

# Expanding Opportunities for High Academic Achievement:

An International Baccalaureate Diploma  
Program in an Urban High School

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**I**s it possible to use well-defined academic programs to prepare low-income students and students of color for 4-year universities and to interrupt the reproduction of social and educational disadvantage (Bourdieu & Passeron, 1990)? What does it take to establish a high-quality academic program in a low-performing high school serving these students? What are the consequences of trying something of this sort—for the program and for the students who participate in it? Federal incentives and the standards set forth in the No Child Left Behind Act (NCLB; 2001) have prompted struggling urban school districts across the country to introduce rigorous curriculum like Advanced Placement (AP) courses and International Baccalaureate (IB) programs to help raise students' academic performance (Kyburg, Hertberg-Davis, & Callahan 2007). Although AP and IB programs have become important signals of college readiness, there is little empirical evidence to justify using these programs as a type of school reform effort to stimulate high academic achievement among

Students of color are consistently underrepresented in honors and gifted programs nationwide. Research suggests that even high-achieving students share many of the risk factors with their low-achieving peers. As a result, their continued academic success is far from assured. In addition, research on academic intervention programs designed to help these students suggests these programs are not widespread or institutionalized in schools in ways that will lead to meaningful gains in closing the achievement gaps at the high end of the academic spectrum. The study presented in this paper employed mixed methods to investigate the relationship between the design of a rigorous college preparatory program, the International Baccalaureate Diploma Program (IB), and the socioeconomic status of the students the program serves. The study found that an open admission International Baccalaureate (IB) program was successfully attracting and retaining African American, Latino, and Native American students from economically disadvantaged backgrounds. Findings are attributed to IB teachers' deeply held belief in the ability of the students to meet the rigor of the program. This IB program also has instituted a number of academic and social support mechanisms to keep students motivated to pursue the challenging curriculum.

## Summary

low-income Latino and African American students (Kyburg et al., 2007). In this article, I describe a research study designed to answer these important questions. My findings reveal that implementing a rigorous academic curriculum was only the first step in the process of raising the academic achievement of Latino and African American students. To maintain the academic rigor of the IB program, educators had to implement additional academic and social support mechanisms to ensure students were able to meet the numerous challenges of the IB program. My findings suggest that not only can an urban school serving Latino and African American students successfully implement a rigorous college preparatory program such as IB, with the appropriate scaffolds, this program can benefit a wide range of students.

This paper begins with a brief overview of the literature that documents the academic achievement gap among high-achieving Latino and African American students, as well as the literature on intervention programs designed to ameliorate these gaps. Following a description of my methodology, I present the recruitment and admission practices employed by the program I studied. I conclude with a description of the academic and social scaffolds developed and implemented by local IB teachers that directly support students' academic achievement.

## Academic Achievement and Educational Opportunity Gaps

### *Even High-Achieving Latino and African American Students Do Not Achieve at the Same Level as Their White and Asian Peers*

Closing the academic achievement gap is one of the most pressing issues facing policy makers and educators. This gap is not just a phenomenon that exists at the midrange of scores; it is a significant feature of the upper range as well. For example, the top fifth of Latino students in 2002 had a SAT verbal score of 598 and mean of 646 on the SAT math compared to score of 663 and

**Table 1**

Mean GPAs of High School Graduates  
by Gender and Ethnicity

Male	2.86
Female	3.09
Asian	3.16*
Latino	2.82*
African American	2.69*
White	3.05

*Note.* From *High School Transcript Study (HSTS), 1990–2005*, by U.S. Department of Education, National Center for Education Statistics, 2007, Washington, DC: U.S. Department of Education, Government Printing Office. Retrieved March 6, 2008, from [http://nationsreportcard.gov/hsts\\_2005/data\\_hs\\_gpa\\_3a\\_1c.asp](http://nationsreportcard.gov/hsts_2005/data_hs_gpa_3a_1c.asp)

\*Significantly different from White graduates.

720 respectfully for the top fifth of White students (Gándara, 2005). This is a difference of two thirds to three fourths of a standard deviation. The recently published High School Transcript Study (Shettle et al., 2007) reveals that the GPAs for Mexican American and African American students also lagged behind their White and Asian counterparts (see Table 1). Fewer African American and Latino students are enrolling in a college preparatory curriculum (see Table 2). In examining two national data sets—the Early Childhood Longitudinal Study (ECLS) and the National Educational Longitudinal Study (NELS)—even the top quintile of Latino students in these studies scored lower than White and Asian American students. A closer investigation reveals that the family backgrounds of high-achieving minority students tend to look more like those of their low-achieving peers than their high-achieving peers. Thus, even high-achieving students share the same risk factors<sup>1</sup> as low-achieving students (Barton, 2003). According to ECLS-K 1998 data, Latino high-achieving students are far more likely than White students to have a mother or father with less than a bachelor's degree (Gándara, 2005). They also are less likely than White high per-

**Table 2**

Percentage Distribution of High School Graduates in a Rigorous Academic Curriculum\*\* By Ethnicity, Academic Year 2005

