SRI International

Case Studies of Participation and Performance in the IB Diploma Programme

Jennifer A. Bland and Katrina R. Woodworth

Center for Education Policy SRI International 2009



CONTENTS

Exhibits	iii
Acknowledgments	v
Executive Summary	vii
Chapter 1. Introduction	1
Chapter 2. The Case Study Schools	3
Lamar Academy	3
Hillsborough High School	
Chapter 3. Preparation, Recruitment, Selection, and Retention	11
Program Availability and Student Preparation	11
Student Outreach and Recruitment	13
Selection and Persistence	
Chapter 4. Support Systems	
School-Level Supports	
District and State Supports	
Chapter 5. Lessons from the Case Study Schools	

EXHIBITS

Exhibit 1	Snapshot of the McAllen Independent School District, by Demographic Category, 2007-08	3
Exhibit 2	Diploma Programme Candidate Performance for Lamar Academy, by Demographic Category, 2005-06 through 2007-08	5
Exhibit 3	College Enrollment by Lamar Academy IB Diploma Recipients, 2006 through 2008	6
Exhibit 4	Snapshot of the School District of Hillsborough County, by Demographic Category, 2007-08	7
Exhibit 5	Diploma Programme Candidate Performance for Hillsborough High School, by Demographic Category, 2005-06 through 2007-08	9
Exhibit 6	College Enrollment by Hillsborough High School IB Diploma Programme Alumni, 2006 through 2008	9
Exhibit 7	Lamar Academy MYP Student Selection Process, 2006 through 2008	19
Exhibit 8	Lamar Academy Diploma Programme Student Selection Process, 2004 through 2008	20
Exhibit 9	Lamar Academy IB Program Student Enrollment and Persistence, Classes of 2006 through 2012	22
Exhibit 10	Selection, Participation, and Persistence for Lamar Academy IB Class of 2008, by Demographic Category	24
Exhibit 11	Hillsborough High School IB Program Student Selection Process, 2004 through 2008	25
Exhibit 12	Hillsborough High School IB Program Student Enrollment and Persistence, Classes of 2008 through 2012	26
Exhibit 13	Selection, Participation, and Persistence for Hillsborough High School IB Class of 2008, by Demographic Category	28
Exhibit 14	8th Grade Math and Reading FCAT Distribution for Hillsborough High School IB Class of 2008 (Applicants, Admits, and Enrolled Students)	29

We extend our thanks to the administrators, teachers, students, and parents at the case study schools and districts whose insights and reflection made this study possible. We also acknowledge the school and district administrators who provided us with quantitative data on student participation and performance.

Additionally, we appreciate the assistance of our SRI International colleagues. We thank Alejandra Lopez-Torkos for her work on the study design and for her careful review of an earlier draft of this report; Meredith Ittner for editorial assistance; and Eileen Behr for administrative assistance.

Finally, we are grateful to the International Baccalaureate Organization for sponsoring this research.

In response to an observed gap in the participation and performance of low-income and minority students in the International Baccalaureate (IB) Diploma Programme across the United States, the IB Organization seeks to expand access and improve student outcomes among these nationally underrepresented groups. To this end, IB commissioned case studies of two schools—Lamar Academy in McAllen, Texas, and Hillsborough High School in Tampa, Florida—based on the schools' unusually strong records recruiting students from underrepresented groups and ensuring their success in the Diploma Programme. In this report, we describe the history and structure of each of these programs; discuss general program availability and student preparation, recruitment, selection, enrollment, persistence, and achievement at each school; explore school-level, district, and state supports that appear to facilitate successful outcomes for students in the Diploma Programme; and identify lessons from the case study schools.

KEY FINDINGS

Lamar and Hillsborough both offer magnet IB Diploma Programmes in large and diverse school districts, and each school has established a record of high pass rates across all racial/ethnic and socioeconomic groups. We find that the two programs illustrate different choices related to selectivity and student persistence, but that there is some convergence related to strategies for outreach and recruitment, and substantial convergence related to general program availability, early preparation, and student supports.

Program availability. The fact that the districts corresponding to both case study schools serve large numbers of students who are underrepresented in Diploma Programmes across the United States allows these districts to reach a broader cross-section of students than may be possible elsewhere. Moreover, because the Diploma Programme is structured as a magnet program in each of these districts, it is available as an option to more students than would have the opportunity to participate if enrollment were restricted to students residing in specific neighborhoods.

Early academic preparation. The case study schools and their corresponding districts have each taken steps to increase the number of students who are prepared to apply to and succeed in the Diploma Programme. Efforts to increase rigor in the elementary and middle school grades have resulted in the establishment of IB's Primary Years Programme (PYP) and Middle Years Programme (MYP) at several schools in each district. Additionally, each case study school offers a 9th- and 10th-grade feeder program—MYP at Lamar and "pre-IB" at Hillsborough—to teach content and skills designed to ensure that students entering the Diploma Programme in 11th grade are well prepared.

Outreach and recruitment. In addition to word-of-mouth outreach, each case study school relies on a variety of recruitment strategies to broaden awareness of the Diploma Programme. Strategies include mailing of information and application materials to prospective applicants, daytime and evening presentations and open houses where students and parents can learn about the program, and shadowing opportunities for prospective students. Additionally, Hillsborough follows up with targeted mailings and other outreach to promising students from underrepresented groups. At both schools, emphasizing student motivation as key to success allows for recruitment that reaches beyond the highest-achieving students, and a focus on college opportunities during the recruitment process promotes student interest in IB and motivates students to take on the program's demanding workload.

Selection and persistence. Each case study school specifies grade-level academic performance as a minimum threshold for success in the Diploma Programme, and each program selects students through an admission process that considers academic performance information alongside teacher recommendations, essays or interviews, and other information that sheds light on qualities such as student motivation.

