
8. Personnel preparation that includes ongoing support, teacher reflection and quality programming, and a combination of on-site coaching with off-campus seminars/institutes is critical to enable change.
9. Capacity building must be intentional and must include people at classroom, school, district, and state levels.
10. In bringing practices to scale in multiple sites, a balance between fidelity of treatment and flexibility of implementation must be found so that practices can

be truly integrated and become, under a variety of circumstances and settings, "indigenous" to the site.

As teachers observe their children's success with challenging materials and activities, their view of their students naturally changes from an "at risk" to an "at potential" framework.

We have learned quite a bit in our work, yet we understand that the challenges we face in working with children of promise who live in poverty are great.

Challenges in Addressing Children of Promise and Poverty

The work undertaken to address the needs of promising learners in poverty is essential, yet we still face serious challenges:

1. Sustainability of efforts over time is the key to success and requires a commitment of resources, time, and energy that can not be over-estimated. There is no "quick fix" to the issues facing children in poverty, and the challenge is to approach these problems with the understanding that it will be a long-term effort that will make a difference.
2. The need for capacity building can not be underestimated. In communities and schools of high and systemic poverty the resources, human expertise, and will to reach for excellence are often limited. The infrastructure to support success must be built. Building this infrastructure must include the dynamic involvement of all major stakeholders (e.g. educators, community and civic leaders, businesses, parents, etc.).
3. Policies that support our ability to recognize and respond to children of promise who live in poverty must be in place at the school, district/parish, and state levels. These policies must include: encouragement to use multiple criteria to help us recognize outstanding potential as it manifests in different ways, at different times, and within different domains; the allocation of resources for the nurturing of potential in populations where this potential remains latent, causing few students to be formally identified as "gifted"; the ability to blend resources and programs to maximize high-end learning opportunities vs. a rigid use of funds and resources.
4. Strong policies are only a starting place; they are the means and not the end. Having solid supportive policies is essential, but without an equally strong commitment to implementing these policies for the benefit of children, the policy alone will not be sufficient. The problems of poverty have remained intransigent and without a tremendous amount of

intentional implementation of solid practices based on strong policies, these problems will not be overcome.

5. Collaboration across all stakeholder groups is needed if we hope to make real progress in the lives of children of poverty. This collaboration must be built into our approaches with all school personnel but must also extend to families, community and business partners. Approaches that pool resources, energy, and expertise and that break down barriers which fragment and isolate services must be strongly encouraged.

Parental and family engagement is critical to the long-term success of children and the effort spent on building strong relationships with parents will have a major dividend for students across the years.

There is much work to be done to overcome these challenges. This work must ensure that excellent educational opportunities are available to all of our nation's children regardless of race, economic status, and/or location. In this way, education may truly be able to level the playing field for children of promise who live in poverty.

Project Athena: A Tale of Two Studies

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Educational studies emphasize the importance of critical thinking and reasoning, especially as these advanced cognitive functions are related to higher levels of academic and creative production within and across cognitive and performance domains (Csikszentmihalyi, 2000; Gardner, 2000). Becoming a creative producer of important “real world” products and problem solutions is predicated on the acquisition and use of higher-level reasoning skills. While most programs for gifted students include components of critical thinking as a fundamental aspect of the curriculum (Chandler, 2004), only recently has the field begun to examine the efficacy of such curricula as it relates to students’ cognitive and academic growth.

While previous studies have shown that students evidence significant and important gains in content-specific higher-order skills, such as literary analysis and persuasive writing on performance-based language arts measures (VanTassel-Baska, Zuo, Avery, & Little, 2002) or designing experiments in science using performance-based measures (VanTassel-Baska, Bass, Reis, Poland, & Avery, 1998), studies have not readily demonstrated that a content-based intervention can provide students with enhanced critical thinking and reasoning skills. Given the increasingly diverse student body in United States’ schools and the press for demonstrable success of all students on state and national accountability measures, additional focus in education is needed to ensure that both sound curricula and equitable assessment practices are employed for the diverse population of students who attend U.S. public schools. Project Athena was designed with these issues of effective curriculum and equitable assessment in mind.

Project Purpose

Project Athena is a federally funded Jacob Javits grant administered through the United States Department of Education. The project is a demonstration intervention study, designed in part to scale up a nationally validated language arts curriculum designed for high-ability learners. As a curriculum intervention study, Project Athena employed an experimental research design that randomized the assignment of classrooms of students and teachers in grades three through five to comparison and experimental instructional conditions. The project was implemented in 15 schools, in seven school districts across three states (i.e., Maryland, South Carolina, Virginia). Over-sampling was built

into the study design to counter attrition effects during the three-year implementation.

Several secondary studies were embedded within the overall project framework. This paper highlights the two primary studies within Project Athena, which addressed the issue of conducting equitable assessments and implementing an effective language arts curriculum for Title I students.

Participants

During a three-year implementation cycle (2003-2006), a total of 2771 students participated in Project Athena, with a slightly higher percentage of students in the experimental classes (54%) than comparison classes. The ethnic make-up of the sample was diverse, with 43% White, 27.5% African American, 18 % Hispanic, and 2.4% Asian American students participating. The remaining students (9.1%) were identified as Pacific Islander, American Indian, or “Other.” Overall ethnic or racial minority students comprised 53.5% of the Project Athena student sample. Gender was approximately evenly divided within and across groups.

Study One: A Tale of Assessment

One study within the larger research framework focused on the development and use of instrumentation sensitive to equity in assessment and increasing the number of low-socioeconomic, minority students as intellectually gifted. Because economically disadvantaged and culturally diverse students of promise were the population of interest in this project, reviewing relevant studies on effective interventions with and assessment of these populations was a crucial part of the project work.

The under-representation of these diverse groups of students in programs for the gifted constitutes a large reservoir of untapped and under-developed talent (Passow, 1991). Maker (1996) posited the need for an altered conceptual framework for gifted identification in order to better reflect the changing values, beliefs, and demographics of American society. Tomlinson, Callahan, and Lelli (1997) concluded that special instruction and programmatic interventions were essential for the success of high potential, low-income and minority gifted students during the primary grades. Of particular concern in this emphasis were African American students who are at special risk in school settings due to social, cultural, and economic

factors that influence their educational performance (Ford, 1996).

Title I students, including a large percentage of poor African American students, were the target population of this project. The socioeconomic factors that adversely affect students of poverty include a sense of psychosocial alienation, interpersonal and intrapersonal stressors, and different learning styles/orientations or educational background experiences. For example, Clasen (1992) and Ogbu (1994) both noted the sense of alienation experienced by minorities struggling to juggle the expectations of conflicting sociocultural worlds. Many researchers also have noted several psychological stressors that adversely affect minority populations (Ford-Harris, Schuerger, & Harris, 1991; VanTassel-Baska, Patton & Prillaman, 1991).

Instruments

Two nonverbal ability tests were administered as part of the assessment process in this research study in an effort to identify more students from poverty as gifted. These nonverbal tests reduce the influence of unnecessary and unfair linguistic and cultural demands and expectations found in traditional psychoeducational assessments, while providing an experiential test administration format to engage students.

The two tests included the *Cognitive Abilities Test* (CogAT; Lohman & Hagen, 2001) and the *Universal Nonverbal Intelligence Test* (UNIT; Bracken & McCallum, 1998). The CogAT and UNIT were used to identify students as intellectually gifted, in addition to the extant identification procedures employed in each of the three school districts.

CogAT. The CogAT is a well-known and established group administered test of verbal, nonverbal, and quantitative ability. Because the focus of Project Athena was on language arts, only the CogAT verbal and nonverbal scales were administered (i.e., quantitative reasoning was judged as not germane to the project). Each section of the CogAT requires approximately 30 minutes for administration for an approximate administration time of one hour. The CogAT technical manual indicates strong evidence for the instrument's validity, internal consistency, and stability. Levels B, C, and D of the CogAT Form 6 were group administered to students in the third, fourth, and fifth grade, respectively.

UNIT. The UNIT is a popular individual, nonverbally administered test of intelligence. A two-subtest UNIT Abbreviated Battery was administered for this study. Considerable UNIT technical adequacy and fairness evidence is presented in the Examiner's

Manual, with estimates of reliability posted by gender, race/ethnicity, exceptional/clinical students, and for important decision-making points (i.e., MR and Gifted levels of cognitive functioning). Average internal consistency coefficients for the Abbreviated Battery are reported as .91 for the entire sample, and .95 and .94 for African American and Hispanic students, respectively. Additionally, the UNIT internal consistency is reported as .96 for combined clinical/exceptional samples and .96 for a gifted sample. The UNIT Examiner's Manual also presents an array of construct, criterion-related, and content validity evidence, with considerable fairness evidence presented as well.

Findings From the Assessment Study

By using two nonverbal measures of intelligence, Project Athena identified nearly twice as many Title I students as gifted as compared to the school districts' identification procedures. Of 253 students identified as intellectually gifted with an $IQ \geq 120$, 94 had been identified by the school districts and 159 were identified by the Project Athena assessments. Using a cut-score of 130 or greater, a total of 64 students were identified, with 29 identified by the districts and 35 identified by Project Athena. Importantly, for those students with IQs at 120 or above, 17.9% were African American on the UNIT test, and 11.9% were African American when the CogAT Nonverbal was used. With IQs at 130 or above, 14.7% were African American on the UNIT test and 8.7% when the CogAT Nonverbal scale was used. Additionally, a total of 10.1% and 5.4% of the sample were African American at the 120 and 130 IQ levels, respectively, when the CogAT Verbal scale was used.

Study Two: A Tale of Curriculum

A second study was designed to assess the efficacy of a promising curriculum developed for use with high-ability learners from low income backgrounds. Participating teachers and classes of students were assigned on a random basis to either the experimental or comparison conditions within each participating school district. Experimental teachers were trained on the project curriculum during each year of implementation, and during the fall of each academic year. A series of pre-test measures were administered to students in both experimental and comparison classrooms prior to curriculum implementation. Two pre-test measures were administered to the entire sample to assess students' incoming levels of academic functioning in reading and critical thinking (i.e., ITBS and TCT). Additionally, in the experimental classrooms, two curriculum-derived performance-based measures were administered for pre- and

post-assessments of students' literary analysis and persuasive writing. All instruments were employed as pre-post measures during all three years of project implementation.

Instrumentation

ITBS. The Reading portion of the ITBS was used in this study. The ITBS is a commonly used group-administered achievement test, with strong evidence of technical adequacy. Internal consistency coefficients for the ITBS Reading scale for the three, four, and five grade levels used in this study were .88, .87, and .86, respectively.

TCT. The TCT is a 45-item project-developed instrument designed to assess the critical-thinking skills of students in grades 3, 4, and 5. The TCT coincides with Paul's (1992) model of reasoning, including his eight elements of thought (i.e., *issue, purpose, concept, point of view, assumptions, evidence/information, inferences, implications/consequences*). The TCT is a group-administered test that consists of ten short stories or scenarios, each of which is followed by several multiple-choice questions. The TCT presents a balanced framework of critical-thinking elements within interesting stories that reflect seven important life-domains for children and adolescents (Bracken, 1993, 1996; Wasserman & Bracken, 2003), making it both useful and relevant to the lives of young students. TCT reading levels were assessed using the Flesch-Kincaid Grade Level readability formula across the 10 brief scenarios and yielded an average grade level of 3.7, with a range of grade levels from 2.7 to 5.3. Initial estimates of TCT internal consistency were .85, .83, and .87 for grades 3, 4, and 5, respectively.

Procedures

Following the pre-test administrations, teachers in grades 3-5 in the experimental classrooms implemented the designated William and Mary language arts curriculum unit for a period of 12 weeks (each curriculum unit contains 24 lessons). Comparison teachers implemented their respective state-prescribed language arts curricula. To increase treatment fidelity, all experimental and comparison classrooms were observed twice during the implementation cycle by a team of trained observers. Observers used a structured observation scale, the *Classroom Observation Scale – Revised* (COS-R; VanTassel-Baska, Avery, Struck, Feng, Bracken, Drummond, & Stambaugh, 2003) to record teachers' instructional behaviors. Following curriculum implementation, two post-test measures were again administered in all classrooms (i.e., TCT, ITBS), and the performance-based measures were administered to the experimental groups.

The language arts curriculum used in Project Athena was developed and tested previously, and was "scaled up" for this study, and embellished with a supplemental reading series created specifically for this project. The language arts curricula employed in the study for 3rd-5th grade students are based on the Integrated Curriculum Model (ICM) (VanTassel-Baska, 1998, 2002). The model is comprised of three interrelated dimensions that are responsive to gifted learners through 1) advanced content, 2) higher order process and products, and 3) conceptual understanding. The ICM has been translated into a curricular framework and set of curriculum units by addressing each of the dimensions in an integrated way.

The language arts curriculum employs advanced literature selections that are minimally two years beyond the students' reading grade level, core models for teaching writing, reasoning (Paul, 1992), and research, as well as a conceptual dimension focusing on the theme of change as it is applied to works of literature. All language arts curriculum units have been aligned to related state content standards and are responsive to the language arts content strands in reading, writing, speaking, and listening. Additionally, every language arts curriculum unit employs specific pre-post performance-based assessments for literary analysis and writing to document authentic student growth and performance. For the purposes of Project Athena the curriculum units of *Journeys and Destinations*, *Literary Reflections*, and *Autobiographies* were employed for the 12-week implementation cycle.

In addition a supplemental curriculum, *Jacob's Ladder*, was developed based on teacher feedback requesting supplemental materials for their students needing help in accessing higher-level thinking in reading. *Jacob's Ladder* was developed for Project Athena as a scaffold to raise lower levels of reading comprehension to higher levels of critical reading behaviors used in the Project Athena curriculum. It was used in a variety of ways during study implementation to augment and enhance student's understanding of reading material. *Jacob's Ladder* begins with targeted readings, ranging from fables and myths, to poetry, and nonfiction sources. Readings and questions move students through an inquiry process from basic understanding to critical analysis. *Jacob's Ladder* tasks have been organized by skill ladders with questions and activities within each rung of the ladder. Ladder rungs have been organized hierarchically to increase reading complexity and intellectual demand.

Findings from the Curriculum Study

Findings from students' learning outcomes

suggest that across three years of implementation experimental students performed at a significantly better level than did comparison students, suggesting that the project curriculum encouraged and fostered critical thinking more than the alternative curricula employed in comparison classrooms. Across three years of implementation, female students scored higher than male students on the TCT. The three-year longitudinal data also indicated that there was a slight ethnicity effect on both the TCT and the ITBS reading assessment, with White students registering the highest group performance, followed by African American students and then Hispanic American students; this race/ethnicity pattern was consistent across both experimental and comparison groups.

After controlling for possible pre-test differences in reading and critical thinking, ANCOVA results illustrated the value of the Project Athena curriculum for Experimental students as compared to Comparison students, with significant main effect differences on the post-test measures of reading and critical thinking. There were no significant interactions associated with the treatment effect analyses, leaving the main effects to highlight the positive influence of the Project Athena language arts curriculum across all Experimental participants, regardless of demographic characteristic or background.

Conclusion and Implications

Both of these multi-year studies provide important research evidence of the effects of using assessment tools sensitive to finding low-income students and a differentiated curriculum designed for high-ability learners in Title I schools.

With respect to the equitable assessment practices study, the Project Athena identification measures nearly doubled the number of Title I students identified as intellectually gifted by including nonverbal tests of intelligence or general ability in the assessment process. This outcome illustrates the benefits of combining two or more tests to facilitate the process of identifying students with one or more unique cognitive abilities. More African American students were identified as gifted when assessed on both the individually administered UNIT and the CogAT Verbal and Nonverbal Scales.

This project underscores the importance of using multiple measures, including standardized tests to identify low-income students who are gifted. Study results highlight the importance of recognizing that different tests will identify different students as gifted even when the tests purport to assess the same

construct (see Bracken, 1988 for a more detailed explanation of why similar tests produce dissimilar outcomes).

In regard to the curriculum intervention study, the project showcases broader and deeper implementation of an effective language arts curriculum with diverse

This project underscores the importance of using multiple measures, including standardized tests to identify low-income students who are gifted. Study results highlight the importance of recognizing that different tests will identify different students as gifted even when the tests purport to assess the same construct.

students in diverse settings. The curriculum study demonstrates that a complex and rigorous curriculum designed for gifted learners can be applied to benefit all learners in key ways to help them achieve higher educational outcomes. Therefore, employing a curriculum that emphasizes higher level thinking for Title I students provides additional value to their learning beyond reading comprehension.

In the long run, Project Athena provides educators with a blue print of what works with regard to both assessment and curriculum for students of poverty in Title I schools. It demonstrates meaningful ways to attain higher curricular standards and beneficial cognitive learning gains in the foundational areas of reading, writing, and thinking for all learners.

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The Challenge: Preparing Promising Low-Income Students for College



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The Challenge

While *Brown vs. Board of Education* made differentiation based on racial differences illegal in the United States, promising minority and low-income students still struggle at the secondary level to gain access to the most rigorous courses in American middle and high schools. For example, Greene and Forster (2003) found in their national study *Public High School Graduation and College Readiness Rates in the United States* that, of high school graduates in 2001, only 25% of African Americans, 22% of Latinos, and 21% of Native Americans had completed a sufficiently rigorous curriculum to be considered college ready, compared to 39% of Whites and 46% of Asians (p. 21). Inequity persists to the detriment of minority and low-income student advancement. Adelman (2006) in *The Toolbox Revisited* locates the root of this achievement gap; “not all high schools present adequate opportunity-to-learn, and some groups of students are excluded more than others” (p. xviii). Minority and low income students are far less likely to attend schools that offer rigorous enough courses that qualify them for college admission. This lack of access to college-prep rigor presents these students with a substantial obstacle to becoming college ready.

Between 1965 and 1975, most American secondary schools removed their “tracking” systems that assigned students to pre-determined programs for the entirety of their high school years. In most cases, designations, such as honors, remedial, and basic, were no longer applied to programs in which students were assigned, but instead were applied to the students’ schedule of courses (Lucas, 1999). Freedman (2000) notes that the process of separating minority students in remedial classes with low expectations as creating “instructional ghettos” (p. 15).