Ethnicity	
White	11
African American	6
Hispanic	8
Asian	22

*Note.* From *High School Transcript Study (HSTS), 1990–2005*, by U.S. Department of Education, National Center for Education Statistics, 2007, Washington, DC: U.S. Department of Education, Government Printing Office. Retrieved March 6, 2008, from [http://nationsreportcard.gov/hsts\\_2005/data\\_hs\\_curr\\_2b\\_1c.asp](http://nationsreportcard.gov/hsts_2005/data_hs_curr_2b_1c.asp)

\*\*4 years of English; 3 years each of social studies, mathematics (which includes precalculus or higher), and science (which includes biology, chemistry, and physics); and 3 years of foreign language.

formers to live with their two biological parents. Looking at the other end of the academic pipeline, the NELS data replicates many of the patterns found in the ECLS data. High-achieving Latino students in the NELS sample are more likely to have parents with low levels of education; more than 25% of Latino students compared with 5% of the White sample have at least one parent without a high school diploma (Gándara, 2005).

African American, Latino, and Native American students are underrepresented in programs for the gifted and talented throughout the nation, and White and Asian students are overrepresented. Table 3 shows the percentage of each ethnic group participating in these classes in K–12 in the 1997 school year, the most recent year for which these data are available. Tables 4 and 5 show more recent data on students enrolled in K–12 gifted programs in states serving high percentages of minority students.

As Gándara (2005) pointed out, it does not make numerical sense to attempt to close the academic achievement gap by focusing only on the lowest third of students. Yet under cur-

**Table 3**

Percent Participation in Gifted and Talented Classes by Ethnic Group and Percent K–12 Population, 1997

Ethnic Group	Percent of Gifted	Percent K–12 Population
White	76.61	64.0
Black	6.63	17.0
Hispanic	8.56	14.3
Asian	6.63	3.1
Native Am	.90	1.1

*Note.* From *The Condition of Education 1998*, by U.S. Department of Education, National Center for Education Statistics, 1999, Washington, DC: U.S. Department of Education, Government Printing Office.

**Table 4**

Percent Identified as Gifted and Talented in 2004 by Ethnic Group and Percent K–12 Population, California

Ethnic Group	Percent of Gifted (2004)	Percent K–12 Population (2004)
White	47	32.9
Black	4	7.9
Hispanic	26	46.8
Asian	22	11.3
Native Am	1	.82

*Note.* Data from California Department of Education (2005) and National Association for Gifted Children (2005).

rent accountability systems this is what local leaders believe they must do to meet federal and state academic requirements. The IB coordinator at the high school examined in this paper reported that even at his school this was the case.

**Table 5**

Percent Identified as Gifted and Talented in 2004 By Ethnic Group and Percent K-12 Population, Texas

Ethnic Group	Percent of Gifted (2004)	Percent K-12 Population (2004)
White	55	38
Black	8.5	14
Hispanic	20	45
Asian	6	3
Native Am	0	.3

*Note.* Data from National Association for Gifted Children (2005) and Texas Education Agency Information Analysis Division (2004).

He said,

The school community has chosen to place its energy and emphasis on numerical indicators of student progress. The prevailing educational philosophy within the school is to focus on improving the test performance of students in the lowest third in order to raise overall school test scores. (Diploma program evaluation, March 25, 2005)

### *Academic Interventions for Traditionally Underrepresented<sup>2</sup> Students*

Raising the achievement of high-school-age, low-income students of color to levels of “high achievement” is generally seen in the literature as helping these students become eligible for college. This usually means helping students to access college preparatory coursework, honors, and AP classes, and in so doing, strengthening their academic skills. Schools often create special intervention programs for disadvantaged students that consist of activities such as tutoring, summer academic bridge programs, special intensive curricular interventions, SAT and ACT test preparation, and

peer study groups. The activities listed above are designed by program administrators to help disadvantaged students overcome the numerous academic achievement barriers they face.

A recent study by Gándara and Bial (2001) reviewed a national sample of intervention programs. The study sought to describe the kinds of strategies that are employed by program staff to prepare traditionally underrepresented students for college and to assess the extent to which they were successful in meeting this goal. Gándara and Bial investigated 13 programs that had completed sufficiently rigorous evaluations to allow a judgment about their effectiveness. These included school-centered, classroom-centered, individual-focused, and statewide models. They were initiated and supported by private foundations, government agencies, schools, and universities. The evaluations reviewed by Gándara and Bial provided very little evidence of students' improved academic performance. Among the most effective strategies reported were: (a) close monitoring of students' personal and academic growth; (b) providing access to high-quality curriculum; (c) providing appropriate "scaffolding" to ensure academic success (tutoring, supplemental coursework, more time on task); and (d) providing academically oriented, supportive peer groups. If students are to successfully attain bachelor's degrees, students need to be both motivated to attend college and adequately prepared to do college-level coursework. The evidence points to a need for more comprehensive intervention programs (Cooper, Chavira, & Mena, 2005). An example that includes some of the key ingredients is AVID, a model that combines college preparatory coursework along with additional social and academic support systems (Watt, Powell, & Mendiola 2004). Some critics of expanding opportunities for students to take rigorous courses argue that students either will not enroll or that courses will be watered down (Loveless, 1999).