However, each program considers and balances this information differently in the process of selecting students, leading to different implications for student retention. Relatively open admission at Lamar enables nearly any interested student to try IB, but the program experiences substantial student attrition, with those students who find they cannot keep up typically returning to their home high schools. In contrast, Hillsborough employs a more selective admission process, but retains a large majority of its initial enrollees.

School-level supports. Students at both case study schools participate in programs at the school level designed to provide the academic and social support that will ensure success in the Diploma Programme. Each school works to ensure a sense of community within the Diploma Programme. For example, the schools develop program buy-in and foster supportive relationships by keeping IB relatively small, requiring that all IB students attempt the full Diploma, and emphasizing the shared values that motivate students and teachers to participate. Each school also carefully monitors student progress, with small program size, close communication among teachers, and use of data allowing for rapid identification of students who are struggling. Additionally, each school offers widespread and readily available supports to help ensure that students are able to keep up with academic content, improve study habits, and manage demanding workloads.

District supports. Many of the programs and features most frequently associated with student success at the case study sites require strong district commitment to the IB approach. District leaders at both sites demonstrate support for the Diploma Programme by allowing for site-based hiring decisions, providing funding, and ensuring that ongoing professional development is available. Furthermore, district leaders' decisions relating to program design have led directly to each program's enclosed structure, deliberately small size, and the fact that students as well as teachers choose to participate.

State supports. Due to the critical mass of IB programs in both Florida and Texas, IB affiliates have formed state-level organizations to coordinate professional development, provide instructional guidance, and advocate for supportive policies at the state level. This advocacy work has led state policymakers to establish financial and academic incentives that encourage participation, including college credit and scholarship opportunities for IB Diploma recipients and financial assistance for schools and teachers whose students are successful on IB exams.

LESSONS

The case study schools, and their respective districts, engage in a series of practices related to student preparation, recruitment, selection, and support that appear to directly affect their high participation and success rates with students from groups underrepresented in Diploma Programmes nationwide. Lessons from these schools inform recommendations that schools, district and state entities, and IB leaders can consider as they work to broaden access and improve outcomes for underrepresented students.

Expand program availability

- Locating Diploma Programmes in diverse school districts, such as those that are host to the case study schools, is a first step towards ensuring access for students who are traditionally underrepresented in IB programs.
- School and district leaders might consider structuring their IB programs as magnets with the explicit intention of increasing accessibility to students across the district or locating programs in schools serving underrepresented students and encouraging these students to enroll.
- In working with schools and districts, IB should be sure to communicate that motivated students entering the program performing at, and even below, grade level have been successful in completing Diploma Programmes and that many such students have earned the full IB Diploma.

Focus on early preparation

- Initiatives aimed at raising overall student achievement by increasing rigor in elementary and middle schools may help prepare larger numbers of underrepresented students for the academic rigor of the Diploma Programme.
- Structuring the Diploma Programme as part of a 4-year course of study, with students entering in 9th grade and receiving 2 years of aligned curriculum and supports prior to formally beginning Diploma Programme coursework at the beginning of 11th grade, provides early preparation that appears to contribute to student success.

Engage in targeted student outreach and recruitment

- Districts and schools seeking to expand the reach of their IB programs should consider engaging in strategic efforts to inform prospective applicants from underrepresented groups of the program's value, explain the qualities that program staff are looking for, and dispel any misconceptions.
- Diploma Programme staff and district leaders should work with teachers and counselors of students in the prospective applicant pool to increase program awareness and encourage high-potential students to participate, perhaps nominating such students to program leaders.
- IB leaders might consider creating recruitment tools and training administrators regarding effective recruitment strategies.

Consider the balance between selectivity and student persistence

- School and district leaders who seek to expand access to underrepresented students while providing sufficient preparation for success should reflect on the tradeoffs related to selectivity and expectations regarding student persistence and attainment of the Diploma.
- In particular, in expanding access, program staff should evaluate their capacity to support incoming students who may struggle with the rigor of the IB curriculum.

Monitor student progress and ensure the availability of academic assistance

- Schools and districts should carefully monitor student progress and develop early warning systems to identify students at risk of getting off track.
- Schools and districts should assess the adequacy of their support systems and consider additional strategies for bolstering student support. Ample student support is especially important for schools with relatively open admission policies.
- IB should support networking among affiliate schools to enable sharing of best practices in the areas of monitoring progress and student supports.

Ensure adequate district support for the Diploma Programme

- District leaders have the capacity to substantially influence school-level IB program quality along several dimensions, including program design, staffing, funding, and teacher professional development. Districts considering adopting the Diploma Programme should be prepared to provide the supports necessary for student success.
- IB leaders are encouraged to promote the sharing of best practices among district leaders.

Encourage state entities to adopt policies that incentivize IB participation and the establishment of additional IB programs

- IB should continue to encourage schools and districts to form or work with existing state or regional organizations to advocate for supportive policies at the state level.
- Likewise, schools and districts should work together to increase awareness of the value of the Diploma Programme among state policymakers.

The International Baccalaureate (IB) Diploma Programme is a rigorous 2-year course of study designed to provide students with thorough preparation for postsecondary education. As program literature explains, earning the IB Diploma "leads to a qualification that is widely recognized by the world's leading universities."¹ With its international curriculum, available in English, French, and Spanish, the Diploma Programme was developed in the late 1960s to meet the needs of internationally mobile students. In recent years, the program has expanded substantially in public schools in the United States—642 high schools offered Diploma Programme courses in 2007-08, representing an increase of more than 50% over the previous 5 years.² The Diploma Programme offers a complete instructional system, with curriculum, aligned assessments, and opportunities for professional development. Perhaps because of its reputation for rigorous assessment, together with the fact that the program is designed for highly motivated students, the Diploma Programme in the United States is sometimes viewed as a program for elite students. Moreover, IB has observed that, "in the United States, there exists a significant gap in participation and performance of low-income and minority students in the Diploma Programme."³