In 1997, the National Task Force on Minority High Achievement was organized by the College Board specifically to address the serious educational issue of the limited presence of minorities among high achieving students at all levels of the educational system. In one of its most recent documents, *Reaching the Top: A Report of the National Task Force on Minority High Achievement*, the College Board (1999) recommended that elementary schools and secondary schools raise the academic achievement, enrollment, retention, and graduation rates of African American, Latino, and Native American students (p. 3).

In America’s public schools, efforts have been made to increase opportunities for low-income students through federal funding. In addition, special programs have been implemented to address the needs of various student populations. Included in these groups are the very high achieving students, or the gifted and talented. Gifted and talented students are most often assigned to rigorous academic curricular tracks in which their teachers hold high academic expectations of them. However, promising low-income and minority students often struggle in gaining access to rigor in secondary schools.

Origin & Scope—Advancement Via Individual Determination (AVID)

AVID was founded in 1980 by Clairemont High School English teacher Mary Catherine Swanson. In 1986, Swanson was brought to the San Diego County Office of Education to disseminate the AVID Program throughout the county, eventually reaching over 100 middle schools and high schools. In 1995, Swanson founded the AVID Center, a non-profit educational organization, to assist in the national dissemination of the program, which now serves over 2,200 schools in 36 states and 15 foreign countries. AVID programs have graduated over 30,000 students at a current rate of nearly 6,000 per year. AVID programs serve over 115,000 students in grades 5-12.

General Description/Program Overview

AVID is an educational acceleration system for grades 5-12 that focuses on professional development, site team research and planning, and provides an elective class that supports a targeted group of underachieving students, with an emphasis on moving more students into rigorous coursework leading to four-year college acceptance. In the accelerated elective class, AVID students receive support through a rigorous curriculum and ongoing, structured tutorials.

Schoolwide achievement results from the professional development received by subject area teachers, counselors, administrators, district administrators, and especially through the success of the students targeted for the AVID elective. These students provide tangible proof for teachers that a wider range of students are capable of rigorous coursework, if the students are provided structure, ongoing support in writing, inquiry, collaboration, reading, organization, study skills, and test taking, among other skills.

AVID requires that a regional or district AVID director provide support to middle and high school sites,

focusing on AVID methodologies, site team planning, data collection and analysis, support for Advancement Placement testing, tutor training, AVID certification, and examination of a site's supports and barriers for student access to rigorous coursework.

AVID is designed to increase schoolwide learning and performance. The mission of AVID is to ensure that all students, and most especially the least served students who are in the middle:

- will succeed in rigorous curriculum,
- will complete a rigorous college preparatory path,
- will enter mainstream activities of the school,
- will increase their enrollment in four-year colleges, and
- will become educated and responsible participants and leaders in a democratic society.

AVID's systematic approach is designed to support students and educators as they increase schoolwide/districtwide learning and performance.

Results

AVID has been studied by numerous independent researchers, including Dr. Hugh Mehan and a research team from the University of California, San Diego, and by Drs. Grace Pong Guthrie and Larry Guthrie, of the Center for Research, Evaluation, and Training in Education (CREATE). Mehan's study, which resulted in the book *Constructing School Success: the Consequences of Untracking Low-Achieving Students* (1996), took place over three years and examined eight San Diego high school AVID programs. One significant discovery from Mehan's study was that students who remained in AVID for three years outperformed their control group who were in AVID for only one year. In addition, the UCSD team reported a number of other important discoveries about AVID, including:

AVID sends one third more students to four-year colleges than the local and national average.

African American AVID students, whether they participate in AVID for one or three years, are enrolling in college at rates which are considerably higher than the local and national averages.

African Americans and Latinos enroll in college in numbers that exceed local and national averages. Of the Latino students who have participated in AVID for three years, 43% enroll in four-year colleges. This figure compares favorably to the San Diego City Schools' (SDCS) average of 25% and the national average of 29%. African American students who participate in

AVID for three years also enroll in four-year college at rates higher than the local and national averages; 55% of African American students in AVID enroll in four-year colleges, compared to 38% from the SDCS and the national average of 33%. AVID students are staying in college once they enroll; 89% of those who started are in college two years later.

The data gathered on parents' income and students' college enrollment suggest that the AVID untracking program is suppressing the well-established effects of parents' income on students' academic achievement. Students who come from the lowest socioeconomic strata and who complete three years of the untracking program enroll in four-year colleges in equal or greater proportion to students from higher socioeconomic levels.

Students who come from the lowest income strata enroll in four-year colleges in equal or higher proportion to students who come from higher income strata. Students who come from families in which their parents have less than a college education enroll in four-year colleges more than students who come from families who have a college education.

In short, the capital that students bring with them into the program does not seem to be as important as the capital that students accrue while they are in the program.

This newly acquired academic identity posed problems for AVID students who had many non-academic friends, however. AVID students resolved this dilemma by managing dual identities, an academic identity with academic friends at school, and a non-academic identity with friends after school. This "border crossing" strategy is useful for minority students, because it provides them experience in moving between two cultures, a high achieving academic culture and a supportive community culture.

A research team employed by the state of California, CREATE has produced several reports regarding AVID's dissemination, including *Strategies for Dissemination*, a study of 15 AVID high schools throughout California (David & Guthrie, 1994); *Evaluation of Statewide AVID Expansion* (Guthrie & Guthrie, 1997a); and *Longitudinal Research on Middle Level AVID, a Two-Year Report* (Guthrie & Guthrie, 1997b), among others. The middle level report findings included the discovery that, during their ninth grade year, AVID students who were in the middle level program for two years outperformed other AVID students who had not been in AVID previously or had completed only one year at the middle school.

Other Research Studies of AVID Include the Following Results:

- In Texas, the AVID program successfully catalyzes schoolwide reform so that low-income and minority students are untracked and prepared for college (Watt, Yanez, Cossio, 2002).
- The AVID program is effective in getting low-income, minority, and first-generation students into the college-going pipeline. (Cunningham, Redmond, Merisotis, 2003).
- “Because AVID proactively seeks to raise achievement and increase college preparedness for students at risk, it deliberately addresses the predictors of college-going behavior and uses college entrance and completion as measures of its success, making it unique among the reform models examined in this study.” (Martinez and Klopott, 2005).
- When compared with other outreach efforts, the longitudinal research on AVID has been extensive. (Hayward, 1997).
- In Newport News, Virginia, AVID middle level students outperformed other students throughout the district on the state’s Passport to Literacy, a reading and writing exam. (Swanson, 1997).
- California Results: AVID graduates complete the sequence of courses necessary for four-year college acceptance at an 84% rate; the state average is 34%. (Guthrie & Guthrie, 1999).
- Nearly 50% of AVID middle-level students take algebra (Guthrie & Guthrie).
- In another study of Texas AVID high schools, researchers found that after three years, AVID students outperformed their classmates on the Algebra and Biology end-of-course exams by 21% and 14% respectively. In addition, AVID students outperformed their classmates and all students in Texas on reading and math standardized tests. (Watt, Powell, & Mendiola, 2004).
- In a study of four schools in one AVID district in Texas, successful AVID schools had a committed principal who provided not only financial support, but also ideological support to properly implement and sustain AVID. (Watt, Huerta, & Cossio, 2004).

What Impact does AVID Have on Core Subject Area Performance?

At AVID Summer Institutes, weeklong sessions are provided for subject area teachers in mathematics, science, English, social science, and world languages. This training is required for both middle schools and

high schools seeking to implement the AVID program. The AVID Site Team Library, at both the middle and high school levels, provides supplemental teacher guides and student activities, to support the use of AVID methodologies with all students. Over 12,000 educators attend four AVID Institutes each summer.

In 1994, the AVID Center concluded a validation process for 33 high schools in San Diego County, studying their AVID programs in depth and making awards based on performance in several categories. Prominent among those categories was the percentage of all high school graduates in those 33 schools who had completed the eligibility requirements for the University of California system. The California Postsecondary Education Commission (CPEC) provided the data for the study. The conclusion of the study: The 33 AVID high schools increased their percentage of seniors completing UC requirements by 37.9%. During the same period, the statewide average increase was 7.3% (Swanson, 1994).

This newly acquired academic identity posed problems for AVID students who had many non-academic friends, however. AVID students resolved this dilemma by managing dual identities, an academic identity with academic friends at school, and a non-academic identity with friends after school. This “border crossing” strategy is useful for minority students, because it provides them experience in moving between two cultures, a high achieving academic culture and a supportive community culture.

A 1992 study by the California Department of Education showed that all graduating seniors at AVID high schools nearly doubled their completion of UC core requirements (a-f completions). During the same period, the increase statewide in California was 13% (Emmett and George, 1994).

For students who graduate from the targeted AVID elective class, the results are also striking. Mehan’s study, *Constructing School Success* (1996) found, among other results, that AVID graduates outperformed California graduates by ethnicity in their completion of UC core requirements in nearly every category—Latinos were 17% above the state average; African Americans were 1% below; White students were 7% higher; all other ethnicities were 7% higher. Moreover, AVID graduates outperformed all ethnic groups nationally in terms of four-year college participation --African Americans were 22% higher; White students 22% higher; Latinos were 14% higher; and Pan-Asians were 22% higher.

Served Populations

AVID focuses on underachieving and mid-performing students who are typically the first in their families to

attend college. Many AVID students are from low-income backgrounds. AVID has been implemented successfully in Title I schools, urban schools, rural schools, suburban schools, and in the Department of Defense Dependent Schools.

Program Content

The synergy of the AVID program to increase a site's number of college bound students is particularly unique. The transformation of individual classroom teachers, who are enthusiastic, encouraged, and invigorated by the success of their students, is as significant as the success of the students who actually enter and complete a four-year college program. The degree to which the AVID program is also the initiation of school-wide change has brought about particularly positive results in many schools. Some of the critical elements that help build the success of AVID include:

- Creation of a positive sense of teamwork within a school, which starts with AVID teachers and then expands to all the academic classroom teachers as they become engaged in the AVID methodologies.
- The demonstrable success of the program with the improved quality of education and success of the students and the percentage of graduates.
- The cost-effective nature of the program and the assistance of the AVID national office to help identify available resources within each individual situation.
- The fact that AVID leadership is drawn from those who have been AVID teachers or administrators and actually experienced the program's success and management.

Since its inception, AVID has been a research-based program, drawing upon the work of studies such as the Carnegie Forum's "Schools for the 21st Century," Stanford University's Path Study, Glasser's Control Theory in the Classroom, and the work of Dr. Uri Treisman. Treisman (1990). Treisman, formerly a professor of mathematics at the University of California, Berkeley, is renowned for his study of different approaches to learning calculus among African American, Chinese, and Latino students. As a solution to differing performances among these students, Treisman (1990) developed a pilot Math Workshop where students "... spent approximately six hours per week working together on problem sets [Treisman] constructed." He took care that "... the problem sets were always difficult to protect the Workshop's non-remedial veneer... The students began to seek out

their weaknesses and to ask for help... Eventually the students were solving most of the problems on their own." Treisman intervened in their personal lives as well to "... avert in the making, problems that if allowed to develop would almost surely have interfered with their academic performance. The average grade of the Workshop students in both first- and second-term calculus was B; their average grade in third-term calculus was A-" (1990). Treisman's pilot mathematics workshop is today a frequently replicated program for postsecondary students. In 1987 Treisman won the Charles A. Dana Award for Pioneering Achievement in Postsecondary Education, and in 1992, he won the MacArthur Genius Grant. In 1991, Mary Catherine Swanson was the first and as yet the only secondary public school teacher to win the Charles A. Dana Award for Pioneering Achievement in Secondary Education.

AVID meets the needs of underachieving students by Providing academic instruction and other support to students to prepare them for eligibility to four-year colleges and universities, Giving students college level entry skills, Increasing the "coping skills" of program students, Motivating program students to seek college educations, and Increasing the student's level of career awareness.

The middle school and high school AVID Program features a regularly scheduled college preparatory elective class for students with academic potential, in which they continue for the duration of their time at the site. Few of the students who are identified for the program are enrolled in college preparatory classes prior to enrollment in AVID. Upon entering AVID, students enroll in advanced level college preparatory classes that fulfill the college entrance requirements. Tutors (ideally former AVID students) from area colleges and universities are trained to use specific teaching methodologies and materials to work with these high school students. The college tutors, along with exemplary high school peer tutors, work with AVID students in study groups and individually, assisting them in all academic areas to make progress commensurate with college expectations.

AVID-trained teachers instruct students in lessons derived from materials, originally developed collaboratively in AVID by high school and college instructors. In addition, college instructors of freshman level introductory courses may teach mini-lessons within the AVID program, providing students with a realistic introduction to college work. Lessons are also offered in note taking, study skills, test taking, time management, SAT and college entrance/placement

exam preparation, effective textbook reading, and library research skills. Students receive extensive help in preparing college applications and financial aid forms. Guest speakers from educational institutions and the business community also visit AVID classes. In addition, on-going home contact (in the form of quarterly letters, regular telephone calls, and quarterly meetings for all parents and students in the AVID program) and a Parents' Advisory Board are vital to the success of the program.

Subject area teachers from core academic disciplines receive initial staff development in the AVID strategies of Writing, Inquiry, and Collaboration, and Reading (WIC-R). These teachers and others participate as members of the AVID site team, examining issues of access, equity, and excellence throughout the school.

Implementation

AVID provides a national office, the AVID Center, which oversees dissemination of the model throughout the United States, Canada, and in the Department of Defense Dependents (DoDDS) schools. The AVID Center designs staff development modules, creates templates for certification of AVID sites according to the AVID Essentials, and provides ongoing support for regional and district directors and coaches for the program. The regional or district coaches assist participating sites in implementing the program according to the AVID continuum. In California, 11 regional offices throughout the state support AVID sites. AVID's Eastern Division office, located in Georgia, works with sites and district directors east of the Mississippi. A Central Division office, based in Texas, serves the middle of the U.S., while a Western Division office serves western states and British Columbia.

Each participating AVID site agrees to (1) train an interdisciplinary team at an AVID Summer Institute; (2) allocate time for staff development for both the team and for the AVID elective class teachers; (3) develop a site plan that focuses on increased access to rigorous curriculum for all students and identifies the site's strengths and barriers related to access; (4) collect data on a yearly basis and examine the data as a site team; (5) allow subject area staff members from all disciplines to attend AVID Summer Institutes; and (6) attend regional or district site team conferences at least twice yearly.

The AVID Center oversees Summer Institutes throughout the U.S. as well as Europe and the Pacific, which the site's interdisciplinary site teams must attend as part of the implementation process. These weeklong institutes provide specific training for AVID elective

teachers, administrators, counselors, and all subject area teachers, along with tutor training and extensive site team sessions.

The AVID network is initially developed at the Summer Institutes and is supported throughout the year in monthly professional development sessions. On-site AVID Advisory Boards include a network of site teachers, counselors, administrators, tutors, students, and parents. Networking with the National AVID Center is provided through an extensive website and quarterly journals. Schools receive ongoing support from AVID Regional and District Directors who work with AVID Site Teams on annual work plans established at the Summer Institutes. Progress toward achieving the goals of the plan is monitored with assistance provided as needed.

Moreover, AVID conducts a yearly certification of each site. The certification components evaluate the eleven AVID essentials of implementation. Regional Directors work with the sites to fulfill the essentials; however, if they are unable to do so, the sites earn affiliate status for one year to come into compliance. If the site is unable to achieve the goals within a year, they are asked to deactivate the program. If sites far exceed the 11 essentials in qualitative and quantitative areas, they are designated as certified with distinction.

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Advanced Placement: Equity and Excellence

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Over the years the College Board has become increasingly concerned that many high school students of poverty do not participate in the Advanced Placement Program (AP). Some do not participate because AP is not offered in their schools. Others do not participate because of the cost of the AP Exams; while many more do not participate because they are not encouraged or prepared to do so. Some students of poverty are, in fact, discouraged by teachers or counselors from enrolling in Advanced Placement classes.

The Advanced Placement program has taken several steps to encourage AP participation of students of poverty and other underrepresented groups. First, the College Board and the Advanced Placement Program have developed an AP Equity Policy Statement.

The College Board and the Advanced Placement Program encourage teachers, AP Coordinators and school administrators to make equitable access a guiding principle for their AP programs.

The College Board is committed to the principle that all students deserve an opportunity to participate in rigorous and academically challenging courses and programs. All students who are willing to accept the challenge of a rigorous academic curriculum should be considered for admission to AP courses. The Board encourages the elimination of barriers that restrict access to AP courses for students from ethnic, racial, and socioeconomic groups that have been traditionally underrepresented in the AP Program. Schools should make every effort to ensure that their AP classes reflect the diversity of their student population. (College Board, 2002)

Second, the Advanced Placement Program has developed Pre-AP Initiatives that are intended to address the problem of students being unprepared for rigorous courses. The purpose of the Pre-AP Initiatives is to equip middle school and high school teachers with the strategies and tools they need to engage their students in active, high-level learning, thereby ensuring that every middle and high school student acquires the knowledge and develops the skills, habits of mind, and concepts needed to succeed in Advanced Placement classes and other college-level course work. Pre-AP takes the form of a variety of intense professional development opportunities designed to give teachers

the knowledge and understanding of the skills and strategies that must be taught to students to prepare them for AP.

Third, in 2005 the AP Program developed a new measure of AP success that removes the emphasis on the percentage of students scoring a 3 or better on an AP Exam. The practice of reporting the percentage of students who scored a 3 or better had led to some schools or teachers discouraging students from participating who might not score at that level. The new measure is the best single measure of equity and excellence in AP. It situates success on the AP Exam within an overall context of equity and access. This new measure is the percentage of students in a total population (a school, a district, a state, or the nation) who had at least one AP experience resulting in an exam score of 3 or higher. This allows each school to compare its success with what is happening in the state or nation overall. This means that there is no way to inflate the school percentage by restricting access to AP. Students who score 1s and 2s on the AP Exam neither increase nor reduce the percentage.