The program presented in this study seemed to be one way to address weaknesses identified by Gándara and Bial's (2001) study, as it provides both access to rigorous academic courses through the IB Diploma Program as well as academic and social scaffolding. My findings suggest that given the right set of aca-

demic supports, high levels of academic achievement can be fostered among students from diverse academic, socioeconomic, and ethnic backgrounds.

### *The International Baccalaureate Diploma Program*

The International Baccalaureate (IB) Diploma Program is an internationally recognized and externally validated comprehensive program of study that provides students with access to highly trained teachers and a very high-level curriculum. The IB Diploma Program is a 2-year program that begins in 11th grade. It is a comprehensive program composed of six subject areas and a core of three additional activities. Students generally enroll in courses from each of the six subject areas during their junior and senior year. To earn a diploma, students must pass exams in all six subjects and complete the three additional core activities. The overarching goal of the curriculum is for students to gain both depth and breadth in each area of knowledge and for students to reflect and think critically about how all six areas of knowledge fit together (IBO, 2002). Many IB programs are implemented in relatively advantaged communities in the U.S. where upper middle class parents have sought out educational advantages for their children (IBO, 2006; Mathews, 2003). As of fall 2006, there were 462 schools authorized to offer the Diploma Program in the U.S., representing 44% of the IB schools worldwide. In recent years, schools in California, Texas, Philadelphia, and New York that serve socioeconomically disadvantaged students have implemented IB Diploma Programs as a type of organizational-level reform effort designed to stimulate high achievement (personal interview, IBNA Executive Officer, January 24, 2005). Increasing access for underrepresented students to IB programs was one of the International Baccalaureate North America (IBNA) Executive Board's primary goals. Its strategic plan states:

Access is the second principal concept of the new IB plan. By creating partnerships and seeking outside fund-

ing, it is hoped that IBNA can expand IB programs to new schools and new populations in the region. This effort is not intended to diminish the achievement of existing schools receiving IB services, but to add to the richness and diversity of the current IB community. By purposefully reaching out to all communities, by seeking new ways to be inclusive, by sharing our expertise with the broader population in the region, IBNA places itself squarely behind the ideal expressed in the IBO mission statement. These efforts will be the best response to the charge of “elitism” that is leveled against IB programs. IBO is unapologetic about creating and maintaining high academic standards for all its academic programs, but it insists that these programs should be available to all students who seek the challenge of educational excellence. (International Baccalaureate Organization, 2004, p. 4)

Although the recognition offered by prestigious 4-year universities have made AP and IB courses signals of students' college readiness, there has been very little empirical research on how AP and IB participants fair in college (National Research Council, 2002). Adelman (1999) found students who took rigorous courses were more successful in college but AP and IB courses were not the focus of his investigation. A study by Geiser and Santelices (2004) specifically attempted to ascertain the predictive validity of AP and IB courses on college grades and retention of students enrolled as first-time freshman from 1998–2004 at all eight University of California campuses. Controlling for demographic and socioeconomic variables, they found students enrolled in IB courses in high school earned higher college grade point averages (GPA) than students who had not taken IB courses (Geiser & Santelices, 2004). Other research conducted in a school district in New York, serving socioeconomically and ethnically diverse students, attributed expanded AP and IB course enrollments to students' higher scores on Regents' math exams (Burris, Heubert, & Levin, 2004). A more recent study of three urban high schools investigated how well IB and AP pro-

grams serve underrepresented students' academic needs (Kyburg et al., 2007). The paper presented a useful model that represents the incredibly complex factors that influence underrepresented students' participation and success in advanced academic courses. Classroom observations and interviews with teachers, students, and parents at these schools revealed significant variation among these groups regarding the appropriateness of the AP and IB curricula to meeting students' needs. Researchers also found that successful AP and IB programs were characterized by teachers' beliefs in their students' abilities to meet the high expectations of the curricula as well as support mechanisms designed to foster positive peer support groups and college-oriented activities.

## Methodology

In 1982, as a response to a statewide effort to improve large urban schools, Jefferson High School received a grant to facilitate the implementation of three small learning communities on campus. The International Baccalaureate (IB) Diploma Program was one of these programs, and the only one that sustained implementation until the time of this study in 2003. In 1991, Portville School District began implementing a voluntary desegregation program in an effort to draw White families back to the district (all names are pseudonyms). Like many districts across the country, Portville launched magnet programs at local elementary, middle, and high schools in an attempt to create demographically balanced schools (Rossell & Armor, 1996) and chose to include Jefferson High School's IB program in this magnet plan. According to court order, the district monitored the ethnicity and socioeconomic status of students participating in the IB program and took an active role in marketing the program, one of three secondary-level magnet programs, to families throughout the district. Thus the IB program was required to participate in local recruitment events such as the Magnet Fair, held at the local shopping mall each winter where the teachers and students provided information about the program. The district also pro-

duced a color brochure describing the unique attributes of the magnet programs that was mailed to local households.