To decrease this "diploma gap," IB leaders have made expanding access to the Diploma Programme central to the organization's strategic plan. IB seeks "to broaden access purposefully where we can have the most impact, particularly with disadvantaged students."⁴ To this end, IB commissioned an analysis of Diploma Programme participation and performance data at schools across the United States in order to better understand causes of the diploma gap and begin to identify strategies that may yield higher participation rates and greater success among students who have so far been underrepresented in the Diploma Programme. The analysis, based on IB data on 2007 exam participation, revealed that there were 430 U.S. high schools with at least one Diploma candidate, defined as a student who attempted the full slate of exams for the Diploma Programme. Forty of these schools had at least 20 Diploma candidates who are members of groups that IB identified as underrepresented in the Diploma Programme nationwide: low-income students—measured by eligibility for free or reduced-price lunch (FRPL) through the National School Lunch Program—and/or students who self-identify as African American, Hispanic, or Native American. Of those 40 schools with at least 20 underrepresented Diploma candidates in 2007, 15 had Diploma pass rates at or above 60% for their underrepresented students.⁵

To learn from those schools that have been unusually successful in both recruiting students from underrepresented groups and ensuring their success in the Diploma Programme, IB identified 2 of these 15 schools for further study: Lamar Academy in McAllen, Texas, and Hillsborough High School in

¹ International Baccalaureate Organization website. *IB Diploma Programme at a Glance*. Retrieved February 2, 2009, from http://www.ibo.org/diploma/.

² International Baccalaureate Organization website. *IB Fast Facts*. Retrieved February 2, 2009, from http://www.ibo.org/facts/fastfacts/index.cfm.

³ International Baccalaureate Organization. (2008). *Request for Proposals: Case Study of Student Performance in IB Schools*.

⁴ International Baccalaureate Organization. (2007). *21 Things You Should Know About the IB* (p. 6). Retrieved February 2, 2009, from http://www.ibo.org/facts/21things/index.cfm.

⁵ The analysis described in this paragraph was conducted by McKinsey & Company in 2008 based on 2007 data. SRI researchers accessed the information through internal documents provided by IB. In this analysis, Diploma candidates were differentiated from certificate candidates, defined as students that sit for one or more exams but do not attempt the full slate of exams necessary to receive the IB Diploma.

Tampa, Florida. In 2007, Lamar Academy had 29 students attempt the IB Diploma, at least 20 of whom are from groups underrepresented in IB Diploma Programmes nationwide (19 Hispanic students and one African American student)⁶; 19 of these 20 Hispanic and African American students, or 95%, earned the IB Diploma. Hillsborough High School had 135 students attempt the IB Diploma in 2007, 40 of whom were from underrepresented groups; 27 of these 40 students, or 68%, earned the IB Diploma.⁷

To explore the factors that contribute to these schools' relative success in attracting and retaining underrepresented students, SRI researchers conducted 2-day visits to each site in early December 2008. At each site, we interviewed Diploma Programme teachers, school administrators, selected district administrators with operational knowledge of the Diploma Programme, and administrators at a Middle Years Programme (MYP) middle school in each district. We also led focus groups with students and parents from the Diploma Programme, from each school's 9th- and 10th-grade program, and from an MYP middle school in each district, with the MYP focus groups consisting of 8th grade students and parents. We requested that IB program coordinators select focus group participants representative of each school's student and parent population. Likewise, teachers interviewed were selected to represent a range of content areas, grade levels, and years of experience at the schools.

We conducted the interviews using semistructured protocols tailored towards each type of respondent, recording and then transcribing responses to ensure accuracy. We then coded the transcribed interview notes across broad categories (e.g., student recruitment and selection, persistence in the Diploma Programme, supports contributing to student success), analyzing for similarities and differences within and across the two schools. To provide student demographic, enrollment, and performance information, we accessed publicly available demographic data for each district and requested additional data on student selection, participation, and performance from school and district administrators associated with each school's program and from IB.

In this report, we present background information on the IB Diploma Programmes at Lamar Academy and Hillsborough High School, including enrollment and exam pass rate data as well as details on the founding and structure of each program. Next, we discuss program availability and the early preparation, recruitment, selection, and enrollment patterns of students in the IB Diploma Programmes at each school and present data on persistence and achievement. We then explore the student supports at each school that appear to facilitate successful outcomes once students have entered the Diploma Programme, and we examine district and state policies and practices that support the Diploma Programme in these schools. Finally, we discuss the implications of findings from these two schools in the context of IB's stated goals to expand access to the Diploma Programme and increase success among underrepresented students.

⁶ We were unable to provide the exact number of underrepresented students from Lamar who attempted or received the IB Diploma due to the lack of an available cross-tabulation of student race/ethnicity and poverty data.

⁷ In each case study school and corresponding district, the Native American population is extremely small. Publicly available district demographic data indicate that students self-identifying as Native American comprise less than one-tenth of one percent of students in McAllen Independent School District and less than one-quarter of one percent of students in the School District of Hillsborough County, and internal IB data on student exam participation indicate that over the last three exam cycles (2006 to 2008), there has been only one Native American Diploma candidate out of the two schools' combined student populations. As a result, further discussions of underrepresented students in the Hillsborough and Lamar Diploma Programmes focus on students who are African American or Hispanic and students who qualify for free or reduced-price lunch, as the schools have a critical mass of students in each of these groups. Additionally, due to the schools' and districts' small numbers of Native American students are aggregated with data on students identified as multiracial or "other" and students not identifying their race or ethnicity, with these data presented in a single "other ethnic background/decline to state" category over the remainder of this report.

CHAPTER 2 THE CASE STUDY SCHOOLS

International Baccalaureate identified Lamar Academy in McAllen, Texas, and Hillsborough High School in Hillsborough County, Florida, as case study schools because of their success with students who are underrepresented among IB Diploma recipients. Both schools had at least 20 Diploma Candidates in 2007 who are from groups that are underrepresented in Diploma Programmes nationwide, and both schools achieved a pass rate of at least 60% with these students. In this chapter, we provide basic descriptive information about the two schools, their host districts, and their IB programs.