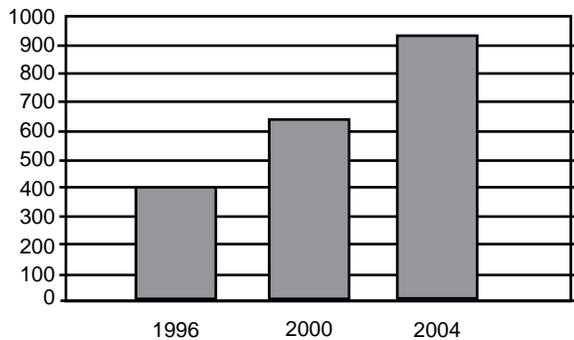
While much has been accomplished and all states have made progress, more needs to be done to help students obtain the skills needed for college. Currently, 40 percent of students entering four-year institutions require some remedial education.

In 2006, the AP program started reporting data to educators that will allow them to track from year to year the quality of student learning in AP courses. Educators are also given feedback about the knowledge and skills AP students are particularly demonstrating -- or failing to demonstrate on each AP Exam.

These steps have helped to increase the number of students participating in the AP Program. In 2005 the College Board reported that all 50 states and the District of Columbia succeeded over the past five years in helping a greater percentage of their students demonstrate college-level mastery of an AP course during their high school years. In the state of New York, more than 20 percent of the class of 2004 demonstrated college-level mastery of at least one AP course during their high school years. In the states of Maryland, Utah, Florida, California, and Massachusetts between 18 and 20 percent of the class of 2004 achieved this goal.

In 2006 the College Board reported that a wider segment of the U.S. student population than ever before achieved success on an AP Exam before leaving high school (see Figure 1). The state of New York continued to lead the nation with nearly 23 percent of students in the class of 2005 earning an AP Exam grade of 3 or higher. Maryland and Utah saw more than 20 percent of their students achieve such AP results. States that saw the greatest amount of positive change in the proportion of students who succeeded on an AP Exam were: Maryland, North Carolina, Washington, Connecticut, and Delaware.

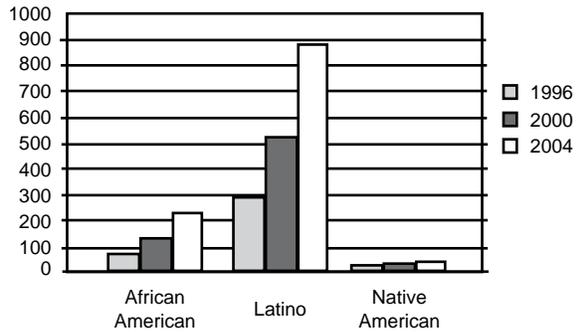
Figure 1. Number of AP Examinations with Grades of 3, 4, or 5 (U.S. Public Schools) (in thousands)



While much has been accomplished and all states have made progress, more needs to be done to help students obtain the skills needed for college. Currently, 40 percent of students entering four-year institutions require some remedial education. In two-year institutions the picture is worse, with 63 percent requiring some remedial education. If remediation in math or reading is required, the likelihood the student will obtain a bachelor's degree is decreased. These figures have made secondary schools across the nation become more committed to helping all students develop the habits of mind necessary for college success.

Although more African American, Latino, Native American, and students of poverty are participating in the AP program, more must be done to ensure that traditionally underserved students are fully represented in AP classrooms. Figure 2 shows the breakdown by minority group. Additionally, attention must be paid to the significant performance gaps between White, Asian, and traditionally underserved minority students. Middle schools and high schools must help these students develop the skills and content mastery needed to succeed in the AP courses. The College Board's Pre-AP Initiatives are designed to help schools accomplish this.

Figure 2: Number of AP Examinations with Grades of 3, 4, or 5 (U.S. Public Schools) (in thousands)



In 2005, the College Board and the Advanced Placement program began to recognize schools that lead the world in helping the widest segment of their total school population attain college-level mastery of each AP Exam. These schools were identified by dividing the number of students scoring 3 or higher on an AP Exam by the total number of students enrolled 9-12 in the school. The schools with the highest percentage of their total student population scoring 3 or higher on the AP Exam receive this recognition. Additionally, schools that lead the world in having the largest numbers of traditionally underserved African American and Latino students scoring 3 or higher on AP Exams are also cited. To date, no school has had large numbers of Native American students scoring 3 or higher on AP Exams.

The College Board and the Advanced Placement program have worked and are continuing to work with states to develop legislation and initiatives to increase AP participation. Additionally, the federal AP Incentive Program grants have helped to increase participation of underrepresented groups of students. However, much remains to be done. Minority students and students of poverty are still underrepresented in AP courses, and they currently perform significantly lower on AP Exams. Major initiatives are needed to ensure that these students are adequately prepared for the rigor of the AP course and for college.

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The Johns Hopkins Center for Talented Youth (CTY): Initiatives to Find and Serve Low-Income Gifted Learners

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Gabe was a hard-working 7th grader at a large public school in East Los Angeles when Anna learned about him. He talked about going to college, but no one in his family, including his then 18-year-old brother, had found a way to do so. His parents spoke limited English and worked long hours in factory jobs so they had little interaction with his school. Certainly, an opportunity to take a summer course at a university in a program for gifted students was not something they were seeking for 12-year-old Gabe...at least not until Anna found him.

Anna was an outreach coordinator from the Johns Hopkins Center for Talented Youth (CTY). Working with the staffs of Los Angeles-area middle schools that had large populations of students from poverty, Anna was looking to find low-income students with the promise to achieve at exceptionally high levels. She arranged for students to be tested through the Johns Hopkins Talent Search and, if they scored well, was prepared to offer them full scholarships to attend CTY's academic summer program. Gabe did score well and, with Anna's encouragement, took an engineering course in a three-week CTY residential program at the University of California Santa Cruz. This summer experience truly changed Gabe's life, enhancing his determination to attend college and leading to an invitation to apply for a special new opportunity. In the inaugural year of a partnership between the Jack Kent Cooke Foundation and CTY to serve low-income gifted students, Gabe was chosen to be a Jack Kent Cooke Young Scholar.

As a result of the academic advice and scholarship support he received through this program, Gabe left his large public school and enrolled in a private high school where he found greater challenge and support for his talents. He spent his summers attending programs on the campuses of the University of California San Diego, California Institute of Technology, and Georgetown University and, with the help of his Jack Kent Cooke advisor, applied to selective colleges. This fall, Gabe will matriculate with full financial support at Stanford University. And, his older brother, who had no plans for college for himself five years ago but who accompanied Gabe on college visits, is now enrolled at a community college.

CTY's Mission and Services

The mission of the Johns Hopkins Center for Talented Youth (CTY) is to identify and serve students with advanced academic abilities. An outgrowth of the work of Julian Stanley and the Study of Mathematically

Precocious Youth (SMPY) at Johns Hopkins (e.g., see Stanley, 2005; Brody & Stanley, 2005), CTY utilizes a talent development model that includes four components:

- Using above-level specific aptitude tests to identify students with advanced reasoning abilities
- Adjusting the pace and level of instruction to meet students' needs for advanced content
- Encouraging students' participation in supplemental out-of-school educational opportunities, and
- Bringing students together with intellectual peers to enhance social and emotional development.

This model is also utilized by talent search programs at Duke University, Northwestern University, and the University of Denver, as well as other university-based centers in the United States. Through partnerships with CTY, the model has also been adapted for use in Ireland, Spain, Bermuda, England, and Thailand (see Touron, 2005).

Today, over 80,000 students in 2nd through 8th grade participate annually in CTY's talent search where they are assessed on above-grade level aptitude tests, such as 7th graders taking the SAT, a test designed for college-bound high school seniors (Barnett, Albert, & Brody, 2005), and it is estimated that at least 250,000 students are assessed each year through one of the talent search programs around the world. Scoring well on an above-level assessment can call attention to students' strengths that previously went unrecognized, thus impacting both on the student's immediate educational program and on his or her goals and aspirations for the future. One parent reported, for example, "*I knew my child was bright but had no idea he was on this level.*" The student subsequently skipped 8th grade, accelerated in math, and sought numerous ways to be challenged throughout high school through internships and other opportunities.

CTY talent search students are invited to participate in a variety of programs and opportunities, including academic conferences and college and career symposia. Those who meet eligibility requirements based on their test scores can take courses through CTY, either in residential summer programs or via distance education. Programs beyond those offered directly by CTY are profiled in CTY's magazine, *Imagine*, and on its Website, thus linking students to a wide variety of resources and opportunities.

The residential summer programs immerse students into a single rigorous, advanced course for three weeks (Barnett, Albert, & Brody, 2005). For many participants, this provides an intellectual experience that they rarely experience in school, thus encouraging their love of learning and enhancing their study skills. In addition, the residential component provides the opportunity for them to live, work, and socialize on a college campus with other bright and motivated young people, and many report forming lifelong friendships with others like themselves. Instructors, teaching assistants, and resident advisors, many of whom are former CTY students, are often powerful role models for the participants. In a follow-up evaluation, one student said, "I feel strong, vibrantly confident, and quirky because of the people I met and what I learned at CTY. It has given me the basis for the woman I am becoming."

Scoring well on an above-level assessment can call attention to students' strengths that previously went unrecognized, thus impacting both on the student's immediate educational program and on his or her goals and aspirations for the future.

Students in need of more in-depth assessment and counseling can utilize the services of CTY's Diagnostic and Counseling Center, and the Julian C. Stanley Study of Exceptional Talent (SET) provides educational counseling and mentoring free-of-charge to the highest scoring students in the talent search, i.e. those who score 700-800 on the SAT before age 13. We have found that most CTY and SET students can be well-served if they take full advantage of school-offerings and supplement them with challenging out-of-school educational opportunities (Stanley, 1989; Brody, 2005). Accelerative strategies and flexible placement can enhance their school curricula, and CTY and other programs and activities can provide access to content and challenges not available in school. Students can also meet and interact with like-minded peers through these activities, thus enhancing social and emotional development. However, gifted learners from low-income homes and communities may face greater challenges in finding appropriately challenging academic opportunities, so CTY is working hard to also address the needs of these students.

CTY Outreach

While CTY has a long history of trying to serve low-income students through special programs and scholarship support (e.g., Barnett, Gustin, & Dusel, 1996; Mills, Stork, & Krug, 1992), it became clear that these efforts were not reaching adequate numbers of students from low-income households, and there was

not enough diversity in its programs. Consequently, in recent years, CTY has intensified its efforts toward finding and serving students from disadvantaged backgrounds. As a result of rigorous outreach efforts, increased financial support, and special counseling, CTY is now helping large numbers of gifted students from disadvantaged backgrounds participate in its programs in the hope that they will be academically challenged and aspire to higher educational and career goals (Ybarra, 2005).

As with all CTY programs, outreach efforts to find talented students from low-income backgrounds begin with locating students to participate in the talent search. While this assessment is crucial for informing educational decisions and for qualifying for CTY programs, doing well in the talent search sometimes brings recognition for outreach students' high abilities for the first time in their lives. Parents, teachers, school administrators, and, most importantly, the students themselves may suddenly realize that they have the ability to achieve at exceptionally high levels and need opportunities to develop their talents.

CTY's outreach coordinators work to identify low-income students with exceptional potential, with current efforts focusing primarily in New York City, Newark, Boston, Philadelphia, Baltimore, Washington, DC, and Richmond, and in the states of Arizona, Hawaii, and California. These coordinators visit schools, make presentations, and talk to parents in an effort to reach talented students and encourage them to be tested through CTY. Fees are waived for low-income students, and special arrangements can be made for transportation to a testing site or for special testing. Outreach students who qualify for CTY programs are offered scholarships to attend, and the organization has worked hard to garner donations from individuals and foundations for scholarship support. Last summer, \$4.2 million was distributed in financial aid to program attendees, indicative of a high level of support.

Participation in a CTY residential summer program offers outreach students all the advantages it offers to all participants, i.e., a chance to be immersed in a challenging content area and to meet and interact with a community of peers. However, for many outreach students, it can also be the first time away from home and the first time on a college campus. The first time away from home can be a little scary, and coordinators work to reassure families about the safety and protection of students at CTY programs. Students who do well in this environment gain confidence and are more likely to seek additional learning opportunities outside of their community. One student reported, "*The scholarship*

opened me to a world outside of the limited city I live in. It gave me opportunities to meet new people and face difficult challenges I would not normally encounter in a regular classroom.” As for the first time on a college campus, especially for students whose parents and siblings did not go to college, the experience can have a positive impact on their own aspirations to attend college.

To encourage scholarship students to return to CTY in subsequent summers, outreach coordinators hold reunions each fall, where the students they have worked with can share their experiences. Other special events, such as college counseling days and programs to build the math and verbal skills of non-CTY qualifiers, have also been held for students who have been identified through outreach efforts. All of these initiatives have led to the inclusion of many more traditionally underserved students in CTY programs without lowering CTY’s requirements for eligibility.

Special Counseling Programs

While it is clear from follow-up evaluations and anecdotal comments that the CTY summer program experience can be life-changing for many scholarship students, we have found that it is important that the momentum continue during the school year if students are to continue to aspire to high levels of achievement. Since many low-income students do not return to environments where learning at a high level is likely to continue—their schools may not offer advanced courses, their homes may lack books and computers, and they may not have the resources to take advantage of supplemental learning opportunities—they are at risk for losing this momentum. To supplement summer program scholarship support for low-income students with year-round learning opportunities, CTY has formed partnerships with several foundations and organizations.

Jack Kent Cooke Young Scholars Program. One of these partnerships is with the Jack Kent Cooke Foundation. Building on the principles and practices long utilized by CTY’s counseling with high-ability students through its Study of Exceptional Talent (SET) (Brody, 2004; Brody, 2005), CTY has assisted in implementing the Jack Kent Cooke Young Scholars Program since its inception. Eligible low-income CTY students, as well as students from the talent searches at Duke, Northwestern, and University of Denver, are encouraged to apply, but the awards are not limited to talent search students, and the Jack Kent Cooke Foundation is working with numerous providers of services to low-income youth to identify potential Young Scholars.

The Young Scholars Program provides each student with an educational advisor who is based either at CTY or at the Foundation’s office. This individual works with the student throughout his or her high school years to identify appropriate learning opportunities so they can develop their individual talents. Depending on the student’s circumstances and needs, the opportunities provided might include such resources as summer and distance education programs, study-abroad options, books, and lessons to develop talent in the arts, with services funded by the Jack Kent Cooke Foundation. To help at-risk students succeed, funding can also be made available for tutorial help or psychological problems if needed. Students are also counseled on course-taking and college selection, and helped with career decision-making.

One Young Scholar shared this reaction to the program:

The Jack Kent Cooke Foundation has changed my life. With the help of the Foundation, my world is expanding. I am making choices now to seize every opportunity for growth and expansion. I am opening doors for my future. I have been recognized with awards and scholarships and I have made friendships with scientists, engineers, and fellow students whom I never would have met.

And his mother reinforced what he has been given:

Sometimes the most important support you give him is the sense that you believe in him and trust in him. The Foundation and JHU send a loud clear message that you love (yes, it feels like love to him) and support him for who he is and for his passion to learn as much as he can get his hands and heart around. The scholarship and the doors it has opened have made all the difference in the world to this young man negotiating through adolescence without a dad and with an amazing drive to learn

The first cohort of Jack Kent Cooke Young Scholars is now graduating from high school, and among the group are first-generation college students, such as Gabe who was profiled earlier. The list of colleges that the students in this cohort will be attending includes our nation’s most prestigious colleges and universities, and among the students are true academic superstars, including an Intel Science Talent Search Finalist and a Presidential Scholar. Next year’s graduating cohort will include a student with the potential to be world-class pianist, and another a professional ballet dancer. Clearly, the Jack Kent Cooke Young Scholars Program is achieving its goal of helping gifted low-income students achieve their full potential.

Next Generation Venture Fund (NGVF). Like the Jack Kent Cooke Young Scholars Program, NGVF grew out of the recognition that many low-income students need year-round support for their talents. After several years of scholarship support from the Goldman Sachs Foundation for low-income students to attend CTY summer programs, Goldman Sachs increased its support to students to include a second CTY summer and a mentor program. This program evolved into NGVF, which provides selected students with scholarship support for two summer programs at either CTY or Duke University's Talent Identification Program (TIP), the mentor program, distance education, and access to an educational advisor based either at CTY or Duke TIP who helps with academic planning and college selection. Parent training workshops are also a key component of the program, as are regional gatherings of NGVF students. Applicants are required to have participated in either the CTY or TIP talent search, and funding is now provided by a number of foundations and donors, in addition to Goldman Sachs. Selected students typically live in areas of the country of interest to the funding agency, with most current CTY NGVF students residing in New York or Los Angeles, and smaller contingents in Philadelphia, Boston, Baltimore, and Washington, DC.

While it is clear from follow-up evaluations and anecdotal comments that the CTY summer program experience can be life-changing for many scholarship students, we have found that it is important that the momentum continue during the school year if students are to continue to aspire to high levels of achievement.

Conclusion

In 2004, CTY celebrated its 25th anniversary, and among the events marking this occasion was a conference: *Helping Talent Soar: Finding and Serving Talent in All of America's Neighborhoods*. The efficacy of the Johns Hopkins talent search model and of CTY programs and initiatives has been well-validated over time. The goal now is to identify students in neighborhoods that were not traditionally well-served and to ensure that low-income gifted students have access to the educational programs and opportunities that will allow them to achieve their full potential.

In working with low-income families, it is important to recognize that their needs are not all the same. For example, the challenges may be greater if a student's family comes from generations of poverty and the parents have little education than they might be for educated parents whose incomes are low due to ill circumstances such as job loss, illness, or divorce. On the other hand, such difficulties may leave emotional

scars among the students who are impacted. Immigrant parents may be most in need of academic advising because of their lack of familiarity with American schools. The strategies utilized to serve low-income students and their families must address the individual and diverse needs of this target population.

This recognition has led CTY to develop a variety of approaches to serving low-income gifted students that include talent recognition, outreach support, scholarships, and ongoing intensive counseling efforts through collaborative efforts with foundations. Finding and serving students in our nation's poorest neighborhoods remains a difficult and ongoing challenge. However, great strides have been made, and CTY is committed to ensuring that all of the students they identify will receive the services they need to achieve their full potential, regardless of their family's financial or personal circumstances.