### *School Desegregation in Portville*

In 1974, a lawsuit brought about court-ordered desegregation in Portville School District. In 1977, when the district implemented a mandatory desegregation program, 59% of the district's student population was White (Rossell, 1994). The mandatory desegregation plan implemented by the district involved involuntary bussing of both minority and White students. This program achieved its goal of creating racially balanced schools. But, not unlike communities attempting to desegregate schools in the South, 3 years into implementation, Portville saw its White enrollment decline by 32% (Rossell, 1994). The Portville community was deeply impacted by the implementation of these programs and has not recovered. Even though the district switched to a voluntary magnet-based desegregation plan in 1991, the district did not see the return of White families. Due in part to a doubling of minority student enrollment, Portville's students now attend some of the most racially isolated schools in the country (Frankenburg & Lee, 2002; Rossell, 1994). At the time of this study few White or middle class families remained in the urban neighborhoods served by Portville School District (as of 2007 only 14% of the district population was White; Frankenburg & Lee, 2002). In 2004, the courts found the district schools were in compliance with U.S. Constitutional requirements, and the district was declared unitary, ending the 34-year court case. The district was allowed to maintain the magnet programs. However, allocation of seats in magnet programs was to be made according to geographic distribution. The legacy of desegregation is important to this study for two reasons. First, schools in South Portville, like Jefferson, were at the center of the minority parents' legal arguments claiming racial bias and educational inequality. Second, although the district intended to increase White enrollment by supporting the implementation of a rigorous college preparatory academic program like IB,

Jefferson teachers responsible for the IB program's day-to-day operations did not share this goal.

### *Data Collection*

The literature describing the efforts of intervention programs designed to increase the numbers of traditionally underserved students transitioning from high school to college reported that these programs were successfully helping students who were already academically prepared, but they seemed to have little impact on increasing the academic achievement of underprepared students (Gándara & Bial, 2001). While collecting data on university partnership programs for another research project, I learned of the IB Diploma Program at Jefferson High School. In light of past research, I wanted to conduct an investigation of Jefferson's IB program to understand how it operated, who it served, if it were implemented according to the prescribed IB model, and if it were impacting students' academic achievement and in fact sending students to 4-year universities. My investigation began with an initial study of all of the college prep pathways available at Jefferson, which involved an in-depth study of each program's recruitment and admissions practices. This article primarily reports findings from the second study I conducted at Jefferson—a study solely focused on the IB program. My understanding of the IB program and its admission and recruitment practices draws on findings from the first study.

A White female, I was the only researcher involved in the study and performed all of the data collection, coding, and analysis. My study of IB program implementation spanned across dimensions such as program characteristics, local organizational capacity, resources and barriers, and program outcomes. I spent one day a week during the 2003–2004 academic year for a total of 24 visits to Jefferson High. Although I always introduced myself as a graduate student from a local university, I positioned myself as an interested observer during my visits, emphasizing that I was a former teacher interested in learning more about

the program, so as not to leave the impression that I was there to judge or evaluate the program.

To gain an understanding of the program philosophy and key components of the IB program, I interviewed officials from the national headquarters of the IB program in New York and an IB Executive Board member. Based on program documents and interviews, I identified key program components and actions schools would be required to take in order to implement the IB model with fidelity. Using a semistructured interview protocol with open-ended interview questions, I interviewed program coordinators, counselors, administrators, teachers, and parents affiliated with Jefferson's IB program. I used a similar protocol to interview three district administrators and a school board member. I asked individuals to reflect on their experiences with the program, how they came to participate in the program, how they perceived the program was functioning, who they thought the program served, and their experiences with parents. During interviews with teachers, I asked about professional development participation, years of teaching experience, and educational background. I also asked teachers to compare their IB teaching experiences with previous teaching experiences. The interviews lasted 30–50 minutes on average. All interviews were conducted individually either in a classroom or school office. Parent interviews were conducted in a group of four. Additional comments from parents were collected after recruitment sessions or IB parent meetings, until I felt I had collected the full range of parent experiences. I was able to identify key program stakeholders at the school, district, and national level from contact lists available on the Internet. IB Program coordinators provided me with contact information for parents. All interviews were recorded electronically and then transferred to Annotape, partially transcribed and then coded.

Thus the primary data sources for this study were transcriptions of 63 interviews with school personnel, parents, and IB administrators. In many cases, teachers invited me to observe their classes either before or after interviews. These observations were not included in the data analysis, but they did inform

my understanding of the IB curriculum and student-teacher interactions.

To triangulate interview data, I observed after-school activities such as student recruitment and parent information sessions. I made detailed field notes during these observations, then I entered them into Annotape for coding and analysis. Using Annotape software, I reviewed transcripts and field notes and coded the data as I identified key program components in place at Jefferson. I then searched the data to capture other significant aspects of the IB program. Examples of these were coded as such and represent the significant findings presented in this report.

A data sharing agreement between my university and the Portville school district allowed me to access longitudinal transcript data for Jefferson students in attendance between 2000 and 2004. Additional data on Jefferson students' university attendance was collected and provided by the IBNA office in New York.

### *Limitations of the Study*

During the research process, I was well aware that my presence and status as a university researcher might influence respondents' answers to my inquiries and that staff might "try to look good" for my benefit. To mitigate this influence, I attempted to have numerous interactions with key stakeholders in a variety of situations until I was satisfied that I had obtained consistent responses through prolonged exposure. The findings I report in this study may not be generalizable beyond the school I investigated.