LAMAR ACADEMY MCALLEN INDEPENDENT SCHOOL DISTRICT, MCALLEN, TEXAS

McAllen Independent School District (McAllen ISD) is located in the Rio Grande Valley near the southern tip of Texas, just across the river from Mexico. The district serves roughly 25,000 students, most of whom are Hispanic (91%) and more than two-thirds of whom are poor enough to qualify for free or reduced-price lunch (69%). A basic demographic description of the district is presented in Exhibit 1.

Total student population	24,902
African American students	132 (1%)
Hispanic students	22,773 (91%)
White students	1,510 (6%)
Asian students	465 (2%)
Other ethnic background or decline to state	22 (<1%)
FRPL students	17,206 (69%)

Exhibit 1 Snapshot of the McAllen Independent School District, by Demographic Category, 2007-08

Note: Percentages do not add to 100 due to rounding error.

Source: Texas Education Agency 2007-08 District Academic Excellence Indicator System report for McAllen ISD retrieved December 1, 2008 from http://www.tea.state.tx.us/cgi/sas/broker.

The IB Diploma Programme was established at Lamar Academy in 2001 in an effort to provide a more challenging curriculum for students within the district. The district team that led the effort to establish a

Diploma Programme in McAllen saw a local niche for the thorough and rigorous preparation that would be provided to students, especially since no other school in the Rio Grande Valley had (or currently has) a Diploma Programme in place.

This effort was motivated in part by efforts to appeal to families from outside the district who might be interested in relocating to the area for business purposes. The global curriculum of the program was considered a potential selling point, with one McAllen ISD administrator explaining that local economic expansion has attracted "managers that come from all over," and the program's rigor was considered especially appealing. One Lamar teacher explained:

The business community was pushing for us, for the district, to be able to provide a rigorous high-quality educational program for students, especially for those people that were looking to move into this community for their business purposes. They wanted to make sure there was a program suitable for those new students that would be coming in. That would be the focus. So the Chamber of Commerce was very much behind us starting this program.

District administrators were also compelled to establish the Diploma Programme in part to retain talented students who were considering charter and magnet school options in surrounding districts. One administrator noted, "A lot of our students were looking for other opportunities outside of the district, so this was a way to retain students and also to provide them with rigor and challenging [coursework]." Accordingly, the district decided to move ahead with establishing a Diploma Programme, and a group of administrators and other stakeholders, including a number of teachers who would go on to teach in the IB program at Lamar, visited a high school in Austin to observe the Diploma Programme in action and consider best practices

McAllen ISD set up its Diploma Programme as a districtwide magnet program at Lamar Academy, where it is co-located alongside a district continuation school known as Options. Students attending the IB program remain enrolled at one of three traditional high schools within the district, taking the majority of their classes at Lamar but returning to their home high schools for certain electives and extracurricular activities.⁸ Students attending IB at Lamar must attempt the full Diploma, with those who do not wish to sit for the full slate of exams required to return to their home high schools. IB at Lamar was available exclusively to Diploma Programme students in the 11th and 12th grades through 2005-06; in 2006-07, McAllen ISD expanded IB at Lamar to include a 9th- and 10th-grade Middle Years Programme (MYP), with the first cohort of students to enter in 9th grade having progressed to their first year of the Diploma Programme at the time of our study (fall 2008).

Based on their experience with the Diploma Programme, McAllen ISD leaders have embraced the IB model as a key approach to increasing curricular rigor and student achievement at all grade levels. The district has expanded its IB offerings to include Primary Years Programmes (PYPs) for all students at 8 of its 21 elementary schools and now offers MYP for all students at 3 of its 6 middle schools. Lamar Academy remains the only school to host IB at the high school level; however, since the program was expanded to include MYP in 9th and 10th grade, the size of each entering cohort of students has increased substantially.⁹ According to one district administrator, "IB is a way of life here. We're constantly talking about it [at the district level]. We truly believe that's the way to promote a child's learning."

⁸ Note that publicly available data for Lamar Academy thus includes only those students enrolled in the Options program.

⁹ The MYP model spans grades 6 through 10. Most students in McAllen ISD who participate in MYP in middle school (grades 6 through 8) go on to one of the district's three traditional high schools, which do not offer 9th-and 10th-grade MYP. Administrators reported that there are no current plans to expand IB to the district's other high schools.

Admission to IB at Lamar is relatively open, and motivated students are encouraged to attempt the program and return to their home high schools if they feel it is not an appropriate fit. As a result, there is substantial student attrition (discussed in detail in Chapter 3). While the composition of the student population attempting the Diploma does not reflect the district as a whole, those students who persist in the program and sit for the exams are extremely successful, regardless of race/ethnicity or financial background. Exam participation and performance data are presented in Exhibit 2.¹⁰

Exhibit 2 Diploma Programme Candidate Performance for Lamar Academy, by Demographic Category, 2005-06 through 2007-08

		Total	African American	Hispanic	White	Asian	Other/ Decline to State	FRPL	Total Underrep- resented
2006 Diploma	Attempted Diploma	28	0	18	8	1	1	9	Not available
Diploma Candidates	Received Diploma	28 (100%)	0 (n/a)	18 (100%)	8 (100%)	1 (100%)	1 (100%)	9 (100%)	Not available
2007 Diploma	Attempted Diploma	29	1	19	3	6	0	11	Not available
Diploma Candidates	Received Diploma	27 (93%)	1 (100%)	18 (95%)	2 (67%)	6 (100%)	0 (n/a)	11 (100%)	Not available
2008 Diploma	Attempted Diploma	24	0	15	5	4	0	8	Not available
Diploma Candidates	Received Diploma	23 (96%)	0 (n/a)	14 (93%)	5 (100%)	4 (100%)	0 (n/a)	8 (100%)	Not available

Source: Information on student enrollment and ethnicity is from IB internal data on 2006, 2007, and 2008 exam participation and performance. Information on FRPL is from Lamar Academy internal data on exam participation and performance.