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Section VI
Next Steps - Priorities for Action

Next Steps: An Impetus for Future Directions in Research, Policy, and Practice for Low-Income Promising Learners

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You must be the change you wish to see in the world. --Mahatma Gandhi

One of the purposes of the National Leadership Conference on Low-Income Promising Learners was to determine what is known about promising students of poverty and to create a proactive research and policy agenda that includes directions for future initiatives related to this special population. Throughout the course of the conference, national leaders in the field of gifted education including state-level directors of gifted, researchers, specialized gifted education center personnel, K-12 leaders, and leaders from special foundations that focus on promising students of poverty met as part of a think-tank to discuss implications of current research and next steps within the field of gifted education. Four discussion groups were intentionally divided by geography and occupation so that a broad range of perspectives would enhance discussion.

Each group was charged with discussion of the following four topics related to promising students of poverty:

- identification and access to services,
- value-added interventions and strategies,
- transition and retention issues, and
- other related topics of importance.

Groups reflected upon each category by answering the following questions: (1) What have we learned? (2) What are the implications for state and local policies? and (3) What are the future directions for research? Data from each group were collated and categorically analyzed. Where two or more groups agreed on a set of ideas, they were included as thematic findings. The following section includes the group findings and implications for the field of gifted education.

Identification/Access to Services

It has been well documented that students of poverty and minority students are underrepresented in gifted programs. Due to their unique experiences, varied environments, and minimal acculturation to middle class values, typical assessment procedures under-identify these students. Moreover, state and local policies, identification procedures, and assessment measures need to be modified to capture the unique experiences and talents of these students. Empirical data specific to the identification of low-income, promising students is increasing in the literature on gifted and talented learners. This category encompasses a majority of the studies for which several generalizable findings

may be ascertained. Research-based identification practices for low-income, promising learners include the following:

1. Begin identification processes early in the child's school career. Pre-school and Kindergarten identification may trigger earlier intervention services, exposure to enriched environments, and advanced content. This proactive approach ensures that these promising students are exposed to an environment that is conducive to developing their potential talent areas and could enhance future educational growth that may not have otherwise been developed or noticed.
2. Provide dynamic and authentic assessment for students who have potential but need more school exposure to higher level content and processes before their giftedness is manifest in measurable ways. This includes pre-teaching components prior to testing, the use of exemplars for assessing performance, and the measurement of growth over time through the use of portfolios, behavior checklists, real-world, problem-based approaches, and performance-based measures.
3. Ensure that identification is ongoing. Multiple chances for entrance into gifted services are necessary. Students of poverty may need continued school exposure to a variety of content areas and higher level thinking skills before being identified or before they are able to thrive in a specialized gifted program. Also, these students may be more transient or absent from school when compared to other populations and consequently may miss key assessment opportunities if assessment is not ongoing.
4. Identification must be accessible to all students. Access to identification is critical to the receipt of services. However, many school systems rely heavily on teacher or parent recommendation as the gatekeepers to identification and service. Many times students of poverty go unnoticed and may not have the opportunity to be assessed. Therefore, assessments or screening procedures for each child in the district should be considered at key times throughout the school year so all students have equal chances for gifted service consideration.
5. Use valid and reliable instrumentation. Validity and reliability of assessment instruments is of greater concern when identifying special populations of promising learners in poverty. Teacher or parent checklists, portfolios, and other created assessments must be piloted and only used after acceptable technical

adequacy is determined. Similarly, highly marketed standardized assessments should be examined, not only for acceptable reliability and validity, but also for relevant sampling data on the designated population.

6. Include multiple measures and assessments as part of an overall identification system. There has been some controversy regarding carte blanche administration of nonverbal assessments as a means for identifying special populations of gifted, low-income or minority students. While the research on the use of nonverbal assessment measures for identification of low-income populations is promising, such tests should never be used as the sole criterion for program consideration. The use of multiple measures, with a nonverbal measure being one of them constitutes a stronger identification system. However, there is not a “one-size-fits-all” assessment to identify low-income promising learners.

7. Provide professional development and training for parents and teachers to better identify promising learners in poverty. Many times parents of these students are reticent to consent to assessment or special programming for their children. Sometimes there is mistrust between the school and the family. Moreover, many classroom teachers and pre-service teachers do not have the training to identify potentially gifted students from low-income and/or minority backgrounds. However, with training, both parents and teachers can improve their skills in this area.

Institutionalizing the identification process for promising learners in poverty is a challenging task for school administrators, teachers, and researchers. There are multiple implications and questions educators who work with these students must consider. Do the definitions, philosophies, policies, and service models complement or discriminate against promising students of poverty? How do the state and local policies and funding mechanisms for gifted need to change to accurately identify and include these students for services?

Screening and identifying all students using alternative and multiple measures over time may be time-consuming and costly. Are there effective and efficient instruments and procedures districts can use for the identification of promising learners? To what extent should districts consider local assessment norms and demographics? How well do the currently identified gifted student demographics match the overall district demographics?

Finally, after these students are identified, how do services match the identification model? Identified minority and low-income students may drop out of gifted programs that do not fit the way they

were identified or are not attuned to their strengths. Adjustments in services need to be made as part of systemic changes and multiple ways of assessing these students for advanced programs.

Value-Added Interventions and Strategies

Value-added interventions are also complicated to decipher in terms of strategies and programs that work. Educators must be cautious not to over-generalize specific study findings as many studies are small in scope and limited to a certain population, grade level, or demographic of low-income, promising students. Database searches of empirical studies specific to gifted or promising students who are low income are also more limited than data on regular, special education, or minority students of poverty.

Still, there are a few value-added approaches that permeate the literature specific to low-income, promising learners that were discussed by the groups as promising strategies:

1. Ongoing mentoring by counselors, teachers, and researchers to provide educational and social support structures for low-income promising students *and their families* positively impacts academic success, social skills, and student efficacy.
2. Proactive, targeted career and guidance counseling for low-income, promising students *and their families* positively impacts low-income students' selection of rigorous high school courses and post-secondary enrollment at selective universities.
3. After school, extra-curricular, Saturday, and summer enrichment programs, especially in mathematics and science, are found to positively affect college application, attendance rates in school, entrance into advanced courses and overall academic achievement.
4. Well-designed school-based interventions that include advanced and enriched curriculum opportunities also have demonstrated learning gains in critical areas for this population.

Additional research is necessary specific to value-added interventions with low-income, promising students so that policies and practices may be enhanced. Data available from general education studies on low-income learners may or may not be relevant to gifted students. For example, data on resiliency factors, social skills, scaffolding, bridging, teacher and family impact, and early-intervention models are included in much of the literature for low-income minority, and lower-ability students; studies in these areas specific to low-income, gifted students need to be conducted. Moreover, studies in gifted education need to be examined and replicated

to include the impact of specific interventions on low-income, promising students.

Most conference attendees suggested that the following “specificity question” be examined as a priority: What types of interventions are most effective with different types of students, under which circumstances, and in what doses? More needs to be known about how existing interventions work with students of poverty. Likewise, more experimental studies that include specific, replicable interventions at given times and lengths throughout a student’s school career should be examined. A unanimous finding of all groups was that the field of gifted education be more deliberate in providing large-scale research studies when planning interventions so that findings reveal generalizable solutions.

It has been established that family and community resources facilitate talent development for students of poverty. Talent development models and studies need to include the impact of internal and external factors that positively (and negatively) impact low-income promising students. Internal factors may include resiliency, self-esteem, efficacy, personality, and motivation; while external factors for future study may include family and community support systems, school supports, school culture, and support. Within the category of external factors of talent development, additional questions need to be answered including: How does school culture influence low-income gifted learners? Which types of teachers are most effective with these students? What do effective teachers do that is distinctive for low-income promising students?

School leadership is another area for future study on these issues. How can school leaders affect positive change for low-income promising learners? Which general education school reform efforts have the greatest impact on these students? Although some of these questions have been studied in general education, results for promising students of poverty have not been obtained.

Moreover, analysis of group discussions in this area suggests that longitudinal studies, retrospective studies, studies in conjunction with other fields, as well as more timely national studies should be considered by those conducting research in order to gain a broader perspective and collective knowledge in the field regarding effective interventions for this unique population.

Transition and Retention for Promising Students of Poverty

Transitions to different grade levels or schools are

difficult on many students. Promising students of poverty are at an even greater risk, especially if school districts do not have appropriate articulation among schools and building personnel. Sanders & Horn (1998) extensively examined student achievement scores in the state of Tennessee and found a significant decrease in student performance whenever a student changed buildings and moved to the lowest grade in that building. The most significant decrease in achievement occurred during the elementary to middle school transition. Although data were not disaggregated for at-risk populations of poverty, they were included in the overall sample. Another study suggests that attrition is common among minority students identified to receive gifted education services (Moore, Ford, & Milner, 2005). The authors speculate that this lack of retention is attributed to prejudices of teachers and students, lack of parental involvement, lower expectations from teachers and guidance counselors, and peer pressure from other minority students who were not identified as gifted.

One study specific to students of poverty who were also gifted examined ongoing attendance versus attrition rates of low-income students participating in a summer enrichment program (Woods, 2006). This study suggests that the earlier a student starts in the enrichment program and the more adept a student’s skills in reasoning and language skills are upon entrance, the more likely she is to remain in the program over time. Also, poor Hispanic males with large families remained in the program longer than other groups; and students with a female head of household were the most likely to quit. Another study examining gifted program attrition from a university-based context found that adult and peer relationships were a critical variable affecting low-income students’ continued participation (Johnsen, Feuerbacher, & Witte, 2007).

Renzulli & Park (2000) examined reasons gifted students dropped out of high school. Most gifted dropouts were from low income and minority groups, had less educated parents, and indicated a lack of desire for high educational attainment. Pregnancy was also a factor for females.

Suggestions for policies and future research in this area were numerous from the groups. For example:

- What types of articulation policies and record keeping systems are in place for district and community personnel to communicate more effectively across grade levels and buildings?
- What types of advocacy initiatives work for these students?

- Which support systems are most effective for retention in school and in gifted programs, especially during transition years?
- What are the risk factors associated with attrition and drop-out rates of low-income promising students?
- What is the cost of inaction at various transition points?
- How do the needs of rural and urban students of poverty differ?
- Which interventions are most effective during which transitional years?
- Which support systems are necessary for transient students among varied school districts and states?

In this area, in particular, an emphasis on forming partnerships with agencies and fields outside of gifted education for the purposes of conducting research was discussed as an important direction to take. Specific suggestions included (1) setting up a national database of low-income gifted students and (2) drafting sample policies that would positively impact access to educational opportunities at key stages of development.

Related Issues of Importance

Participants attending the conference were also asked to articulate additional issues they were concerned about related to promising learners in poverty. Pursuant topics of importance included advocacy efforts, building partnerships with families, professional development, pre-service teacher education, societal bias, discrepancies in definitions of gifted within the field, the impact of policies specific to this population, funding formulas in education, and strategies for the dissemination of research to those who work with these students.

- Questions raised that were representative of these categories included the following: How do schools build trust with low-income families?
- How can educators and researchers give families in poverty a larger voice for accessing educational opportunities?
- How do we help families of low-income promising students accept the services that may be provided?
- What can be done about regression during the summer months for low-income, promising students who are not in summer school?
- What types of professional development are effective for teachers and administrators working with this population?
- What types of teacher preparation programs are needed to prepare teachers to work with this

group?

- What are the indicators of quality?
- How can study findings on these learners be disseminated to the teachers and schools who need the information the most?
- How can state education funding formulas better provide resources to schools, students, and families that need them the most?
- What can NAGC do to lead in policy making and dissemination of research initiatives and findings?

The issue of poverty is larger than the field of gifted education. How can those in the field of gifted education partner with other groups outside the field to better serve promising students of poverty? How do the different definitions, philosophies, and belief systems in gifted education impact services and practices for promising students of poverty? How can technological advances be used to create national databases on gifted education for research, dissemination, and tracking of transient students of poverty?

Next Steps: Where Do We Go From Here?

Darwin wrote that “If the misery of the poor be caused not by the laws of nature, but by our institutions, great is our sin.” Institutions of learning and those involved with impacting the lives of low-income students have an awesome task in promoting the talent development of these learners.

Recognition of an issue is the first step toward action that can bring about change. Examining personal bias, revisiting definitions, philosophies, and beliefs about gifted, and being able to recognize talent in all types of students are important introspective steps toward addressing the needs of this underrepresented population. In addition, several action steps may be taken by state-level personnel, researchers, national leaders, foundations, and other educators to catalyze efforts on behalf of these learners.

1. Educators and researchers in gifted education need to be more proactive in collaborating with local, state, and national level organizations and foundations that focus on students of poverty in order to maximize efforts, including joint research studies, reports, conferences, and service provisions. Dissemination efforts on findings specific to these students should include a national audience and yet target local school district level teachers in each state. Researchers in gifted education need to move beyond gifted education audiences for presentation and dissemination of work in this area. Similarly, researchers from other fields should be invited to work in collaboration with gifted education and present at gifted education conferences.

A special strand at the National Association for Gifted Children Annual Convention may include a targeted focus on promising students of poverty with an emphasis on the findings from this monograph.

2. Model policies for use at state and local levels need to be developed to ensure equitable practices for identification and service of promising learners in poverty. Likewise, policies that are exclusive or discriminatory to this population need to be dismantled.

3. Exemplary program models, Pre-K-16, that posit a systemic approach to identification and services for promising learners in poverty need to be developed and disseminated to state and local education constituencies. These models should include technical adequacy data on instrumentation and services at various levels of development and appropriate transitions throughout a child's school career.

4. A focus on more sophisticated research related to promising learners in poverty needs to be conducted, including longitudinal studies and studies developed from national databases. Researchers must be able to tease out critical variables of interest so that the field can better understand not only what works but also how it works. Researchers in gifted education also need to provide linkages to studies in areas such as counseling, cognitive science, and psychology. Not only will such partnerships provide insight into other issues related to barriers and effective practices when working with promising students of poverty, but a larger audience may be reached through these partnerships that will inform more individuals about the issues of giftedness and poverty, which should result in better advocacy efforts and a larger voice for these students and their families.

5. School districts need to recruit a more diverse population of educators, including educators from low-income schools and those from various minority groups and train them to work effectively with promising students of poverty. Institutions of higher education need to enhance recruitment efforts for such teachers. Moreover, districts need to focus on professional development and pre-service teacher training specific to promising learners in poverty and of color.

6. An emphasis on family education and involvement is critical to the enterprise of talent development in these learners. Schools and researchers should collaborate with the families of students to promote success and help develop talent. The culture of poverty is one that embraces strong family loyalties and relationships. Thus, schools need to work within this framework to better assist students and their families

in accessing appropriate educational opportunities. This may include individual learning plans for families and students with access to daily sustenance needs, mentors, and other social outlets that will enhance student ability and provide the necessary curricular and extra-curricular opportunities.

The pursuit of equity, excellence, and collaboration are key components critical to positive outcomes for promising students of poverty. Equitable access to programs and school opportunities are the first steps in providing excellence in education for this unique population. Advanced curriculum, high expectations, and extra-curricular options also enhance talent development. Collaboration with families, researchers, and other educators regarding students of poverty within and across schools, districts, and states is a necessary component for change. Finally, our educational institutions must be active participants in enhancing talent development.

Because gifted education is at the nexus of equity and excellence arguments in schools, we must redouble our efforts to sustain the dual agendas of raising the mean performance level for all learners, even as we target resources to increase the variability at high levels of performance among gifted learners who require additional support to optimize their learning potential.

Closing Thoughts

In her closing remarks to conference participants, NAGC President Joyce VanTassel-Baska reiterated many of the observations made by speakers and participants throughout the conference by summarizing them as major themes that emerged from the two-day meeting.

One such theme was the central role of *early and sustained intervention* that considers the relative importance of both cognitive and social-emotional development. Within a cognitive development framework, the provision of rigorous, advanced content-based curriculum opportunities was crucial to the accrual of educational advantage over time. The role of both in-school and out of school opportunities working together to enhance learning was viewed as optimal.

A second theme centered on the need for *personalized experiences that provided the social support network* of relationships for these students deemed essential to the activation of talent development processes. The role of family members, teachers, and mentors were seen to be important aspects of that social support system. Teachers, in particular, were viewed as critical to the process in several ways: as gatekeepers for identification,

as models of adults who accept and nurture individual differences, and as facilitators of targeted learning opportunities. Individual learning plans represent one strategy for collaboration among these stakeholders in the lives of students from poverty.

A third theme that resonated throughout the conference presentations was the need for *systematic institutional responses* to the issues of finding and serving low income, promising students. Universities and other institutions in the community need to target a research, development, and outreach agenda to learn more about what interventions work with these learners to produce positive educational attainment and life productivity. State education agencies and local school districts need to develop policies and underlying procedures for implementing research-based practices of identification and service delivery to these learners and dismantle existing policies and practices that prohibit access. Educational institutions and organizations like NAGC need to work together to effect the deepest and most sustaining change for these students.

Because gifted education is at the nexus of equity and excellence arguments in schools, we must redouble our efforts to sustain the dual agendas of raising the mean performance level for all learners, even as we target resources to increase the variability at high levels of performance among gifted learners who require additional support to optimize their learning potential.

May this action agenda be taken to heart by all who read it and care deeply about the talent development of all students of promise.

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Section VII
Participant Reflections

A Call for “Technical Advocacy” for Promising Learners in an Age of Accountability

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Of all the data presented at the conference, the most powerful, to me, was this simple statistic shared by Harold Hodgkinson: nearly one in five children in the United States lives in poverty.

After hearing the number of students living in poverty and the dire consequences poverty can have for development and academic achievement, it was heartening to hear there are also promising programs and approaches that are helping children succeed despite the myriad challenges facing them.

However, as I heard the success stories of individual children, small pilot projects, and local programs, my mind kept returning to the sobering fact that there are literally *millions* of low-income promising learners in our country, the vast majority of whom have no access to programs and services like those we heard about at the conference. Given the magnitude of our challenge, it seems hard to imagine that, despite the obvious commitment and creativity of the individuals running these programs, such opportunities can be extended to all children in poverty without state and federal policy makers playing a much more significant role. For while community organizations, foundations, and individual schools can help identify “what works,” only state and federal governments can create the policies and provide the resources necessary to tackle a challenge of this magnitude.