### *Research Site*

Jefferson High School is an urban comprehensive high school that serves primarily Latino, Black, and Southeast Asian students. Jefferson High has been in operation for more than 40 years. I was particularly interested in Jefferson because, based on my review of the literature, it was a highly unlikely place to find

a rigorous college preparatory program. Jefferson High School was receptive to researchers from the local university because the school had an established relationship with the University of California prior to the inception of my study. When I began my study, one of my first interviews was with a Portville school board member. He met me at a community center not far from Jefferson High for our interview. He greeted me and said, "Welcome to the ghetto." I begin my description of Jefferson High School with this anecdote because the statistics that follow describe the school, but not the labels that often come with the statistics. Jefferson is an archetype of the urban comprehensive high school in California and, perhaps, the nation. Jefferson High School is set in a residential neighborhood a few miles from the downtown area of a moderately sized industrial city of Portville. The city of Portville is 37% Latino, 53% White, 11% African American, 37% Asian, and .5% Native American/Alaska Native (U.S. Census Bureau, 2005). Of the population 25 years and over in Portville, 68.2% have a high school diploma, 15.4% have a bachelor's degree and 4.9% have a graduate or professional degree (U.S. Census Bureau, 2000). Jefferson High School is designated as a Title 1 school by the Department of Education. Title 1 schools receive special funds from the federal government to provide remedial or compensatory education programs for low-income students. Jefferson serves a population that has all of the academic achievement risk factors identified in the literature (Barton, 2003). It is large, serving 3,176 students with 132 teachers on staff. It is diverse, 60% Latino, 13% Asian, 12% African American, 10% White, and 5% American Indian or Alaskan Native. According to the California Department of Education (CDE; 2005) Academic Performance Index (API) report for 2005, 1,374 students were classified as economically disadvantaged. Their API score was 539 of a possible 1,000 points in 2004. Jefferson's API score is among the lowest in the state. The school has been sanctioned or called a "high priority school" under California's school accountability system. These sanctions mean that the Portville school district received addi-

tional state funding from 2001–2004 to increase students' academic performance.

### *International Baccalaureate Diploma Program Begins as a Magnet Program at Jefferson High*

The following paragraphs were written by Jefferson IB's coordinators in 2004. They describe the context and the early history of the IB program at Jefferson High.

The International Baccalaureate Diploma Program at Jefferson High School was established in 1993 as a magnet Program for Portville Unified School District in California. Following desegregation of the school system in 1970s, many of the affluent families in Portville moved to neighborhoods in the northern part of the city. The remaining population of Portville Unified School District consisted of a diverse group of families from low socioeconomic backgrounds. In establishing the IB Diploma Program in 1993, the school administrators hoped to draw students from the more affluent neighborhoods of surrounding districts back to Jefferson High School.

During the early years, the Program at Jefferson confronted issues similar to many new IB Programs. Generating energy and enthusiasm for IB was challenging. There were few students willing to do any IB courses. The teachers lacked confidence in themselves and their students. At the time, few teachers even expressed the belief that “kids like ours” could be successful in an IB Program. Thus, they were unwilling to devote the time and energy that was necessary to succeed. Adding to the difficulties, all of the students had to take identical classes because the course offerings were limited. Students had to complete district and state requirements in addition to IB requirements, making the IB Diploma exceedingly difficult to attain.

By 1999, the district and IBO were unhappy. The district increasingly viewed the Program as a failure because only a few students were earning the IB Diploma. The Program seemed to be going nowhere and the number of students entering the Program was declining. By the end of the year, the district lost the magnet funding for the Program. The outlook for the future of the IB Diploma Program at Jefferson High School was bleak. What could be done? (IBNA Journal of Best Practices, 2004)

In 1995, Jefferson had only 3 IB diploma candidates. By 1999, the number had not increased. According to an IBNA official, Jefferson teachers knew something needed to change or the program's authorization would be revoked by IBO (IBNA Executive Official, personal interview, January 24, 2005). In 1999, in an effort to rejuvenate the program, John (a history teacher) and his wife Helen (an English teacher) were asked by Jefferson's principal to serve as co-coordinators of the IB Diploma Program. John and Helen were both Stanford University graduates. John had a teaching certificate in gifted and talented education, had taught at Jefferson for 30 years, and was chair of the history department. Making the IB program work for the Latino, African American, Asian, and Native American students from Jefferson's attendance area became John and Helen's personal crusade. John and Helen once told me in an interview, "Doing this work remains an exciting and rewarding labor of love" (personal interview, May 31, 2005). As a coordinator, John proved to be both charismatic and tenacious. John and Helen's first task was to increase the number of students participating in the IB program, which meant adopting a new admission philosophy.

### *The IB Admission Philosophy at Jefferson High*

Given the persistent underrepresentation of minority students in advanced academic programs at all levels, the issue of how to identify students for participation in advanced programs has garnered considerable discussion in the literature (Ford,

Harris, Tyson, & Trotman, 2002; Strong-Scott & Delgado, 2005). The use of traditional achievement tests to identify students for these programs has been blamed for minority underrepresentation (Figueroa & Ruiz, 1999; Vanderslice, 1999). Although researchers recognize the flaws of using traditional achievement tests, there seems to be little consensus among researchers on how schools should identify students who will be best served in advanced academic programs (Smutny, 2003).