Lamar Academy students, teachers, administrators, and parents report that college is a universal plan for Diploma Programme students. This is corroborated by internal data kept by Lamar Academy on the college enrollment of IB Diploma recipients (see Exhibit 3).

¹⁰ Note: There are slight discrepancies between the data provided by IB and the data provided by Lamar Academy describing the number of students who attempted the IB Diploma at Lamar in each of the years referenced in Exhibit 2. For the remainder of the report, data in each individual table describing Lamar Academy IB exam participation and performance will be consistent with the data provided by the entity named in the source information below that table, but the larger inconsistencies remain.

Exhibit 3
College Enrollment by Lamar Academy IB Diploma Recipients, 2006 through 2008

	Total IB Diploma Recipients	Total College Enrollment	Enrollment in 4-year Colleges Out of State	Enrollment in 4-year Colleges In State
2006	28	28	4	24
2007	28	28	8	20
2008	23	23	9	14

Source: Lamar Academy internal enrollment data and internal records on college enrollment by Diploma recipients.

Furthermore, current Diploma Programme students report feeling highly prepared for postsecondary education. This sense of preparedness is reinforced by reports from alumni who return to Lamar to discuss their college experiences during academic breaks. One current Diploma Programme student reported that "I think something we hear from all the former graduates is that they're prepared for college—even the ones that go to MIT still say that they're more prepared than anyone else." Likewise, a teacher addressed some specific areas in which Diploma Programme students are especially prepared:

We still have [students from the first graduating class] who come back, and they talk to the current students...while they were here, they say, they worked so hard. Now, they go off to college—"1500 words? Piece of cake." And their roommates are freaking out, and to them it's no big deal. They're ready.

HILLSBOROUGH HIGH SCHOOL SCHOOL DISTRICT OF HILLSBOROUGH COUNTY, TAMPA, FLORIDA

The School District of Hillsborough County (SDHC) serves all of Hillsborough County, a roughly 1,000 square mile area surrounding Tampa, Florida. The district enrolls nearly 200,000 students—according to district administrators, its 2007-08 enrollment established it as the eighth-largest district in the United States. No single racial or ethnic group makes up a majority of the district population: 42% of students are White, 28% are Hispanic, and 21% are African American as of the 2007-08 academic year. Nearly half of the students in the county (49%) come from families that are poor enough to qualify for free or reduced-price lunch.¹¹ A basic demographic description of the district is presented in Exhibit 4.

¹¹ Information retrieved from internal 2007-08 SDHC demographic data provided by district staff to SRI researchers.

Exhibit 4 Snapshot of the School District of Hillsborough County, by Demographic Category, 2007-08

Total student population	189,329
African American students	41,467 (21%)
Hispanic students	52,074 (28%)
White students	79,130 (42%)
Asian students	5,709 (3%)
Other ethnic background or decline to state	10,949 (6%)
FRPL students	93,617 (49%)

Source: SDHC internal demographic data.

The IB Diploma Programme was established at Hillsborough High School (HHS) in 1990 as one of series of district magnet programs implemented in order to comply with a court order for desegregation across the district while simultaneously creating programs that would be conducive to strong student academic preparation. One district administrator who played a leadership role in setting up the district's magnet programs explained:

People came in and said, "We can't have empty schools in the inner city. Figure out what we can do there." And we did. We kind of had a blank slate. And so I decided, we're going to create these wonderful programs, and—where [such programs] might be making a difference just for desegregation in other districts, I think it's an identity here. We put the programs in and made it very clear that these were quality programs.

Because the Diploma Programme established at HHS was the first IB program of any kind in the district, district leaders sought guidance from administrators at a Diploma Programme high school in neighboring St. Petersburg. Upon the advice of St. Petersburg administrators, SDHC officials set up IB at HHS as a 4-year program to provide students from across the district with adequate preparation for the Diploma Programme. Thus, the district admitted only 9th-grade students to a specially designed "pre-IB" program in the first year (MYP did not yet exist) and then expanded the program from there, adding an additional grade level each year for the next 3 years as well as admitting new 9th-grade students.

The IB program at HHS shares a facility with students attending a traditional comprehensive high school program. IB students make up approximately one quarter of the school's total enrollment. IB students have their own set of dedicated teachers and classrooms for core academic courses, and they share staff and facilities with other HHS students for electives and extracurricular activities.¹² Students attending

¹² Note that publicly available data for HHS includes both IB students and students enrolled in the "traditional" high school program.

Hillsborough's Diploma Programme are required to attempt the full IB Diploma, with those who do not wish to sit for the full slate of exams obliged to return to their home high schools.

IB enrollment at HHS has remained relatively consistent in the years since the Diploma Programme was established. The district initially admitted approximately 125 students per entering class and has since increased that number to 145. Since the establishment of the Diploma Programme at HHS, the district has expanded the Diploma Programme to two additional high schools (one in the mid-1990s and another in 2006), with a third expansion program slated to open in fall 2009. As a result, IB enrollment has increased substantially across the district, with HHS enrollment now restricted to students in a geographic "attendance area" made up of a subset of the district's schools located in relatively close proximity to HHS. The district has also introduced PYP in two elementary schools and MYP in one middle school; these are also magnet programs, but, unlike the IB high schools, admission is determined by lottery rather than through a competitive application process.

While the district clearly recognizes the value of IB, IB was introduced in SDHC alongside a suite of other magnet programs, and district leaders remain committed to providing students with the option to choose from among a series of rigorous high school courses of study. When asked whether the district would be interested in expanding IB across all of its schools, one SDHC administrator responded:

No, we wouldn't do that. Because if you're committed to the choice concept, then...everybody doesn't have exactly the same kind of programs. You have choice, and you choose the schools that you want, that have programs that correlate with what you want. And if [the district] were to put an IB program everywhere, then you take that [away].