There is no doubt that additional resources must be invested to ensure that all talented students can grow and learn. Therefore, there continues to be a need for gifted education advocates to make the case for government funding for gifted programs and services. Yet, given a spiraling federal budget deficit and state budgets stretched thin by stagnant tax revenues, rising health care costs and high energy prices, there is little hope of massive increases in federal gifted education funding any time soon.

However, even in the midst of these economic challenges, our education systems are reinventing themselves in the age of accountability. This creates a need and opportunity for what I will call “technical advocacy” at the local and state levels.

At the school district level, many programs and services for gifted children are at risk because administrators and school board members mistakenly believe they cannot “afford” services for talented children when budgets are stretched to the limit. Gifted educators must do a better job of helping them learn about

options like acceleration, distance learning programs, and flexible ability grouping that we know can make a tremendous difference for gifted children and cost no more to provide than a “one size fits all” education that in reality “fits” few and neglects many.

At the state and federal level, the experts of our field must invest greater energy in engaging the ongoing evolution of the accountability movement. Many in our field have argued persuasively that the first wave of the accountability movement had unintended negative consequences for talented children, because the systems created only looked at “bringing up the bottom” while paying little attention to whether or not students who were already “proficient” were continuing to learn and grow. Today, the debate over “whether” schools should be held accountable for results is essentially over, at least in the halls of government. However, policy discussions regarding “what” should count and how it should be counted are ongoing. For example, many states, including Ohio, are already exploring how to move beyond snapshot measures that look primarily at “proficiency” and towards systems that seek to measure the academic growth of individual students over time and hold schools accountable for the growth of all children, not just those below the proficiency line. The second wave of the accountability movement is starting to form, and we cannot afford to let it pass us by.

As Peter Drucker famously said, “What gets measured gets done.” Are we as gifted educators doing enough to influence “what gets measured”? Are the experts of our field doing enough to share their expertise with policy makers to ensure our curriculum standards demand complex understanding and not simply rote memorization? Are they engaged enough in the development of accountability measures to make sure they are culturally fair and have high ceilings so we can tell whether or not schools are serving our brightest youth from every community? Are they active enough in the policy making bodies of professional organizations to make sure professional standards for educators and accreditation standards for teacher preparation programs address the needs of gifted and talented children?

In the age of accountability, passionate parents can still advocate persuasively regarding the need for programs and services for gifted children. However, only the experts of our field have the knowledge and expertise required to be effective in helping shape the details of the standards, assessments, and accountability systems

that now exert such a powerful influence on the structure and priorities of our public schools.

I was proud to attend the conference representing the Ohio Department of Education, and to be among talented and dedicated colleagues from other state departments of education from across the United States. As consultants and advisors to policy makers in our states, we need opportunities to learn from the successes and shortcomings of innovative programs like those we heard about at the Low Income Learners of Promise conference. I applaud the Jack Kent Cooke Foundation, the National Association for Gifted Children, and the Center for Gifted Education at the College of William & Mary for making it possible for so many members of the Council of State Directors of Programs for the Gifted to take part. I also hope the conference was just the beginning of a deep and ongoing conversation and more active partnership between researchers, educators, and policy makers. With one in five children living in poverty, every part of our educational infrastructure must work in concert to address the challenge of cultivating the talents of all our students.

A View from the States... Reflections from North Carolina

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There is much that we still need to know in order to make informed decisions regarding our brightest students who live in poverty. It is necessary to look at the issue, not only from a national perspective, but also from a regional, state, and local one. As a result of the conference in Washington, D.C., North Carolina will explore hosting a State Leadership Conference on Low-Income Promising Learners.

All Institutions of Higher Education offering licensure coursework in gifted education will be invited to attend. The aim is to have college and university personnel reflect on how their course syllabi can be modified to better address the needs and issues regarding low-income promising learners in licensure courses. This new initiative is based on the premise that pre-service and in-service teachers working with gifted populations need a more comprehensive understanding and sensitivity to the needs of this population of gifted students.

In 2004, North Carolina reported the third highest increase in the poverty rate and was one of only 10 states showing a decline in median household income. In addition, twenty-three counties in the state have poverty rates exceeding 18 percent—all are rural, and the large majority (19) are located in the Coastal Plain region (U.S. Census Bureau). From these statistics, it is evident that a focus on teachers of the gifted within this region is critical – with teachers, counselors, administrators, and other educators needing comprehensive training regarding how to best identify and nurture potential among these low-income gifted students.

Key points discussed at the national conference will serve as guiding principles as we plan our state conference. These include:

1. Poverty is multi-faceted. The duration of poverty and when it occurs in a child's life are important considerations. There are great variations among poor families. There are no "typical" low-income children.
2. Interventions for these children need to occur early (birth to age 5) and continue through elementary, middle, high school, and college. Different interventions may be needed at different points along the way. Interventions should be intensive and sustained on the same students for at least three or more years. Sustainability is critical regarding interventions. Furthermore, interventions should be strength-based not weakness-based.

3. Support services should be multi-pronged, comprehensive, and track students across all levels of development. Such services should address both the needs of the students and their families. It is recommended that a support triage consisting of a teacher, parent, and a mentor be formed. Furthermore, support services should be much broader than just academic support. Such services should encompass social and psychological aspects as well. Services should also be individualized based on the needs of the child.

4. Value-added opportunities for these students are needed. We cannot expect the schools to do it all. Out-of-school opportunities that incorporate rigor, experiential learning, and advanced content are crucial.

5. To address the complex and multi-faceted issue of poverty, we must get out of our "research silos." We need to do a better job of isolating variables so we can determine what is really working. We need to identify those small interventions that reap the greatest results (cost effectiveness). We need updated data regarding these populations instead of continuing to cite the same old/outdated data. We need greater access to schools to conduct research, and we need more longitudinal research so that programs can be effectively evaluated.

6. Ongoing and substantive teacher training is needed. It should be realized that one cannot train "belief" systems out of teachers, but teachers need to systematically reflect on their practice and need support in translating what we know into practice. There is a general lack of teacher training regarding gifted education, multicultural education, and poverty issues. It is apparent that we need more teachers of color in our classrooms --- particularly in gifted education.

7. Collaborations and partnerships are vital. Organizations and other entities with common goals and initiatives must work together to provide a mosaic of opportunities across PreK-16. Such collaboratives can work together toward common initiatives, and develop a strong research agenda that supports interventions to help determine what "works."

8. Policies are needed to support inclusion of children in poverty in programs for the gifted. However, policy should not be viewed as the ultimate solution. Policies should serve as points of departure for effective practice.

9. Identification continues to be a pervasive issue. While identification is important, this issue has

overshadowed the designing and implementation of appropriate educational experiences for these children. Perhaps we are putting the cart before the horse. By providing appropriately stimulating and enriching learning experiences to children upfront, perhaps teachers will better recognize the learning potential in their students. In other words, having high expectations for children may force otherwise unidentified students to be recognized. Dynamic assessment needs to be further explored as a viable method for identifying gifted students. Use of multiple criteria in identification, though appropriate in concept, is continually misused and misinterpreted (creating “hurdles” that children must jump through in order to be placed in gifted programs). Such misuse has sabotaged instead of enhanced opportunities for gifted students from underrepresented groups.

10. Rigorous, relevant, advanced content-based curriculum is needed. Dual language curriculum is also a growing need. Many educators are reluctant to implement dual language curriculum due to the cost and amount of resources needed. Curriculum that incorporates the development of effective coping strategies (hope, optimism, global self-esteem, goal setting, educational aspiration, and resiliency) should also be developed. It was generally agreed that students need new and interesting learning material.

There is a lot of work ahead of us, but the issue is too important to neglect any longer. It is our hope that additional forums will be organized so that we can share and discuss effective models for meeting the needs of low-income, bright learners. We need to keep the conversation going in order for promising solutions to emerge.

A State Department Reflection

Barbara McGonagill, Ed.D.
Specialist, Governor's Schools and Gifted Education
Virginia Department of Education

The National Leadership Conference on Low-Income Promising Learners was a unique opportunity to see the many variables that must be considered as states and localities develop more inclusive gifted education programs. It was beneficial to see where we are in practice and to compare that to what we know and to what we think we know. The need for research into “effective” practices to determine why some strategies work and why some do not remains a major concern. The points that I think could be lost in the discussion are these: How do we communicate with parents that we are not attempting to create stereotypical gifted students through stereotypical programs and how do we process these different pieces of the puzzle from a non-ethnocentric perspective. Promising learners from low socioeconomic families are not all the same. Therefore the belief that if we do one thing, we will recognize, identify, and serve these promising learners is not accurate or appropriate. Layers of solutions will be needed to reach these learners in the most effective and most appropriate manner.

A University Perspective

Nancy Breard
School of Graduate Studies
Converse College

The conference addressed an area that gifted education must focus time, effort, and resources on to begin to solve the issues. The highlight of the conference for me was Harold Hodgkinson. The statistics he shared were stunning. I read his article with great interest, especially since he proposes “action steps.” The other speakers who provided new ideas were those who outlined their programs that have shown positive results, AVID, HAP, and the Posse Foundation. My greatest “Aha” from those programs was the level of support students in poverty need to succeed through K-12 and college. These students need advocates, mentors, and guidance counselors who know them and their families and provide opportunities, solid advice, and any social services the students need. Gifted programs in public schools must begin to examine what can reasonably be done for these students now to ensure their present and future success.

Hollering *Calf Rope*: Academic Resilience and Low-Income Children of Promise: A University Perspective

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To some Americans, hollering “*calf rope*” means crying uncle, throwing in the towel or acknowledging defeat. In my experience as a gifted facilitator working with low-income secondary gifted students in a large Midwest school district, I found hollering *calf rope* a real deterrent to academic achievement. Income level rather than skin color seemed to affect these students’ ability to seize and complete advanced academic experiences such as scholarships, Advanced Placement courses or dual enrollment. Whether Hispanic, White or Black, gifted students perceived barriers in the academic achievement arena irrelevant in athletic competition. The level playing field of sports with its preset rules of the game, team uniforms and clearly designated positions largely erased differences of middle class materialism, name brand clothing and socioeconomic status. How do gifted students of poverty successfully navigate the unknown world of academic prowess with parents who often ended their own school career before grade twelve and remember their own school days with less than glowing memories?

Generally, these parents supported their bright children to the fullest extent of their ability, enrolling children in gifted program experiences during their elementary school years. These parents attended school conferences and events regularly and took great pride in their children’s accomplishments. All too aware of their own limitations through lack of education, parents listened and followed school recommendations, sometimes to the detriment of children’s cognitive and affective needs. Low-income parents often remained unaware of gifted programming availability and needed guidance and encouragement to pursue the optimal academic experiences for their children. Although the school district offered and allowed great choice of academic programming, these children sometimes missed proper placement. Even when identified at an early age, parents needed assessment data paired with a clear understanding how service choices impacted their child’s academic progress. Secondary students later recalled these unfortunate placements with regret when they encountered rigorous academic experiences and realized their own struggle to compete with confidence.

The best programs supporting low-income, high-ability students led from the top with principals who exuded enthusiasm for learning and supported identification

programs and school in-service training for school staff. School psychologists who teamed with teachers to test and appropriately place students built gifted programs from the ground up in low-income schools needing visibility and awareness for advanced academic experiences. In one school an elementary teacher who referred students for gifted services helped transform a generation of poverty as students gained advanced academic experiences otherwise unavailable. Parents who formed informal networks supported gifted programming within the school setting and beyond into the community particularly assisted students as they moved from elementary to middle school or from middle school to high school.

Gifted facilitators and counselors may assist gifted students in transitioning school levels with guest visits from school personnel or short excursions to the new school in late spring. Secondary schools that pre-enroll students with personnel trained in gifted students’ needs and who personally know the students well maximize proper placement and further their possibility of success. Secondary schools that attend to gifted student strengths, interests, and preferences ease their journey into young adulthood with career awareness and opportunities matched with appropriate training. All academic accelerations involving travel or multiple destinations require special attention regarding logistics. Regular education teachers who support the juggling act gifted students sustain in dual enrollment college courses and respond wisely and sensitively with reasonable expectation when students forget books or assignments or arrive a few minutes late on occasion benefit these student transitions into the academic arena immensely. Gifted facilitators who advocate for students and their scheduling complexities help ensure student success.

If any single area of the gifted population bears special attention from the school, community, and state; underserved low-income high-ability students need multilevel support since they and their families often lack important resources to accomplish academic achievement without focused advocacy efforts. Financial concerns form only a part of the need; knowing how to fill out financial aid forms, apply for scholarships, take college entrance tests and find the right college requires trusting relationships from within the school community. Partnerships between high schools and local higher education institutions draw

attention to high profile scholarships for motivated students. However, given proven practices, perhaps a question remains regarding students with diverse abilities without adequate direction or motivation. How will they sustain academic achievement through these difficult years? When students reach the outer rim of their known world and the reality of leaving the comfortable behind to reach forward into the unknown world of academics, how will they respond? How can educators bridge students' experience into the unfamiliar? At this juncture, one hopes these wonderful students will overcome obstacles with resilience as they face internal and external barriers and seize advanced academic experiences with confidence and joy rather than holler *calfrope*.

A University Perspective...

Joan D. Lewis, Ph.D.
University of Nebraska at Kearney

The National Leadership Conference on Low-Income Promising Learners held in April 2006 was by far the most stimulating and illuminating educational experience I have had in many years! With poverty being the greatest leveler of opportunities for learners of all ethnicities, discovering educational methods and social supports that reach out to all students of promise from this large population is essential for the well-being of our nation as well as the students themselves. It remains a national disgrace that that such an affluent nation has yet to share the promise of a better life with all its citizens.

The presentations, focus group discussions, and informal communications across many fields were illuminating. I was particularly interested in the information on the varying levels of support needed by individual low-income promising learners. It reminded me of several personal experiences that I think are relevant.

- About twelve years ago, a colleague in Mississippi told me of several gifted high school students she taught in one of the poorer counties in the state. First, the principal of the all Black high school where she taught would only write a letter of support for students intending to go to a traditionally Black university. One of her students chose to go to the University of Southern Mississippi without his support and was accepted. At the end of the first semester, she was extremely upset to discover she was struggling to earn Cs; she felt she had been denied the quality of education her fellow college students received. This very capable young woman encountered unexpected hurdles. *Just being admitted to college does not guarantee success. A great deal of support is often needed at this level.*
- My second example is even more distressing. One of the new faculty members hired at the University of Nebraska at Kearney came from an extremely low-income background. I confess to having been shocked at his experiences and his misconceptions of anyone who was better off than he. Fortunately, there had been a few people that had supported and encouraged his education, making college possible for him with donations of clothes, a suitcase filled with necessities including bed sheets, and advice. Several of the faculty reached out with friendship and support in his first position after earning his Ph.D. We failed. He accepted an administrative position in a school district in a large city and

failed to succeed there too. None of us who cared about him have been able to locate him once he left that last position. What a terrible waste of a bright, caring, and very likable man! *Supports may need to follow the learner into the workplace for varying lengths of time.*

There is so much talent going to waste and lives that fall short of what they might be. Equity in education is not narrowing the achievement gap by suppressing the learning of our most able children and youth, but rather making those opportunities available to all children who show promise. The cross disciplinary approach of the Low-Income Promising Learners conference needs to be pursued until workable solutions are found. I cannot tell you how much I appreciate the opportunity to have participated even in small measure.

The Local School District Focus... Recognizing Emergent Potential of Low-Income Promising Learners

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For many years the field of gifted education has been wrestling with the issue of under-representation of children from low socioeconomic backgrounds and children of color. Newly added to this complexity is the sudden influx to U.S. classrooms of immigrant students from war or poverty-ravaged countries. How do we as educators and policy makers for gifted learners address this multi-faceted issue of the multiplicity of gifted learners with limited resources, both financial and educational?

First and foremost, educators of the gifted must continually challenge themselves to **learn more about cultures different from their own**; understand the range of perspectives various cultures have on the meaning of giftedness/talent and/or creativity and acknowledge that many children coming from diverse backgrounds may not have a historically supportive environment toward advanced education. More and more of our student population comes from dissimilar backgrounds and countries; although this creates a rich learning environment, it conversely affects our identification and programming practices. Behaviors that in the past may have appeared to be combative or unschooled may in our new reality be those of highly able children. Some families may consider advanced classes that single students out as discriminatory and/or culturally insensitive. We must educate our families about the benefits of participating in such courses, and ensure that the classes are not just havens for the “good kids.” Understanding and knowing about the cultures of the students we work with can help us in making healthier informed decisions about gifted/talented/creative students’ identification and programming.

Secondly, we must **seek out students of promise in the early years**. We must meet and talk with our Early Childhood Education partners, community members, religious organizations and daycare providers to share what we know about the various aspects of gifted/talented/creative children and their unique behaviors. Let them know that sometimes the behaviors of gifted/talented/creative children from diverse backgrounds can be misinterpreted as ill-disciplined or mischievous, when in fact these behaviors represent quite the opposite. Especially in young boys, given that they may mature much later than young girls, often exhibit behaviors that are misinterpreted, and thus, get pigeonholed into a life sentence of behavioral modifications. Many of these young boys come from low socioeconomic, non-enriched learning environments. As leaders in the field

of gifted education, we must get involved early in these young people’s educational careers so we can prevent them from heading down the Special Education trail, and get them on the highway to gifted education.

Third, we must get **involved with our school district’s diversity efforts**. As professionals we have a duty to change the perception still held by many that gifted education exists to save the White middle-class child from general education. Gifted education is about “educational need,” not about separatism, elitism, or privilege. We must ensure that our services are credible, rigorous, effective and equitable. We must constantly seek out gifted children from all economic and cultural backgrounds—going the extra mile to locate, encourage, and support the child, as well as the child’s entire family and community. PreK-12 school districts’ diversity efforts must include this identification and support process.

Finally, children coming from impoverished backgrounds must be **provided enrichment early in their educational career**. Enrichment is the way to uncover passions, expose talent, and develop individual interests. Many children living in poverty have limited access to resources and experiences that are the staple of success in the K-16 experience. Enrichment offerings can open up a whole new world for students living in poverty, providing them with experience that can lay foundations of learning required for later studies. Enrichment should connect the child to the worlds of art, music, theater, and dance, and expose them to the richness of opportunities in the fields of science, math, and literature. These opportunities can awaken them to the beauty and wonder the world has to offer. We can give these children purpose and a future if we work together to provide it.