It is not uncommon for high school honors and AP or IB programs to serve as extensions of districts' K-8 gifted and talented programs and to maintain some minimum criteria, such as a score in the 85th percentile on a standardized test, for admission to the program according to IB administrators at the national level (IBNA Executive Officer, personal interview, January 24, 2005). The IBO does not officially have any policy regarding admission to the IB Diploma Program; thus admission criteria are adopted by local coordinators. John, Jefferson's IB coordinator, described his admission philosophy in the following way:

One of the main reasons for our program's recent growth is access. Jefferson High School has always extended a policy of open enrollment for the IB program. All students are encouraged to pursue the full diploma. Students from outside the Jefferson attendance area must take at least four classes to stay in the program. There are no entrance exams, no GPA requirements, and no interviews prior to taking IB courses. Any student who has the desire to enter our program may do so. We encourage students to be at or near grade level in language and math. We also emphasize the need to be self-motivated. Although some students are invited to apply based on a GPA of 3.0 or higher, any interested student can submit an application through the district's magnet application process to enter the pre-IB program in ninth grade. We prefer to have students make the attempt, assess their prospects, and choose to leave the program on their own, rather than to exclude them at the outset. (personal interview, May 31, 2005)

**Table 6**

Demographic Characteristics of Students 2004

%	African American	Asian American	Latino	Native American	White
IB Program	12.4	15.8	47.3	.1	21
Jefferson High School	13.7	12.8	56.1	4.3	11.8
Portville School District	14.9	15.7	47.4	2.9	13.5
U.S. IB Students	10	15	9	.4	63

*Note.* Data from California Department of Education (2005) and International Baccalaureate North America (2004).

In 2003, the open admission process attracted eighth-grade students with a wide range of GPAs ( $n = 172$ )—59% of the incoming eighth-grade students had GPAs of 3.0 or higher, 35% had GPAs between 2.0 and 3.0, and the remainder had GPAs below 2.0. Only half of these students had completed algebra in eighth grade, and 42% of these students began their education in the U.S. as English learners. Approximately 50% of these students received federal free and reduced lunch. Table 6 demonstrates that the open-access admission policy had successfully captured students traditionally underrepresented in accelerated programs.

### *Admission Perspectives From the International Baccalaureate Organization*

Unlike some college preparatory intervention programs, like AVID (Watt et al., 2004) or *Puente* (Gándara, Mejorado, Gutiérrez, & Molina, 1998), the IB Diploma Program does not have formal admissions guidelines. When I asked IBO affiliates about admission policies, I learned that IBO administrators have

purposely chosen to leave this matter up to local schools (IB Executive Board Member, personal interview, March 18, 2005; IBNA Executive Officer, personal interview, March 28, 2005). For example, one state used data provided by local IB program coordinators to investigate differences in exam pass rates between IB programs based on the type of admission policy the school employed.

The IB administrator said:

One important bit of data from the Five Year Program Evaluations collected from all IB high schools in California related to the issue of program access. I really wanted to know about the entry criteria programs were using, because I wanted to compare the exam pass rates of schools with “open” entrance requirements [schools where the only criteria was motivation] versus “high gates” [schools who required gifted and talented status or test scores] for entry. A researcher did some analysis of the data and found that there was only a difference of two percentage points in pass rates. In other words, no difference really [64% vs. 66% average pass rate]. (California IB Organization President, personal interview, January 24, 2005)

IB executives understood the relationship between a program’s admission policies and students’ exam scores as evidenced by the following statement:

You have to be careful how you interpret the results of an IB exam. If your goal is for all students to get five, six, sevens on IB exams and you want every kid in your program to get a diploma, well, you can accomplish that by limiting the number of kids that you allow to take the program, or make sure that you take only the best—the best isn’t the right word—only the most prepared students into your program. But, if you start to appreciate how much this [program] can help all kinds of kids

then you may have a gentler view, when your diploma rate goes down or your kids are getting threes and fours, because you are more aware of the distance students have traveled. And this may be more important than the destination. (IBNA Executive Officer, personal interview, January 21, 2005)

In 2004, at one suburban high school in California that accepts only students who have been previously identified as gifted and talented, 96% of the IB exam scores were passing or higher (Mayer, 2006). For the U.S. as a whole, 80% of IB exams are passed, and internationally 85% are passed (Mayer, 2006). By comparison, in 2004, only 48% of IB exam scores were passing or higher at Jefferson, where the program had an open admission policy.

Despite the fact that national IB representatives said they actively share their open entrance philosophy with teachers with the hope that more teachers would be open to accepting a wide variety of academically prepared students into IB their classes, one IBO representative said, "I know some older IB teachers are really attached to the validation of their teaching that they get from their students' exam scores. This need for validation keeps these teachers from taking 'low' kids into their program" (IBNA Executive Officer, personal interview, January 21, 2005). According to this representative, school counselors were another group that needed to be convinced to let a wider variety of students into their IB programs. Although this representative was enthusiastic about communicating that an IB program could accommodate many levels of academic preparation, her statements also indicated that IBO was not currently planning to use policy levers to institute these beliefs.