Admission to the HHS IB program is achieved through a competitive process. All 8th-grade students performing at or above grade level are considered eligible to participate in the district's IB programs, but only approximately half of applicants have been admitted in most recent years. Interested students from across the district submit grades, test scores, and additional application materials to be considered for admission to the IB high school in their attendance area. District administrators determine a composite score for each student and admit the students with the top 145 composite scores in each attendance area.¹³ Once students are admitted, there is relatively little attrition, with program staff working towards a stated goal of preparing all admitted students for success in the Diploma Programme.¹⁴ HHS IB Diploma Candidates have traditionally been quite successful—the percentage of candidates who have received the IB Diploma in recent years has ranged from the low 70s to the high 80s. While students from traditionally underrepresented groups do not attempt the IB Diploma at HHS in proportion to districtwide enrollment numbers, underrepresented students at HHS still attempt and achieve the Diploma with far greater success than their counterparts in most schools across the nation. Exam participation and performance data are presented in Exhibit 5.¹⁵

¹³ Students who participate in MYP have a small additional number of points added to their composite scores, but administrators report that these added points rarely put a student over the necessary threshold for admission. See Chapter 3 for a more detailed discussion of the admission process at HHS.

¹⁴ In addition to completing all exams required by the IB Diploma Programme, all HHS IB students take a full slate of AP exams. District and school administrators explain that the first priority of IB teachers is to prepare students for success in the Diploma Programme, but that AP exams provide students with additional opportunities to earn college credit.

¹⁵ There are slight discrepancies between the data provided by IB and the data provided by Hillsborough High School describing the number of students who attempted the IB Diploma at HHS in each of the years referenced in Exhibit 5. Elsewhere in the report, there are also slight discrepancies between SDHC and HHS enrollment data at various points for the HHS Class of 2008. For the remainder of the report, data in each individual table describing HHS IB exam participation and performance will be consistent with the data provided by the entity named in the source information below that table, but the larger inconsistencies remain.

Exhibit 5
Diploma Programme Candidate Performance for Hillsborough High School,
by Demographic Category, 2005-06 through 2007-08

		Total	African American	Hispanic	White	Asian	Other/ Decline to State	FRPL	Total Underrep- resented
2006 Diploma	Attempted Diploma	128	17	15	62	26	8	13	40
Diploma Candidates	Received Diploma	108 (84%)	10 (59%)	15 (100%)	53 (85%)	23 (88%)	7 (88%)	10 (77%)	31 (77%)
2007 Dialama	Attempted Diploma	135	11	20	85	18	1	15	40
Diploma Candidates	Received Diploma	115 (85%)	6 (55%)	15 (75%)	77 (91%)	16 (89%)	1 (100%)	10 (67%)	27 (68%)
2008 Dialama	Attempted Diploma	124	6	17	65	30	6	12	31
Diploma Candidates I	Received Diploma	89 (72%)	3 (50%)	13 (76%)	52 (80%)	19 (63%)	2 (33%)	10 (83%)	22 (71%)

Source: IB internal data on 2006, 2007, and 2008 exam participation.

The Diploma Programme at HHS is also highly successful in preparing students for postsecondary opportunities. Internal data kept by HHS demonstrate universal college enrollment by Diploma Programme alumni following high school graduation (see Exhibit 6).

	Total 12th Grade Enrollment	Total College Enrollment	Enrollment in 4-year Colleges Out of State	Enrollment in 4-year Colleges In State	Enrollment in 2-year Colleges In State
2006	126	126	40	86	0
2007	133	133	33	100	0
2008	122	122	40	81	1

Exhibit 6 College Enrollment by Hillsborough High School IB Diploma Programme Alumni, 2006 through 2008

Source: HHS internal enrollment data and internal records on college enrollment by Diploma Programme alumni.

Additionally, as with Lamar, students at Hillsborough High School report feeling that IB prepares them very well for postsecondary education. Administrators report that many colleges and universities are "rolling out the red carpet" for Diploma Programme graduates, offering waived tuition and fees, articulation agreements, and a series of other perks. One student observed:

Former students come back and say that they're prepared for college. Sometimes they can go straight into their sophomore year. They feel more prepared with writing...and on citing your sources and all of that. Kids have to go take a course [in college] on how to write essays, and [HHS alums] are like, "We learned this all in 9th grade."

We now turn to a more in-depth discussion of the strategies that each school uses to recruit, select, and retain students.

PREPARATION, RECRUITMENT, SELECTION, AND RETENTION

A previous analysis of Diploma Programme participation and performance data identified several points along the pipeline of program availability, early student preparation, recruitment, selection, enrollment, persistence, and successful completion of the Diploma where underrepresented students are "filtered out."¹⁶ While the IB Diploma Programme is relatively limited as an option for all U.S. high school students—fewer than 7% of U.S. students attend an IB school—nearly as many underrepresented students attend high schools that offer the Diploma Programme as do students that are more typically represented. However, far fewer of these underrepresented students meet grade-level performance criteria, an indicator of readiness for the Diploma Programme.¹⁷ This reflects the persistent nationwide achievement gap between low-income, African American, Hispanic, or Native American students and White or Asian students who are more affluent. Students who meet grade-level performance criteria appear to participate in the Diploma Programme at approximately the same rates, regardless of race, ethnicity, or poverty, but students from underrepresented groups who attempt the IB Diploma are successful far less frequently (42%) than students who are more affluent and White or Asian (72%).

In this chapter, we examine the case study schools' practices at each point along this pipeline, exploring the steps that each school's program has taken to broaden program access more generally, to attract students from groups that are underrepresented in U.S. IB programs, and to ensure the success of participating students. We consider practices related to program availability and student preparation, which may increase the number of students who are eligible and prepared for the Diploma Programme; outreach and recruitment strategies, which may increase the number of students interested in participating; and tradeoffs related to student selection and persistence.