Section VIII
Annotated Bibliography

Annotated Bibliography

The abridged annotated bibliography is a culmination of multiple database searches including ERIC, InfoTrac Onefile, PsychINFO, and research studies compiled from the Council for Exceptional Children (CEC) and National Association for Gifted Children (NAGC) *Initial Knowledge and Skill Standards for Gifted and Talented Education*. Various combinations of keywords related to gifted and poverty were used as search agents including: gifted, poverty, socioeconomic status, achievement, intelligence, low-income, talent, ability.

Bibliography Categories

The bibliography is divided into the following sections, although some studies and articles may cross several categories:

- A National Perspective
- Conceptions of Poverty: Overviews and Issues
- Assessment Instruments & Identification Practices
- Curriculum, Programs, and Interventions, and
- Talent Development Processes.

Selection Process

In order for a study, report, or article to be included as part of the annotated bibliography (1) the issue of poverty or low socioeconomic status had to be listed in the abstract as a major focus of the study, (2) the article was empirical or included a review of the literature; (3) the empirical data or literature review included gifted or high-ability learners as a population of interest; and (4) the study was published in 1990 or later. The only exceptions to these criteria are the “conceptions of poverty” section and the “national perspectives” section on the status of poverty as well as national monographs and books specific to the issue, although these may not be empirical or focused specifically on gifted, the articles included represent a focus or perspective on poverty that may be beneficial to the field of gifted education.

A National Perspective

Education Trust (2005). *The funding gap 2005: Low-income and minority students shortchanged by most states*. Washington DC: Author.

This report analyzes financial information from school districts in various states as reported by the U.S. Department of Education and the U.S. Census Bureau from 2002-2003 school year to determine the difference in funding in high poverty and high minority schools. Data suggest that there is a discrepancy of approximately \$907 when comparing the amount of money per student spent between high poverty and affluent public school districts. Schools with high minority populations spend approximately \$614 less when compared to districts with a majority population.

United States Department of Education, National Center for Education Statistics (2006). *The condition of education 2006*, MCES 2006-071. Washington, DC: U.S. Government Printing Office.

This report outlines the discrepancy between students of poverty and students not of poverty on national mathematics achievement tests for students in the fourth grade. Students in high poverty schools had a discrepancy of approximately 34 standard points difference on math achievement tests when compared to students in affluent schools. These schools also had fewer White students and more Black, Hispanic, and non-English speaking students. Teachers in these schools were more likely to have less than five years of teaching experience.

VanTassel-Baska, J. (1991). *Gifted youth at risk: A report of a national study*. Reston, VA: Council for Exceptional Children.

This study explored the nature and extent of programs and services available for culturally diverse and economically disadvantaged gifted learners. Analysis of the state-level data focused on definitions of disadvantage, program standards for at-risk gifted populations, as well as state identification practices and funding. A comprehensive review of the current knowledge about programs and services for these learners is discussed including policy recommendations.

Young, T., Turner, J., & Denny, G. (2004). Examining external and internal poverty as antecedents of teen pregnancy. *American Journal of Health Behavior, 28*(4), 361-373.

Data from the National Education Longitudinal Study were analyzed. This data set allowed us to identify eighth-grade antecedent of teen pregnancy/childbearing. The variables that were found to be most predictive of later pregnancy were reflective of internal poverty (locus of control, subject's educational expectations, and confidence in graduating from high school) and external poverty (parents' highest education). Prevention programs must begin before the eighth grade, instill an internal locus of control, promote academic achievement by enriching children's perception of personal life options for which an education is needed, empower children and their familial models, and prevent internal poverty. (PsycINFO Database Record © 2005APA).

Conceptions of Poverty

Ambrose, D. (2003). Barriers to aspiration development and self-fulfillment: Interdisciplinary insights for talent discovery. *Gifted Child Quarterly, 47*(4), 282-294.

A model synthesizing constructs from ethical philosophy, sociology, and education reveals socioeconomic barriers to aspiration development, capacity development, and self-fulfillment. Various hypothetical life trajectories on the model illustrate the influences of these barriers on long-range talent development toward self-fulfillment and either egoistic individualism or relational altruism. Implications for gifted education include the need for more ethical awareness in the field and more realistic appraisals of hindrances to aspiration formation among the deprived. (PsycINFO Database Record © 2005, APA, all rights reserved).

Baker, B.D., & Friedman-Nimz, R. (2004). State policies and equal opportunity: The example of gifted education. *Educational Evaluation and Policy Analysis, 26*(1), 39-64.

This study explores the relationship between state policies, including state mandates and state aid allocations, and the distribution of educational opportunities. Analyses suggest that program mandates and funding may be effective tools for increasing the distribution of opportunities for gifted children. However, models of both aid distribution and opportunity distribution indicate a tendency of states more significantly involved in gifted education to promote regressive distributions of opportunities (greater availability in schools with fewer low-income students) through regressive distributions of aid (higher levels of aid to districts with fewer children in poverty). (Adapted from PsycINFO Database Record (c) 2005 APA.)

Boothe, D., & Stanley, J. C. (Eds.) (2004). *In the eyes of the beholder: Critical issues for diversity in gifted education*. Waco, TX: Prufrock Press.

Each chapter in this book is dedicated to the needs of diverse populations of gifted students including issues in gifted education related to race, gender, and socioeconomic status. Chapters include issues such as underachievement and African American students, empowering Hispanic students in gifted education, curriculum compacting as a research-based strategy for diverse students, and talent searches in gifted education.

Castellano, J. A., & Diaz, E. I. (Eds.) (2002). *Reaching new horizons: Gifted and talented education for culturally and linguistically diverse students*. Boston: Allyn & Bacon.

Poverty is associated with many complex social status and family-structure factors, which may place language-minority children at risk of presenting themselves as low achievers. Levels of stress and distress, number of children, and presence of mental and health problems tend to be much higher in poor families than in their middle and upper class counterparts.

Frasier, M. (1993). Issues, problems and programs in nurturing the disadvantaged and culturally different talented. In K. A. Heller & F. J. Monks et al (Eds). (1993). *International handbook of research and development of giftedness and talent*. (pp. 685-692). Elmsford, NY: Pergamon Press, Inc.

Through a review of relevant research and practice specific to disadvantaged and culturally different children, this chapter focuses on characteristics of talented children in either or both groups and descriptions of conditions that affect their display of talents including problems related to the use of tests to determine eligibility for talent development programs and programs and curricula designed to address the educational needs of talented disadvantaged and culturally different children. The article provides suggestions for future research and development.

Gandara, P. (2004). *Latino achievement: Identifying models that foster success*. University of California Latino/Latina Policy Research Program (RM04194). Storrs, CT: University of Connecticut, National Research Center on the Gifted and Talented.

This monograph describes the educational status of Latino students in the United States and, based on the extant research, attempts to explain their relatively low educational performance. The research indicates many structural and socio-cultural barriers to academic achievement for this group, including poverty, poor schooling, language differences, low educational levels of parents, and lack of social capital.

Gorey, K. M. (2001). Early childhood education: A meta-analytic affirmation of the short- and long-term benefits of educational opportunity. *School Psychology Quarterly*, 16(1), 9-30.

In this study the scientific evidence on the effectiveness of early childhood educational programs were reviewed. Integrating results across 35 preschool experiments and quasi-experiments, the primary findings were: (a) preschool effects on standardized measures of intelligence and academic achievement were statistically significant, positive, and large; (b) cognitive effects of relatively intense educational interventions were significant and very large, and (c) cumulative incidences of an array of personal and social problems were statistically, significantly, and substantially lower over a 10- to 25- year period for those who had attended preschool. (PsycINFO Database Record © 2005APA, all rights reserved).

Murray C. (1997, Winter). IQ and economic success. *Public Interest*. 128, 21-35.

An emerging class society where more intellectual people become richer and more powerful and the less intellectual find it harder to cope financially is described. This is further explored by discussing the relationship between intelligence quotient (IQ) and income inequality. Results suggest that, even in a society where there are no poor parents and where all children are born into intact families, there may be a reduction of poverty but not income inequality. This implies that equal opportunities do not necessarily result in equal outcomes. (*InfoTrac OneFile*. Thomson Gale.)

Olszewski-Kubilius, P., Grant, B., & Seibert, C. (1994). Social support systems and the disadvantaged gifted: A framework for developing programs and services. *Roeper Review*, 17(1), 20-25.

In this article an alternative framework, that of social support systems and social networks, are offered as a basis for designing programs that meet the needs of low-income, gifted children. This approach includes understanding the types of emotional and physical support that can be garnered from various individuals within a child's family

and community to increase the probability of talent being recognized and developed.

Ryscraft, J. R. (1990). Behind the walls of poverty: Economically disadvantaged gifted and talented children. *Early Child Development and Care*, 63, 139-147.

There is a strong positive correlation in the interrelationship between educational achievement and socioeconomic status (SES). This is understandable given the assumption that intellectual ability is a product of both heredity and environment. Society's demand for exceptional abilities continues to increase, making the search for and development of gifted and talented children an educational priority. The stigma of poverty may cause the individual to be seen as lacking motivation, aspirations, or desire to succeed and may inhibit the identification of economically disadvantaged gifted and talented children. A combination of assessment techniques is currently favored that includes individual intelligence tests, behavior rating scales, culture-fair testing, and case study. (PsycINFO Database Record (c) 2005 APA, all rights reserved.)

Turkheimer, E., Haley, A., & Waldron, M. (2003). Socioeconomic status modifies heritability of IQ in young children. *Psychological Science*, 14(6), 623-628.

Scores on the Wechsler Intelligence Scale for Children were analyzed in a sample of 7-year-old twins from the National Collaborative Perinatal Project. A substantial proportion of the twins were raised in families living near or below the poverty level. Results demonstrate that the proportions of IQ variance attributable to genes and environment vary nonlinearly with SES. The models suggest that in impoverished families, 60% of the variance in IQ is accounted for by the shared environment, and the contribution of genes is close to zero; in affluent families, the result is almost exactly the reverse. (PsycINFO Database Record (c), 2006, APA, all rights reserved).

Assessment Instruments & Identification Practices for Promising Students of Poverty

Baum, S., & Owen, S. (2004). Talent beyond words: Identification of potential talented in dance and music in elementary students. In Zimmerman, E. (Ed.) *Artistically and musically talented students* (pp. 57-72.) Thousand Oaks, CA: Corwin Press.

This article presents evidence for the reliability and validity of the Talent Identification Instrument (TII), an observation process in music and dance in which multiple judges rate students throughout a multi-session audition. This approach was designed to recognize previously overlooked abilities in urban elementary students, including low income, bilingual, and special education students. Evidence for validity was obtained through factor analysis, and strong agreement among raters was evident. (psychINFO database)

Callahan, C.M. (2005). Identifying gifted students from underrepresented populations. *Theory into Practice*, 44, 98-105.

Based on a review of the literature, this article outlines 10 solutions for remedying the identification system in gifted education for underrepresented populations including the following: expand the definitions of gifted, provide exemplars for measuring performance-based assessments, promote talent development, identify early and often, use valid and reliable assessment tools, use authentic assessments, gather data over time and use portfolios, eliminate limiting policies or practices, become more inclusive when screening for gifted, and match curriculum and services to identification.

Canivez, G.L., & Konold, T.R. (2001). Assessing differential prediction bias in the Developing Cognitive Abilities Test across gender, race/ethnicity, and socioeconomic groups. *Educational and Psychological Measurement*, 61(1), 159-171.

This study investigated the differential predictive validity of the Developing Cognitive Abilities Test (DCAT) in a heterogeneous group of 863 male and female 6th-grade students. Bias was assessed across gender, race/ethnicity, and socioeconomic dimensions. Overall, the results indicate a general lack of bias in the DCAT in predicting

ITBS scores across gender, race/ethnicity, and socioeconomic group. (PsycINFO Database Record (c) 2005 APA, all rights reserved)

Coleman, M.R., & Gallagher, J.J. (1995). State identification policies: Gifted students from special populations. *Roeper Review*, 17, 268-275.

State-level directors of gifted education were surveyed about identification procedures of gifted students from special populations. Subgroups such as culturally diverse students, economically disadvantaged (38), learning disabled/gifted (37), and other handicapping conditions (36) were included in state definitions of special populations. In 39 states, different criteria could be used to identify these students. Seven states used a quota system, and 12 states used trial placement experiences. Twenty states included gifted education in special education and allowed for the same due process rights.

Frasier, M.M. (1991). Disadvantaged and culturally diverse gifted students. *Journal for the Education of the Gifted*, 14, 234-245.

This paper reviews research findings and research needs in the area of identification of gifted students from disadvantaged and culturally diverse groups. The Frasier Talent Assessment Profile system is presented as a way to utilize data from test and non-test sources to identify these children.

Frasier, M.M., Hunsaker, S.L., Lee, J., Finley, V.S., Frank, E., & Garcia, J.H. (1995). *Educators' perceptions of barriers to the identification of gifted children from economically disadvantaged and limited English proficient backgrounds*. (Report RM-95216). Storrs, CT: University of Connecticut, National Research Center on the Gifted and Talented.

This report presents results from a 10-item survey of 750 educators from 14 school sites, designed to gain insights into the perceptions educators hold regarding the problems of identifying gifted children from economically disadvantaged and limited English-proficient backgrounds. Results indicated that major barriers to identification were test bias and teachers' inability to recognize indicators of potential in certain groups. Moderate barriers and minor barriers were also identified. The implications of these results for designing staff development programs are discussed.

Good, C., Aronson, J., & Inzlicht, M. (2003). Improving adolescents' standardized test performance: An intervention to reduce the effects of stereotype threat. *Journal of Applied Developmental Psychology*, 24, 645-662.

A field experiment was performed with 7th grade students to test methods of helping female, minority, and low-income adolescents overcome the anxiety-inducing effects of stereotype threat and, consequently, improve their standardized test scores. Results showed that females in experimental conditions earned significantly higher math standardized test scores than females in the control condition. Similarly, the students in the experimental conditions earned significantly higher reading standardized test scores than students in the control condition.

Jatko, B.P. (1995). Action research and practical inquiry: Using a whole class tryout procedure for identifying economically disadvantaged students in three socioeconomically diverse schools. *Journal for the Education of the Gifted*, 19, 83-105.

An action research whole-classroom approach was used to evaluate fourth-grade students at three elementary schools (one affluent community, one lower-middle income community, and one extremely low income community) who had no previous experience with the Future Problem Solving program. Data were collected on student teams. The author reflects that using the whole classroom tryout technique allowed her to observe and include gifted children in the program who otherwise would not have been recognized and would not have had access to the gifted program.

Johnsen, S., & Ryser, G. (1994). Identification of young gifted children from lower income families. *Gifted and Talented International*, 9(2), 62-68.

This study examined the relationship among measures used in the identification for a summer program of 50 gifted and talented four to seven-year-old children from lower-income families. Approximately 38% were Hispanic. Identification procedures included parent nomination, teacher nomination, products, the Torrance Test of Creative Thinking, the Screening Assessment for Gifted Elementary Students—Primary Version. The three best predictors of future achievement were the SAGES-P Reasoning, the parent checklist, and the teacher checklist.

Mantzicopoulos, P.Y. (2000). Can the Brigance K & 1 screen detect cognitive/academic giftedness when used with preschoolers from economically disadvantaged backgrounds? *Roeper Review*, 22, 185-191.

The accuracy of the Brigance K&1 Screen in the early identification of Head Start children with possible cognitive/academic giftedness was explored with 134 children, 13 of whom were identified as potentially gifted on the K-ABC. These potentially gifted children also performed significantly better on the Brigance than did other children. Teacher ratings were ineffective in detecting potentially gifted children.

Naglieri, J.A., & Ford, D.Y. (2003). Addressing underrepresentation of gifted minority children using the Naglieri Nonverbal Ability Test (NNAT). *Gifted Child Quarterly*, 47(2), 155-161.

This study examined the effectiveness of the Naglieri Nonverbal Ability Test (NNAT) in identifying gifted Black and Hispanic students in comparison to White students. The sample was comprised of 20,270 students in grades K-12 who were similar to the U.S. population on several demographic variables. The distributions of NNAT standard scores were studied separately for White, Black, and Hispanic groups. Results indicate that similar percentages of White (5.6%), Black (5.1%), and Hispanic (4.4%) children earned an NNAT standard score of 125 (95th percentile rank). These findings suggest that the NNAT may be useful as part of a procedure to identify diverse students for gifted education services.

Plucker, J., Callahan, C. & Tomchin, E. (2004). Wherefore art thou, multiple intelligences? Alternative assessments for identifying talent in ethnically diverse and low-income students. In Sternberg, R (Ed.) *Definitions and conceptions of giftedness* (pp. 155-175). Thousand Oaks, CA: Corwin press.

This study investigates the reliability and validity of a battery of non-standard instruments based on the MI theory, including teacher checklists and performance-based assessment activities. The purpose in developing the instruments was the identification of talent in culturally diverse and/or low income kindergarten and first grade students. Results suggest acceptable evidence of reliability but raise questions about the validity of the assessments.

Reid, C., Romanoff, B., Algozzine, B., & Udall, A. (2000). An evaluation of alternative screening procedures. *Journal for the Education of the Gifted*, 23, 378-396.

The purpose of this study was to describe and analyze the performance of elementary school students on multiple screening measures for gifted identification of students in Title I schools. Participants engaged in both the Problem-Solving Assessment (PSA) and the Matrix Analogies Test (MAT). The authors indicate that placement and identification recommendations were better predicted by PSA scores but that they also found moderate concurrent validity between both test measures. Findings indicate that alternative assessment measures cast a more broad net and enable educators to identify gifted students who would traditionally go unnoticed.

Shaunessy, E., Karnes, F.A., & Cobb, Y. (2004). Assessing potentially gifted students from lower socioeconomic status with nonverbal measures of intelligence. *Perceptual and Motor Skills*, 98, 1129-1139.