IB administrators at the national level argue that they can leave admission decisions up to the program coordinators at local schools because of the high level of program fidelity: "There is only one IB program . . . fidelity is a nonnegotiable" (California IB Organization President, personal interview, January 21, 2005). I specifically asked IBNA representatives if they thought

IB programs implemented in schools serving low-income and minority students would need to implement their IB programs differently than schools that served socially and economically advantaged students. These representatives repeatedly emphasized the importance of program fidelity. Data from a study on program implementation supports their claim (Mayer, 2006). The IB program at Jefferson was implemented as prescribed by the IBO with a very high level of fidelity. However, there was an important relationship between students' academic and family backgrounds and program design. The Jefferson program had many unique qualities that went above and beyond the standard set of IB components. These components were directly related to the characteristics of the students they serve. I characterized these components as *scaffolds*.

***Meeting IB's Academic Expectations:  
Providing Students With Academic and Social Scaffolds***

Scaffolding is a concept attributed to Vygotsky's (1978) work in child development. In this context, Mehan, Villanueva, Hubbard, and Lintz (1996) defined scaffolding as a series of both social and academic supports specifically designed to help underachieving students achieve academically. For example, John, Jefferson's coordinator, said, "For a lot of our kids just being here [at school] every day is an immense success, accomplishing stuff while they are here is an even greater success, and then for them to accomplish things at a high level is off the charts" (personal interview, March 20, 2004). After taking their positions as coordinators in 1999, Jefferson's coordinators, John and Helen, realized that their open enrollment policy meant that students were entering the program with different levels of academic preparation. In a 2004 newsletter, the coordinators wrote:

As an open-enrollment program, we run the risk of losing some students before they finish the Diploma. In some cases, the students cannot do the work. In others,

they are not willing to do the work. As each year passes, we find better ways to support those who are struggling.

To ameliorate these differences, John and Helen developed several different types of scaffolds to help students acquire the academic skills and social supports most students already have when they enter the program at other schools. John said,

The more things you have in place to reach more kids—teachers who are supportive and coming from their heart, a program where overall kids are excited to be there, where there is social connection—you have a chance of drawing in more and more kids. (personal interview, May 31, 2005)

These aspects of the IB program appeared to be unique to Jefferson. These scaffolds included counseling, academic enrichment courses, and social supports.

### *Counseling*

Counselors' jobs often differ depending on the demographic characteristics of the students they serve (Paul, 2002). At Jefferson the counselors said they had not been given the opportunity to attend even the free college preparatory conferences sponsored by local universities. By comparison, IB counselors at another California school regularly attended college admissions workshops sponsored by Ivy League universities. Observation and interview data revealed that the majority of counselors at Jefferson were focused on helping students meet local high school graduation requirements. Jefferson's IB coordinators realized that their students needed a counselor who could help students with college admissions requirements, financial aid, and monitoring students' academic progress. The IB coordinators worked with Jefferson's administrators to have IB students assigned to a single counselor who participated in IB professional development. As the program grew, this counselor played an important

role in helping coordinators to track student progress, to identify students who might be struggling academically, and to provide students with financial aid and scholarship counseling.

### *Academic Enrichment Opportunities*

Academic enrichment opportunities offered by the IB teachers occurred during and after the academic school day. For example, the ninth-grade Spanish-speaking algebra teacher provided free after-school tutoring for students. During lunch, 11th- and 12th-grade biology students served as science tutors for 9th- and 10th-grade students. The IB coordinators also arranged for the district to offer a special summer course in algebra for students interested in IB who had not completed algebra in the eighth grade. In addition, Helen pointed out in a 2004 newsletter:

Our students have 2 full years of IB-caliber classes before they enter the Diploma Program. A demanding pre-IB program helps to prepare students for the Diploma Program. Our freshman curriculum includes a course called Introduction to Inquiry, which is designed to ensure that all students have the skills necessary to be successful in the program. The commitment to community service also begins in the pre-IB program as part of the course evaluation in Introduction to Inquiry. The hours do not count towards the IBO service learning requirement in the Diploma program. However, the requirement instills in students the idea of service as part of the learning experience. We view the preparation as critical to their success in obtaining the Diploma. The 4-year commitment is essential to creating our IB family.

### *Social Scaffolds*

Research demonstrates that students can benefit academically from a positive, academically oriented peer group and can be similarly disadvantaged by a peer group that is not academi-

cally oriented (Gándara, O'Hara, & Gutiérrez, 2004; Henderson, 1997; Ogbu, 1978; Stanton-Salazar 1997). As Ogbu (2003) pointed out, "For Black students, peers had a negative impact on academic engagement. . . . Poor academic performance . . . was partly due to the achievement norms of peer groups" (p. 197). John, the Jefferson IB coordinator, believed:

The identity that the kids get from participating in the IB community is a healthy one. It feeds their self-esteem, their belief in themselves, but it doesn't isolate them. IB kids don't think that they are better than everybody else; they come from modest backgrounds. There isn't the temptation to set themselves way above everybody else; a superior attitude is not encouraged by the staff. (personal interview, April 13, 2004)

The Hispanic Dropout Project's findings (Secada et al., 1998) support Jefferson coordinators' views that supportive student-teacher relationships are important to students' academic success. Other studies also support coordinators' beliefs that building trusting relationships with teachers can influence student academic achievement (Alexander, Entwisle, & Thompson, 1987; Gándara, 1995; Quint, 2006; Stanton-Salazar & Dornbusch 1995). An IB club meets once a month during lunch to plan activities. The psychology teacher, who has a master's degree in counseling and prior experience working with at-risk youth, runs an after-school physical education class in horsemanship.