PROGRAM AVAILABILITY AND STUDENT PREPARATION

Access to the Diploma Programme begins with program availability, either at a student's home high school or through a district choice program. The next step is adequate preparation, typically reflected by mastery of grade-level content and skills.

Offering IB in demographically diverse districts is a first step towards increasing access for underrepresented students. Magnet programs may also allow for greater reach.

The fact that both McAllen ISD and SDHC serve large numbers of students who are underrepresented in Diploma Programmes across the United States allows these districts to reach a broader cross-section of students than may be possible elsewhere, particularly in districts that serve a more affluent and less diverse student population.

Moreover, Lamar Academy is the only high school offering the IB Diploma Programme in McAllen ISD, and Hillsborough High School is one of three high schools currently offering the Diploma Programme to students in Hillsborough County. Because the Diploma Programme is structured as a magnet program in each of these districts, it is available as an option to far more students than would have the opportunity to

¹⁶ The analysis described in this paragraph was conducted by McKinsey & Company in 2008 based on 2007 data. SRI researchers accessed the information through internal documents provided by IB.

¹⁷ IB does not set minimum performance criteria for entrance into the Diploma Programme. Performance at or above grade level is the standard used in the McKinsey analysis of IB participation and performance.

participate if enrollment were restricted to students residing in specific neighborhoods whose local high schools offered the program.

Of course, opening the Diploma Programme to a whole district does not by itself ensure that a broad cross-section of the district's population will enroll or persist in the Diploma Programme. However, the structuring of the Diploma Programme as a districtwide magnet can support increased access when combined with early preparation and aggressive recruitment practices.

Early academic preparation, including exposure to IB in elementary and middle school grades, may increase the number of students who are prepared for IB high school programs.

Both McAllen ISD and SDHC began their affiliations with IB by offering the Diploma Programme. Once each program had achieved high pass rates with its first few cohorts of students, administrators in McAllen and in Hillsborough County sought to expand the number of students participating in the Diploma Programme. Each district has taken steps to increase the number of students who are prepared for the demands of their respective Diploma Programmes, including the establishment of the IB Middle Years Programme (MYP) and Primary Years Programme (PYP) in both districts as well as the expansion of access to advanced coursework, such as Algebra I, within all SDHC middle schools.

McAllen ISD is in the midst of a districtwide effort to improve student performance and expand access to and interest in the Diploma Programme through broad adoption of MYP and PYP. Eight of McAllen ISD's 21 elementary schools have introduced PYP and 3 of its 6 middle schools have introduced MYP, with the schools in various phases of the IB authorization process. McAllen ISD staff members explicitly cite the success of the Diploma Programme with a small subset of the district's students, combined with the challenges associated with expanding access, as their impetus to introduce MYP and PYP. One teacher, in describing the challenge of instructing students who enter the Diploma Programme with varying skill levels, explained how the establishment of MYP and PYP in district schools was intended to help prepare more students:

[The] educational experience [of incoming students] is quite diverse. So we basically tried to remedy that and make sure that [all of] our students would be adequately prepared to meet the challenges of the Diploma Programme, and in starting the Middle Years Programme and the Primary Years Programme, this was very much on our minds.

Teachers and administrators emphasized the value of specific methods of instruction and other features of MYP and PYP that develop students' study skills and motivation in addition to specific content knowledge. For example, one administrator explained:

We saw how successful our Diploma Programme was, and we wanted the foundations to extend. If we start in the early years and build that program, the Primary Years Programme, [we can] promote students to become hard workers, and also to develop a learner profile, which is an element that is interwoven through all three programs. [We were] also looking at developing a second language, which again is an element of all three programs. We saw it as a win-win situation—that not only would [the students who were already predisposed to enter] our Diploma Programme benefit from it, but it would allow more access. We've increased the number of students that are entering [Lamar]...and we're anticipating that again next year.

Many MYP parents and students concurred, expressing satisfaction at the differences in student assignments, skill development, and resulting preparation for rigorous high school coursework since enrollment in MYP. One parent of a McAllen ISD MYP student explained, "I've noticed more going on in the classes…there seem to be more teachers really promoting awareness, higher-order learning."

SDHC has a smaller MYP and PYP presence—particularly relative to the size of the district—with one MYP middle school and two PYP elementary schools. These are magnet programs, but the selection process occurs via lottery, limiting the entrance criteria to interest rather than performance level and

thereby facilitating Diploma Programme preparation for a broader range of students. In explaining the value of MYP in increasing access, one district administrator commented, "I think that the random selection process helps boost up students who would not otherwise [enroll in the Diploma Programme]."

As with the programs in McAllen, district officials at SDHC explain that MYP and PYP were put into place in Hillsborough County in order to build skill sets that would support students interested in entering one of SDHC's Diploma Programme high schools and prepare students for high-level instruction at their home high school or one of the district's other magnet programs. A Hillsborough High School teacher who participated in the district's selection process for magnet high school programs described the level of preparation that was evident in students applying from Williams Middle School (SDHC's MYP magnet), focusing specifically on writing skills:

In the past I graded writing samples for those kids applying to the different magnet programs...I could tell the Williams students, because they were always a cut above everybody else, through the writing samples...I could tell they had gotten the skills necessary to write creatively and to express themselves.

Other HHS teachers, as well as many students and parents, discussed the impact that MYP has had on student preparation upon entering HHS. One teacher observed:

I see the Williams students in 10th grade...they're the ones for whom it seems like it's easier now, because Williams was able to prepare them with the work level and the advanced curriculum and all that. And I think it was an easier transition for them, whereas other students, from their neighborhood schools, they weren't challenged as much at their middle schools...I have a freshman homeroom this year, and I can see it with some of the students, with the stress I see in them—they're not as prepared as some of the kids from Williams.