Researchers measured the effects of three nonverbal assessments (the Culture-Fair Intelligence Test, the Raven Standard Progressive Matrices, and the Naglieri Nonverbal Abilities Test) on the gifted identification of predominantly African American students from low socioeconomic homes. The scores on these nonverbal

measures indicated that the Culture-Fair Intelligence Test and the Raven Standard Progressive Matrices identified more students than the Naglieri Nonverbal Abilities Test. A discussion of the results and implications for research are presented. (Author Abstract: *InfoTrac OneFile*. Thomson Gale.)

Tomlinson, C.A., Callahan, C.M., & Lelli, K.M. (1997). Challenging expectations: Case studies of high-potential, culturally diverse young children. *Gifted Child Quarterly*, 41, 5-17.

Project START (Support to Affirm Rising Talent), a three-year collaborative research based on Howard Gardner's theory of multiple intelligences attempted to: (1) develop identification procedures; (2) identify high-potential primary age students from culturally diverse and/or low economic backgrounds using the multiple intelligences model; (3) investigate the reliability and validity of the identification procedures; and (4) test the efficacy of specific interventions on student achievement and attitudes about school and self. This article reports findings from eight case studies of START learners.

Tyler-Wood, T., & Carri, L. (1993). Verbal measures of cognitive ability: The gifted low SES student's albatross. *Roeper Review*, 16, 102-105.

The Cognitive Abilities Test (CogAT), Otis-Lennon School Abilities Test, Stanford-Binet, Slosson Intelligence Test-Revised, and Matrix Analogies Test (MAT) were administered to 20 elementary students from lower socioeconomic backgrounds and 20 who were not from such backgrounds. The low SES students performed significantly lower than the control group on the verbal portion of the CogAT, the verbal portion of the Stanford-Binet, and the Slosson Intelligence Test-Revised.

VanTassel-Baska, J., Feng, A., & Evans, B. (in press). The use of performance-based assessment in identifying underrepresented populations of gifted students: A follow-up study of patterns and perceptions in identification and performance. *Gifted Child Quarterly*.

This study tracks the profile data of a new performance-based protocol for gifted identification in the state of South Carolina over a three-year period. Results suggest that students identified using performance tasks were more likely to be identified through the nonverbal assessment component of the tasks. Performance data show that performance task-identified students in general performed at levels below traditionally identified students. In their area of strength, however, they tended to approach the mean for the traditionally identified gifted students on that portion of the high-stakes state test.

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.

Performance-based assessments were developed and piloted as an alternative to standardized testing for potentially gifted minority and poverty students in the state of South Carolina. The alternative performance assessment resulted in finding an additional 12% African American and 14% low-income children for gifted identification. These students represent those who scored a few percentage points below the cut off on traditional measures. Thus, performance-based tasks provide an effective and innovative approach to finding more low-SES and minority gifted students for programs.

Worrell, F.C. & Schaefer, B.A. (2004). Reliability and validity of Learning Behaviors Scale (LBS) scores with academically talented students: a comparative perspective. *Gifted Child Quarterly*, 48, 287-309.

Teacher ratings of academically talented (AT) students on the Learning Behaviors Scale (LBS) were examined for evidence of reliability and validity in two cohorts attending a summer program. The AT students' scores were similar to scores of gifted and talented and high-IQ students in the normative sample, and reliability estimates of participants' scores were in the moderate to high range. LBS scores predicted achievement after controlling for previous achievement and socioeconomic status. Future research should examine LBS scores in public school settings with identified and referred students. (Author Abstract: *InfoTrac OneFile*. Thomson Gale.)

Curriculum, Programs, and Interventions for Promising Students of Poverty

Baldwin, A.Y. (1994). The seven plus story: Developing hidden talent among students in socioeconomic disadvantaged environments. *Gifted Child Quarterly*, 38(2), 80-84.

The Javits 7+ Gifted and Talented Program awarded to Community School District 18 of Brooklyn, New York, was designed to provide an opportunity for socioeconomically disadvantaged children to receive intensive school-based activities that would prepare them for programs for the gifted. The philosophical approach of this grant was derived from Gardner's concept of multiple intelligence. The program was designed to involve teachers, parents, district staff, and students in program design and implementation. This article outlines the components of the grant, its operation, and its evaluation as viewed by the author. (Author Abstract)

Borland, J. (2004). *Issues and Practices in the Identification and Education of Gifted Students from Underrepresented Groups*. Storrs, CT: University of Connecticut, National Research Center on the Gifted and Talented NRCGT.

This document examines causes of the under-representation of economically disadvantaged students, students of color, students from ethnic minorities, and students with limited English proficiency in programs for gifted students, and presents some ideas and practices that fall within the range of typical gifted program activities and changes in policy and practice to provide better education for gifted students.

Borland, J.H., Schnur, R., & Wright, L. (2000). Economically disadvantaged students in a school for the academically gifted: A postpositivist inquiry into individual and family adjustment. *Gifted Child Quarterly*, 44, 13-32.

This follow-up study reports the effects of the placement in a school for gifted students of five economically disadvantaged minority students from central Harlem who were identified in kindergarten as potentially academically gifted. The authors concluded that the students made better academic progress than could have been expected, were integrated socially, and appeared to be experiencing no adverse emotional reaction. The authors believe that their success was dependent upon the students, the families, and the school setting. They also assert that the identification of economically disadvantaged students as potentially gifted is valid.

Campbell, F.A., & Ramey, C.T. (1990). The relationship between the Piagetian cognitive development, mental test performance, and academic achievement in high-risk students with and without early educational experience. *Intelligence*, 14(3), 293-308.

The Concept Assessment Kit-Conservation (CAK) was administered to 86 low socioeconomic status (SES) children and random cross-sectional samples of their more advantaged classmates at ages 5, 6, and 7 years. Low-SES Ss who had early educational intervention developed the ability to conserve earlier than those without intervention; however, the order of difficulty for the different concepts was similar in all groups. The proportion of nonconservers in the low-SES intervention group did not differ significantly from that of their more advantaged peers in the 1st and 3rd years in early elementary school, but low-SES Ss who did not receive early educational intervention were more likely to be nonconservers. (PsycINFO Database Record © 2005APA).

Cone, J.K. (1992). *Untracking Advanced Placement English: Creating opportunity is not enough*. National Writing Project: Occasional Paper No. 30.

Cone has written extensively on "untracking" AP courses. In this article, she observes that gifted and non-gifted students opting for rigorous reading and writing regimens in AP challenged her to adopt different teaching strategies. For promising low-income students, the opportunity to accelerate was not in itself the complete solution.

Cross, T., & Burney, V.H. (2005). High ability, rural, and poor: Lessons from Project Aspire and implications for school counselors. *Journal of Secondary Gifted Education, 16*(4), 148-156.

Project Aspire, attempts to increase the number of academically able middle and high school children of poverty by providing them school-based rigorous math and science Advanced Placement (AP) courses through multiple platforms of distance education technologies. This paper reports an analysis of the ideas and experiences shared during the training sessions with 21 school counselors. From the analysis and a literature review, the authors offer information for effectively working with high-ability middle and high school students living in rural poverty. (Author's Abstract: PsycINFO Database Record (c), 2006, APA, all rights reserved).

Cunningham, A., Redmond, C., & Merisotis, J. (2003). *Investing early: Intervention programs in selected U.S. states*. Montreal: Institute for Higher Education Policy.

This report features programs in various states that target AVID intervention for low-income, first-generation, and minority students in order to get them into the college pipeline. AVID (Achievement via Individual Development) proves to be effective in providing students rigor and support that helps them overcome the negative effects of parents' income and education levels, enabling them to apply for college education.

McKenna, M. A., Hollingsworth, P. L., and Barnes, L. B. (2005). Developing latent mathematics abilities in economically disadvantaged students. *Roeper Review, 27*(4): 222-7.

This study examined the effects of Kumon instruction, a supplementary, highly sequential, individualized method of developing mathematics skills. Whole classes of Title I elementary school students from grades two through five were divided into two groups, those with Kumon instruction and those without. Pre and posttests were administered to all participants to assess progress, compare standardized test results, and examine levels of acceleration. Results showed that Kumon group students improved their mathematics skill levels more than non-Kumon group students. (adapted from Author's abstract)

Mills, C. J., Stork, E.J., & Krug, D. (1992). Recognition and development of academic talent in educationally disadvantaged students. *Exceptionality, 3*, 165-180.

Thirty-six students who scored average on standardized achievement tests and were economically disadvantaged were provided with a skills-based program to enhance their mathematics or language arts ability. Twenty-eight students served as a comparison group and received no treatment. After the intervention, the majority of students in the treatment group qualified for academically gifted programs.

Olszewski-Kubilius, P. (2006). Addressing the achievement gap between minority and nonminority children: Increasing access and achievement through Project EXCITE. *Gifted Child Today, 29*(2), 28-37.

In this study, data are provided on the achievement of low-income minority students who participated in Project EXCITE, a five-year intervention program. Results showed that the majority of students who were identified in the third grade and persisted in the program through grade 7 were on track to complete algebra and have significant laboratory science experience prior to high school. Project EXCITE significantly increased the number of minority students, most of whom were also low-income, to enter advanced classes in middle school and high school.

Renzulli, J.S.& Reis, S.M. (1994). Research related to the Schoolwide Enrichment Triad Model. *Gifted Child Quarterly, 38*(1), 7-20.

This article summarizes longitudinal research dealing with categorical components of the Schoolwide Enrichment Triad Model (SEM). Results suggest that the use of this model favorably influences teachers' instructional practices and improves teachers' attitudes toward the education of gifted students and of elementary students' attitudes toward learning and self-concept. The model effectively serves high-ability students in varied educational settings

and in schools that serve diverse ethnic and socioeconomic populations. (PsycINFO Database Record (c) 2005 APA, all rights reserved.)

Schlicter, C.L. & Palmer, W.R. (2002). Talents unlimited: Thinking skills instruction as enrichment for all students. *Research in the Schools, 9*(2), 53-60.

This article includes a compendium of thirty years of classroom research on the Talents Unlimited model and demonstrates its effectiveness in enhancing creative and critical thinking skills of K-12 students diverse in intellectual ability and achievement, socioeconomic level, and interests. The model includes productive thinking, decision making, planning, forecasting, and communication that students use in creative problem solving. These skills, in concert with academic skills and knowledge, are applied to the curriculum to enrich and enhance students' creative thinking about all areas of instruction (PsycINFO Database Record © 2005APA, all rights reserved).

Swanson, J.D. (2006). Breaking through assumptions about low-income, minority gifted students. *Gifted Child Quarterly, 50*(1): 11-25.

This research describes Project Breakthrough, federally funded as a demonstration project through the Javits Gifted and Talented Education Act. Using units developed by the Center for Gifted Education at the College of William and Mary, teachers increased their understanding of how to heighten the rigor and challenge of content and instruction, and students gained significant achievement in learning. Also, this research suggests that even with minimal curricular intervention, minority and low-income students benefit from advanced curricula and instructional strategies that challenge them.

Sweet, J.R., Rasher, S.P., Abromitis, B.S., and Johnson, E.M. (2004). *Case studies of high performing, high technology schools: Final research report on schools with predominantly low-income, African-American, or Latino student populations*. Naperville, IL: North Central Regional Educational Lab.

This document addresses the questions; to what extent can educational technology help schools close achievement gaps? What types of educational technology can administrators, teachers, and students use to help schools close achievement gaps? Researchers conducted case studies of 19 high-performing, high-technology schools that have predominantly low income, African American, or Latino student populations.

VanTassel-Baska, J. (2003). *Content-based curriculum for low income and minority gifted learners*. (RM03180). Storrs, CT: University of Connecticut, National Research Center on the Gifted and Talented.

This monograph and review of the literature addresses planning and developing curricula for low income and minority gifted learners. Issues discussed include collaboration among professionals working with these students, choice of school program delivery models, involvement of parent and community support systems in nurturing potential, and curriculum interventions directed toward the needs and profiles of this population. Three different sections focus on identification, characteristics, and models and interventions for low income and minority learners. New directions for future curriculum and program design are discussed.

Woods, M. B. (2006). *Factors affecting the degree of participation among enrichment program attendees*. Dissertation Abstractions. United States: ProQuest Information and Learning.

This study examined levels of participation in a summer enrichment program for gifted economically disadvantaged children who were mostly Black (37%) or Hispanic (46%). The results of the study indicated students were more likely to stay in the program if they were (1) Hispanic males with larger families in the lowest income bracket, (2) entered the program earlier in their school career, and (3) had stronger reasoning and language skills. Students more likely to drop out include those with a female head of household.

Talent Development and Promising Students of Poverty

Meyers, S.L. (1997, March). *Analysis of the 1996 Minnesota basic standards test data*. Minneapolis, MN: University of Minnesota, Hubert H. Humphrey Institute of Public Affairs.

A study by the University of Minnesota on data derived from the 1996 state Basic Standards test indicates that inner-city poverty exercises only a slight impact on test scores. The most outstanding indicator of academic success was the regularity of attendance in school. Other significant indicators of good academic performance were diversity and a stable school atmosphere. Gifted and talented programs had a bigger positive effect on minority scores than on White scores. (*InfoTrac OneFile*. Thomson Gale.)

Brewer, E. (2005). A longitudinal study of the talent search program. *Journal of Career Development, 31*(3), 195-208.

This longitudinal study examined the impact of participation in the federally funded Talent Search program at the University of Tennessee, Knoxville. The Talent Search program provides career exploration and counseling to low-income students with the potential to be first-generation college students. Postsecondary education rates of talent search participants were compared with enrollment rates of a control group who were also eligible for services but did not participate. Findings suggest that Talent Search participants were significantly more likely to enroll in postsecondary education than members of the control group.

Griffith, J. (1998). The relation of school structure and social environment to parent involvement in elementary schools. *The Elementary School Journal, 99*, 53-81.

This study reports results of parent and student surveys that examined relations among school characteristics and parent involvement. Parents who participated more had a child enrolled in the gifted and talented program, a child in the second grade, multiple children enrolled in the public schools, and perceptions of a safe, empowering, and positive school climate. In contrast, characteristics associated with lower parent participation in school activities included being Hispanic, African American, or Asian American; being of lower-socioeconomic status; having a child enrolled in either special education or the English-as-a-second-language program. (*InfoTrac OneFile*. Thomson Gale.)

Harmon, D. (2002). They won't teach me: The voices of gifted African American inner-city students. *Roeper Review, 24*, 68-75.

This study examined the effects of busing African American students from a lower income, predominantly minority, elementary school to a middle to upper income, predominantly majority elementary school. Students were angry about attending another school, received harassment, were rejected by their White peers, and stayed with their own minority group. They viewed ineffective teachers as having low expectations, lacking in understanding these needs, and providing unfair and unequal treatment. Effective teachers had high expectations, understood the culture, and provided fair and equal treatment.

Hébert, T. (2002). Educating gifted children from low socioeconomic backgrounds: Creating visions of a hopeful future. *Exceptionality, 10*, 127-138.

The stories of three students from low socioeconomic backgrounds highlight significant issues in educating gifted students living in poverty. Major themes uncovered across the three cases included educators who looked beyond the circumstances of the students and maintained high expectations, the positive influence of enriched teaching-learning opportunities and extracurricular activities, and the success of a mentoring approach with the students.

Hébert, T.P., & Beardsley, T.M. (2001). Jermaine: A critical case study of a gifted black child living in rural poverty. *Gifted Child Quarterly*, 45(2), 85-103.

In this account of a gifted Black child living in an impoverished rural environment, a university researcher, and a classroom teacher collaborated in order to describe a young man's creativity, his resilience, his struggle to find a place for himself in his community, and the significant factors that influenced the early formation of a strong self-identity. The findings of the study offer educators helpful suggestions for identifying and addressing the educational needs of gifted Black children living in rural poverty. (*InfoTrac OneFile*. Thomson Gale.)

Hunsaker, S. (1995). *Family influences on the achievement of economically disadvantaged students: Implications for gifted identification and programming*. Research Monograph 95206. Storrs, CT: University of Connecticut, National Research Center on the Gifted and Talented.

This review of the literature looks at family influences on the achievement of economically disadvantaged youth, with an emphasis on relationships among families, academic achievement, and gifted education. The importance of schools and communities in supporting families and the family culture is stressed. Studies specific to gifted education have found status variables that correlate directly with identification of students as gifted and that indicate the importance of focusing on individual expressions of giftedness within cultural contexts when evaluating gifted students within economically disadvantaged families. (ERIC abstract)

Jimerson, S.R., Egeland, B., & Sroufe, L.A. (2000). A prospective longitudinal study of high school dropouts: Examining multiple predictors across development. *Journal of School Psychology*, 38(6), 525-549.

This study utilized data from a 19-year prospective longitudinal study of at-risk children to explore multiple predictors of high school dropouts across development. Ss were considered at risk due to poverty and associated risk factors such as age, education and single parenthood. Students were classified in terms of their high school graduation status at age 19. Results demonstrated the association of home environment, early quality of caregiving, SES, IQ, problem behaviors, academic achievement, peer relations and parental involvement in school with dropping out. (PsycINFO Database Record © 2005APA).

Moon, T.R., & Callahan, C.M. (2001). Curricular modifications, family outreach, and a mentoring program. *Journal for the Education of the Gifted*, 24, 305-321.

This study focused on longitudinal interventions of mentoring, parental involvement, and multicultural curricula on the academic achievement of 273 elementary students from low socioeconomic environments. The results suggested that the interventions had no statistically significant effect on student achievement in any grade. However, at-risk students were on grade level by the end of the project. In addition, students who participated in the project gained in their problem-solving abilities, creativity, and social skills, and as a result were referred and placed in gifted programs more often than students who did not receive the project's benefits.

Konstantopoulos, S., Modi, M., & Hedges, L.V. (2001). Who are America's gifted? *American Journal of Education*, 109, 344-373.

This study uses both descriptive statistics and multivariate analytic techniques to explore correlates of academic giftedness for American eighth graders, using the National Education Longitudinal Study of 1988 (NELS:88). Findings indicate that students who are self-reliant and spend more time on homework assignments and leisure reading per week are much more likely to be academically gifted than other students. In addition, high levels of parental educational aspirations as well as high levels of family socioeconomic status are important predictors of academic giftedness. (*InfoTrac OneFile*. Thomson Gale.)