John and Helen also have developed several student retreats modeled after youth leadership development programs. As John described in a 2004 newsletter,

One activity is "Warm-Up Week," which all incoming freshmen are encouraged to attend. For 5 hours a day during Warm-Up Week we work with the students in developing the attitudes and teamwork strategies in order to succeed in the program. We also provide them with opportunities to practice and apply what they

learn. Students from grades 10 through 12 also attend and advise small groups. We find that the students who attend the Warm Up Week are more confident and better prepared starting the school year. They also have a head start on forming the connections with other students, an essential element to success in the IB program. During the Senior Diploma Candidate Retreat each fall, the candidates and some of the senior staff retreat for 3 days to camp in the nearby foothills, an event that is sponsored by the Parent Booster Club. We instituted the retreat because our students were having serious difficulty completing their Extended Essays and maintaining the momentum of their junior year in the program. Ostensibly, the purpose is to read and discuss Extended Essays and to provide encouragement toward completion, which does happen to a greater or lesser degree. For students who do not have a supportive home environment, the retreat encourages them to rely on one another and on their teachers for support and motivation.

In interviews, John and Helen shared that the purpose of the retreats and clubs is to give students an opportunity to build trusting relationships with teachers outside of the school context. They summarized their results in a 2004 newsletter:

John and Helen's attempts have been successful. As one set of parents reported: We feel that one thing which the IB program provides, which is very seldom accomplished in public schools, is a sense of community. This is a quality which is most often found in the home, church, or organizations and clubs, but which is quite often difficult, if not impossible, to create in a public school. Both of our children have found a close-knit support group within the IB community, both with other students and with staff. This has made it easier, more fun, and more rewarding to achieve the difficult goals of the IB program. Achieving these goals has made it possible for them to

better synthesize, analyze, and articulate the information in the curriculum.

Students' own statements revealed that John and Helen's efforts to create a supportive environment were working:

Environment plays a major role in learning. The IB program is for kids who have a common goal, to learn. Being with other students who want to learn can make a big difference. In [regular] classes we are interrupted by students who are not willing to learn. Instead, we are in a classroom filled with students who are there for the same reason that I want to [be] there. Therefore, this causes less distraction for us. And gives us the grades we want. (Student 4, essay, May 5, 2004)

Other students said, "IB is more than just an academic program . . . It's a family. There's Helen and John playing the role of parents . . . our fellow peers play the role of brothers and sisters" (Student 77, essay, May 5, 2004), and "The program offers a small family environment in a school filled with a tremendous amount of students" (Student 86, essay, May 5, 2004). During exam week I observed on two different occasions teachers bring breakfast to their students and provide encouragement during the tense hours prior to their exams.

## Significance

Jefferson's IB students are succeeding in an extremely rigorous academic curriculum and preparing to go to college in part because of the additional scaffolds John and Helen have built into their program. Student data in Table 7 illustrates the tremendous growth of the IB program since the implementation of the open application process and scaffolds. In 2006, 48 of the 55 diploma candidates went on to college. Findings from this study suggest a wide range of students can succeed in a rigorous aca-

**Table 7**  
Descriptive Data for IB Program at Jefferson High School

Year	IB Courses offered	Candidates Examined	Exams Administered	Exam Scores 4-7	Diploma Candidates	Diplomas awarded	% Exams Passed	% Exams	
								Passed U.S.	Passed Int'l
2005	16	145	393	175	55	12	44.53%	79.04%	84.10%
2004	15	111	343	165	36	18	48.10%	80.70%	85.37%
2003	14	76	202	121	16	5	59.90%	81.62%	85.38%
2002	12	62	198	108	19	10	54.55%	83.27%	85.84%
2001	11	50	148	76	14	6	51.35%	82.86%	86.15%

ademic program like IB. Academic programs can maintain their integrity without limiting student access. The full implementation of the IB Diploma Program at Jefferson required that IB coordinators raise students' performance to the level of program expectation rather than lower the expectations to accommodate students' limited academic preparation.

A rigorous academic program like the IB Diploma Program should complement intervention efforts at schools across the country that already offer underserved students scaffolds such as motivational retreats, tutoring, and college preparatory clubs. As educators strive to create more high schools that support the academic achievement of low-income and minority students, this study underscores the incredible challenges these schools will face. These schools will be required to implement both a rigorous curriculum and the scaffolds to ensure students can meet the challenges of rigorous academic courses. Policy makers at the local and federal level will need to support teachers like John and Helen, who are committed to helping all students succeed at high levels with funds for ongoing professional development and the implementation of rigorous academic programs like the IB Diploma Program.

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## End Notes

<sup>1</sup> These risk factors include parents' educational background, income, rates of residential mobility, number of adults in the household, and level of English proficiency. For a complete review of this literature, see Kyburg, Hertberg-Davis, and Callahan, 2007.

<sup>2</sup> Underrepresented minorities are defined as those whose proportion of college enrollments are substantially below their proportion of high school graduates. In California, these groups include Chicano/Latino, African American, and American Indian students.