Lubinski, D., & Humphreys, L.G. (1992). Some bodily and medical correlates of mathematical giftedness and commensurate levels of socioeconomic status. *Intelligence*, 16, 99-116.

A survey was conducted on some 100,000 high school students to determine the relationship between socioeconomic and health conditions and mathematical giftedness. It was found that physiological well-being is generally more associative with giftedness than socioeconomic advantages. The gifted children's good health may be due to organismic superiority, effective parenting, and other random factors. (*InfoTrac OneFile*. Thomson Gale.)

Olszewski-Kubilius, P., & Laubscher, L. (1996). The impact of a college-counseling program on economically disadvantaged gifted students and their subsequent college adjustment. *Roeper Review*, 18, 202-208.

Fifty-five urban high school students were compared to a group of economically advantaged students who participated in a special summer program. Most of the students were Black or Hispanic (61%). The lower SES students changed their plans to finance college as a result of the program. Researchers found in the pre-college phase, economically advantaged and disadvantaged gifted students differ only slightly in their aspirations, dreams, expectations and perceptions about college. However, in college, lower SES students were more likely to have been employed as freshman, and perceived a declining level of support from teachers and a lonely feeling on campus.

Renzulli, J.S., & Park, S. (2000). Gifted dropouts: The who and the why. *Gifted Child Quarterly*, 44, 261-272.

Two studies were conducted to obtain comprehensive information about gifted high school dropouts and to examine factors that are related to their dropout behavior. The results indicated that many gifted dropouts were from low socioeconomic-status families and racial minority groups; had parents with low levels of education; and participated less in extracurricular activities. The logistic regression analysis results indicated that dropout behavior for gifted students was significantly related to students' educational aspirations, pregnancy or child-rearing, gender, father's highest level of education, and mother's highest level of education. (*InfoTrac OneFile*. Thomson Gale.)

Robinson, N.M., Lanzi, R.G., Weinberg, R.A., Ramey, S.L., & Ramey, C.T. (2002). Family factors associated with high academic competence in former Head Start children at third grade. *Gifted Child Quarterly*, 46, 278-290.

Of the 5,400 children in the National Head Start/Public School Early Childhood Transition Demonstration Project tested at the end of third grade, the highest achieving 3% (N = 162) were selected to conduct a principal components analysis on their scores on vocabulary and achievement measures. Compared with the remaining children, the high-achieving children were thriving both socially and academically. The families of these children had somewhat more resources on which to call and somewhat fewer stresses than the families of the other children. Caretakers of high achievers ascribed to more positive parenting attitudes and were seen by teachers as more strongly encouraging their children's progress. (*InfoTrac OneFile*. Thomson Gale.)

Shumow, L. (1997). Daily experiences and adjustment of gifted low-income urban children at home and school. *Roeper Review* 20(1), 35-39.

Increased educational resources and support are needed for low-income parents with gifted children. These resources should include extracurricular programs outside high-poverty neighborhoods, improved identification and assessment techniques, and more opportunities to use individual talents. Such resources may require legislative action and private sector assistance. (*InfoTrac OneFile*. Thomson Gale.)

VanTassel-Baska, J., Feng, A., Quek, C., & Struck, J. (2004). A study of educators' and students' perceptions of academic success for underrepresented populations identified for gifted programs. *Psychology Science*, 46(4), 363-378.

This article presents a study of the impact of placing minority and low income students identified through performance-based assessment in gifted programs. Findings suggest that gifted program participation was

beneficial in enhancing self-confidence, developing stronger communication skills, and learning to think in different ways. For some students, problems with persistence, organizational skills, time management, and lack of verbal skills overshadowed their participation. Implications include the need to follow students identified through nontraditional measures longitudinally to assess overall schooling impacts.

VanTassel-Baska, J., Olszewski-Kubilius, P., & Kulieke, M. (1994). A study of self-concept and social support in advantaged and disadvantaged seventh and eighth grade gifted students. *Roeper Review*, 16, 186-191.

This study investigated the role of self-concept and related social support factors in the academic achievement patterns of gifted adolescents. Seventy-six males and 71 females, 97 of whom were middle and above SES and 50 of whom were low SES comprised the sample. Findings indicated some differences based on ethnicity and gender, but most differences were between lower and higher SES groups, particularly in the areas of social support and social and behavioral self-concept. The disadvantaged students showed significantly lower perceived academic and social self-competence than did their more advantaged peers. (PsycINFO Database, 2005, APA).

Worrell, F.C., Szarko, J.E., & Gabelko, N.H. (2001). Multi-year persistence of non-traditional students in an academic talent development program. *Journal of Secondary Education*, 12(2), 80-89.

Minority and low-income students have been underrepresented in programs for the gifted. This nine year database study examined factors related to the return rate of 316 nontraditional students (ages 12-17) who were identified with multiple indicators and who received support while participating in a summer program for talented youth. Results indicated that GPA, math and reading achievement test scores, final grades in the first summer of attendance, and SES were not significant predictors in whether or not a student returned. The authors suggest that psychosocial variables may contribute to participation rates and advocates the need for follow-up studies with non-returning students.

Author and Presenter Biographical Sketches



Biographical Information for Conference Presenters and Monograph Chapter Authors

Tommie Sue Anthony, University of Arkansas, Little Rock

Tommie Sue Anthony worked in the Pulaski County Special School District for 34 years as a teacher and as the Director of Talented and Gifted Programs. She developed AP Vertical Teams, wrote the district's desegregation plan for gifted programs and created the nationally recognized Wilbur Mills High School University Studies Program. She has been involved with the College Board's Advanced Placement Program since 1981 as an AP teacher, an administrator, and a consultant. She is the author of the College Board's workshop, *Pre-AP: Instructional Leadership-Using AP Vertical Teams*. In 2005, she was selected as one of 100 consultants to serve as an Advanced Placement National Leader to evaluate and mentor AP consultants throughout the country. Mrs. Anthony is a graduate instructor at the UALR Center for Gifted Education and the Coordinator of the Center's Arkansas Advanced Placement Professional Development Center.

Dr. Alexinia Y. Baldwin, University of Connecticut

Alexinia Baldwin is Emeritus Professor at the University of Connecticut, Department of Curriculum and Instruction. She has served as the president of the Association for Gifted (TAG), Board member of The National Association for Gifted Children (NAGC), and USA delegate for the World Council for Gifted and Talented (WCGT). Her publications have focused on gifted underserved students; their identification and curriculum needs in the classrooms and the masks that hide their recognition. Her Baldwin Identification Matrix has been used in many school districts to assist in identifying these students. Most recently, she has received the 2004 Distinguished Scholar award from NAGC.

Dr. Ernesto M. Bernal, Consultant

Ernesto M. Bernal received a Ph.D. in Educational Psychology from the University of Texas. He has been a classroom teacher of the gifted, a school administrator in two private schools for the gifted, a researcher, and a professor and administrator in public institutions of higher education in the Southwest. Currently Dr. Bernal works as an educational consultant to school districts and is an external evaluator to complex educational projects, including the dual-language gifted education program (a Javits project) in El Paso I.S.D., the AP Initiative project in Austin I.S.D., and the AP Initiative project in the Arizona Department of Education.

Dr. Bruce A. Bracken, College of William and Mary

Bruce Bracken is currently a Professor of Foundations and a faculty member of the Center for Gifted Education at the College of William and Mary. During his career, Dr. Bracken has published more than 120 articles, reviews, book chapters, tests, books, curricula, training CDs, and videos. Bracken co-founded and has co-edited the *Journal of Psychoeducational Assessment* for more than 20 years, and currently sits on the editorial boards of eight national and international educational and psychological journals. He is a Fellow of the APA in the Division of School Psychology and the Division of Child and Adolescent Psychology. Dr. Bracken is a Diplomate and Fellow in the American Board of Assessment Psychology, and has recently served on a panel for the National Research Council of the National Academies of Science.

Dr. Linda Brody, Johns Hopkins University Center for Talented Youth

Linda Brody directs the Julian C. Stanley Study of Exceptional Talent and co-directs the Diagnostic and Counseling Center at the Johns Hopkins Center for Talented Youth. She also supervises CTY's participation in the Jack Kent Cooke Young Scholars Program, the development of a new Website for math and science students, and the publication of the award-winning magazine *Imagine*. Linda has over 30 years experience as a counselor, researcher, and advocate for gifted children, and she has published widely in books and professional journals. Her special interests include the highly gifted, gifted females, and twice-exceptional students, and she has done extensive research on acceleration.

Dr. Carolyn M. Callahan, University of Virginia

Carolyn Callahan holds a Ph.D. in the area of Educational Psychology with an emphasis in gifted education. At the University of Virginia she developed the graduate program in gifted education, the Summer and Saturday Program for gifted students, and serves as site director of the National Research Center on the Gifted and Talented. Her research has resulted in more than 150 refereed articles and 35 book chapters across topics ranging across the areas of program evaluation, the development of performance assessments, and curricular and programming options

for highly able students. She has received recognition as Outstanding Faculty Member in the Commonwealth of Virginia, Outstanding Professor of the Curry School of Education, and was awarded the Distinguished Scholar Award and the Distinguished Service Award from the National Association for Gifted Children. She is a Past-President of the Association for the Gifted and the National Association for Gifted Children.

Dr. Mary Ruth Coleman, University of North Carolina at Chapel Hill

Mary Ruth Coleman is a Senior scientist at the FPG Child Development Institute, University of North Carolina at Chapel Hill, and Research Associate Professor in the School of Education. She is the Director of Project U-STARS ~ PLUS, a Javits Project, and the Director of Project ACCESS (Achievement in Content and Curriculum for Every Student's Success) funded by the U.S. Department of Education. Dr. Coleman served three terms on the Board of Directors for the Association for the Gifted (TAG); recently completed her third term on the Board of NAGC; and service on the Board of Directors for the Council for Exceptional Children (CEC). She was just elected President-elect for CEC and is currently serving in this capacity.

Robert Gira, AVID Center in San Diego, CA

Robert Gira is the Executive Vice President of National Programs, responsible for overseeing AVID Center's National Programs and Divisions, as well as National Initiatives. He has led a variety of curriculum projects for the AVID Center and developed the program's system-wide data collection format. As a staff developer, he has provided instruction at AVID Summer Institutes for administrators as well as for AVID National Demonstration Schools, and has conducted tutor trainings throughout the U.S. Before joining AVID in 1994, he was an administrator at two high schools in San Diego County, Rancho Buena Vista High School and Vista High School. As principal at Vista High School from 1990 to 1994, he participated in the school's selection as a California Distinguished School and helped with reform efforts such as shared governance, integrated instruction, and restructuring. He taught English in the Vista Unified School District for ten years.

Dr. Donna Y. Ford, Vanderbilt University

Donna Y. Ford is Betts Chair of Education and Human Development at Vanderbilt University. She teaches in the Department of Special Education. Donna earned her Doctor of Philosophy degree in Urban Education, educational psychology. Dr. Ford conducts research primarily in gifted education and multicultural/urban education. Donna is a board member of the National Association for Gifted Children, and has served on numerous editorial boards, such as *Gifted Child Quarterly*, *Exceptional Children*, and *Roeper Review*.

Dr. Harold Hodgkinson, Center for Demographic Policy

Harold Hodgkinson is President of the Center for Demographic Policy in Washington, DC. Previously, he served as Director of the National Institute of Education (Presidential Appointment), President of National Training Labs and Dean of Simmons College and Bard College. Dr. Hodgkinson has also worked on the research faculty at UC Berkeley. Author of 12 books and 200 articles, he holds a Masters degree from Wesleyan and a Ph.D. from Harvard. In addition, he has been awarded 13 honorary degrees and is a member of many boards and commissions. He has spent the last 30 years researching educational issues at all levels and has received the title of Distinguished Lecturer by the National Science Foundation.

Maureen Holla, Higher Achievement Program

As Executive Director of the Higher Achievement Program, Maureen Holla is recognized as an industry leader for her use of technology and science-based evaluation to improve academic outcomes for under-resourced children. Under her leadership, Higher Achievement has won many awards including the 2006 Johns Hopkins University Excellence in Summer Learning Award and the 2005 Excel Leadership Award. Ms. Holla came to Higher Achievement after her tenure at Community Impact, a neighborhood development pilot, which she helped transform into a national organization. In addition, Ms. Holla has co-authored curricula in youth leadership, literature, and social studies. Ms. Holla has received numerous awards for her executive management and community leadership, but the one she values most is a Community Hero award from students of Washington, DC.

Dr. Margie K. Kitano, San Diego State University

Margie Kitano is an Associate Dean of the College of Education and Professor of Special Education at San Diego State University (SDSU). She works with the San Diego Unified School District collaborative certificate program in gifted education and the Human Development Foundation's Open Gate programs for culturally and

linguistically diverse gifted learners from low-income homes. Her research and publications focus on instructional strategies supporting these students' achievement.

Dr. Paula Olszewski-Kubilius, Northwestern University

Paula Olszewski-Kubilius is currently the director of the Center for Talent Development at Northwestern University and an associate professor in the School of Education and Social Policy. She has worked at the Center for over 20 years during which she has conducted educational programs of all types for learners of all ages including programs for underrepresented gifted students. She has conducted research and published over 80 articles or book chapters on issues of talent development, particularly the effects of accelerated educational programs and the needs of special populations of gifted children. She currently serves as the editor of *Gifted Child Quarterly*.

Pat O'Connell Ross, United States Department of Education

Pat O'Connell Ross is the Team Leader for the Mathematics and Science Partnership Program, U.S. Department of Education. In 14 years of federal service, she has also managed the Javits Gifted and Talented Students Program, the Eisenhower Math and Science National Programs, and the Fund for the Improvement of Education. In addition, she was an Associate Director at Project 2061, the American Association for the Advancement of Science (AAAS); Director of Academic Programs with the Center for Talented Youth at Johns Hopkins University; and an Education Specialist with the Maine Department of Education.

Rassan Salandy, The Posse Foundation

Rassan Salandy is the director of university recruitment for the Posse Foundation. He is a graduate of Vanderbilt University and a Posse alumnus. Since his graduation, he has achieved his M.A. in philosophy from the University of Wisconsin and plans to pursue his doctorate in the same field.

Dr. Del Siegle, University of Connecticut

Del Siegle is an associate professor of educational psychology and teaching fellow at the University of Connecticut. Prior to earning his Ph.D., Del worked as a gifted and talented coordinator in Montana. He is president-elect of the National Association of Gifted Children and serves on the board of directors of the Association for the Gifted (TAG) and the AERA Research on Giftedness and Talent Sig. He authors a technology column for *Gifted Child Today*. Del's research interests include web-based instruction, motivation of gifted students, and teacher bias in the identification of students for gifted programs.

Dr. Barbara Smith, AVID Center

Barbara Smith is the AVID Eastern Division Director. In that position, she works with education, business, and legislative leaders to build statewide infrastructures for over 400 AVID network sites in the eastern region of the United States. In addition to building strong networks to increase the college-going population of underserved student populations in the Eastern Division, Dr. Smith coordinates the Eastern Division Summer Institute and analyzes program quality of AVID sites. The major part of Dr. Smith's work in education occurred with the Georgia Department of Education and the DeKalb County School District. At the Department of Education, Barbara provided leadership to various local, state, and national education reform efforts as division director of Instructional Interventions and Executive Director of the Area IV School Service Center.

Dr. Frank C. Worrell, University of California, Berkeley

Frank C. Worrell is Director of the School Psychology program and Faculty Director of the Academic Talent Development Program at the University of California, Berkeley, where he also serves as co-Director for Research and Development for the California College Preparatory Academy, a charter school involving UC Berkeley and Aspire Public Schools. His research interests include academic talent development, at-risk youth, scale development and validation, and teacher effectiveness. More specifically, he examines psychosocial variables related to academic achievement in adolescent populations, and the reliability and validity of instruments used to measure psychosocial constructs. He is a member of the editorial boards of *Assessment*, *Gifted Child Quarterly*, *Journal for the Education of the Gifted*, *Journal of Secondary Gifted Education*, *Roeper Review*, and *School Psychology Quarterly*.

Joshua Wyner, Vice President, Programs, Jack Kent Cooke Foundation

Joshua Wyner is Vice-President, Programs for the Jack Kent Cooke Foundation, where he is responsible for developing and directing the foundation's programs. The Foundation fulfills its mission through high-value scholarship programs for high school, community college transfer, and graduate students; a grant-making program designed to increase top community college students' access to highly selective four-year college and

universities; and support for other educational programs that serve the Foundation's target population – high achieving students with financial need. Prior to joining the Foundation, Mr. Wyner ran a nonprofit, practiced law, and evaluated federal programs in areas ranging from K-12 education to local government reform to federal environmental policy. Mr. Wyner graduated from Vassar College; received an MBA from the Maxwell School, Syracuse University, and a J.D. from New York University School of Law.



Monograph Editors

Dr. Joyce VanTassel-Baska, College of William and Mary

Joyce VanTassel-Baska is the Jody and Layton Smith Professor of Education and Executive Director of the Center for Gifted Education at the College of William and Mary where she has developed a graduate program and a research and development center in gifted education. She is president of the National Association for Gifted Children (NAGC) as well as past-president of the Association for the Gifted of the Council for Exceptional Children (CEC-TAG), and the Northwestern University Chapter of Phi Delta Kappa. She has published widely, including 15 books and over 275 refereed journal articles, book chapters, and scholarly reports. For seven years she also served as the editor of *Gifted and Talented International*, a publication of the World Council on Gifted and Talented.

Tamra Stambaugh, College of William and Mary

Tamra Stambaugh is the Coordinator of School Based Services at the Center for Gifted Education, College of William and Mary, where she assists with the implementation of two Javits grant studies, one focusing on elementary science curriculum interventions and the other on language arts curriculum interventions, both with an emphasis on students in Title I schools. She is an adjunct professor for Muskingum College in Ohio, and was the Vice-President of the Ohio Association for Gifted Children. Mrs. Stambaugh, a doctoral candidate at the College of William and Mary, is in the process of completing her dissertation, a curriculum intervention study in language arts, focusing on raising the critical thinking and reading comprehension skills of students in Title I schools.