While expansion of MYP and PYP appears central to McAllen ISD's efforts to increase rigor and academic preparation for all of its students, expansion of these programs at SDHC is cited as one of many strategies designed to provide a broader spectrum of students with the content and supports that will prepare them for advanced instruction at the high school level, including eligibility for entrance into the Diploma Programme. For example, SDHC has recently worked to increase student preparation for rigorous high school coursework by dramatically increasing the number of students who receive instruction in Algebra I by the end of 8th grade. Over the 3 most recent academic years (2006-07 to 2008-09), 8th-grade enrollment in Algebra I at SDHC has increased from 5,196 to 8,659, or from approximately 37% to approximately 62% of the total SDHC 8th-grade class.¹⁸ When asked about strategies to increase Diploma Programme enrollment among underrepresented groups, one SDHC administrator discussed MYP and then specifically cited the expansion of Algebra I:

Districtwide...we've taken the approach that more and more people should have access to advanced classes, and if you take a look at the number of students taking Algebra I in 8th grade now...you'll see what strides the district has made in that direction. So I just think that overall in our district, we have a philosophy that better prepares students for IB.

STUDENT OUTREACH AND RECRUITMENT

In addition to program availability and student preparation, access to the Diploma Programme requires awareness and interest on the part of students. Program-led outreach and recruitment efforts seek to achieve these ends by explaining the Diploma Programme's value.

¹⁸ Enrollment numbers are from SDHC internal districtwide enrollment data. The overall percent of students having completed Algebra I by the end of 8th grade is slightly higher, as SDHC districtwide enrollment data also indicate that 1 to 2% of students enroll in Algebra I in 7th grade.

Combining word-of-mouth outreach with a variety of more explicit recruitment strategies broadens awareness of the Diploma Programme.

In general, Lamar administrators, teachers, students, and parents report that they sense a fairly accurate perception of the realities and the value of the IB Diploma Programme among the greater McAllen population and the potential applicant pool, particularly as the Diploma Programme continues to produce successful graduates who receive attention in the community. This awareness of the program enables a substantial amount of student recruitment to occur via word-of-mouth and other informal processes. One Lamar staff member reported, "At one point...we really had to go out and present, but we've gotten to the point where our reputation [precedes] us..." Another reflected, "I think our strongest advocates for the way we gain [new students] have been by word of mouth."

Additionally, Lamar administrators engage in a series of explicit outreach activities prior to the application process. Each year, Lamar staff members mail informational materials and applications to 8th-grade students from across the district who have been identified by middle school teachers and counselors as potentially good fits for the program. According to one Lamar administrator, approximately 700 8th graders received these materials in the most recent application cycle. Shortly before applications are due each January, staff make presentations at each of the district's six middle schools for any students who are interested in the program. Administrators emphasize that these schoolwide presentations are intended to be made available to at least all students who wish to attend, and several middle schools require attendance by all of their 8th graders. According to an administrator at one MYP middle school in McAllen ISD, "We have somebody from Lamar come over and talk to all of them as a whole—all of 8th grade—because we don't want to target anyone. We want everyone to have that chance to go." Lamar also hosts multiple open house events on evenings and weekends where interested students and parents can visit Lamar and hear from current students and teachers about the particulars of the program. Inclusion of students is an important element of the recruitment process at Lamar, as staff members cite the student role in answering questions about the program to be critical in setting appropriate expectations. One administrator explained:

We like to have kids that are maybe just a year or two older than [the 8th-grade prospective applicants] talk to them, because I think those are the ones that they'll be more comfortable asking. They'll recognize that kid, and they'll go "I know that kid, he's in sports with me and he does this and this, and how's he handling all this?" They'll ask those types of questions of the kids.

Once students are admitted, they are invited to visit Lamar to shadow current students for day. As with other recruitment efforts, the visit is intended to give prospective students a realistic sense of what it will be like to attend Lamar and a chance to spend more time with current students.

Lamar representatives also make themselves available upon request to present information on the Diploma Programme and answer questions in smaller settings within and outside the district's middle schools. For example, administrators reported having recently made presentations at private schools and in individual middle school classrooms—frequently those where teachers want to ensure that high-achieving or highly motivated students are exposed to the Diploma Programme—as well as presentations to realtors, the local Chamber of Commerce, and other parties with a stake in promoting the value of Lamar's offerings for families that might be interested in moving to the district.

With such a large overall student population at SDHC, and with so many additional choices beyond the Diploma Programme available to high school students seeking a rigorous academic program, word-of-mouth recruitment at Hillsborough does not appear to receive the same emphasis that it does at Lamar. However, it is still an important recruitment strategy. Those affiliated with the Diploma Programme at Hillsborough High School tend to report that it is well respected by those who are aware of it throughout the community and that perceptions are reasonably accurate, but that community awareness is not necessarily widespread. When discussing perceptions held by people outside of the program, one student

commented that "most who have heard of [the Diploma Programme] have a pretty good idea what it's about, but there are some people who've never heard of it before." Similarly, an administrator observed that "certainly, [there are] people geared towards IB, they know about it, and they come and find you at the beginning of the school year and they're kind of chomping at the bit to get out there," but went on to state that overall community awareness of the program is a work in progress. Indeed, while many students at Lamar mentioned that they had heard about the Diploma Programme and were driven to apply due to its reputation in the community, those students at Hillsborough who reported learning about the program outside of more formal recruitment mechanisms tended to explain that they had a more direct link to the program, such as a sibling, friend, or neighbor who had participated.

Accordingly, many explicit outreach efforts are employed to recruit students to the Diploma Programme at Hillsborough High School. Because of the range of high school options available for SDHC students, student recruitment for the Diploma Programmes at all three SDHC high schools is handled partially through each individual school and partially through the central district office that coordinates all magnet and choice programs. The district presents information about all of its high school magnet programs directly to students and parents through mailers and through a series of districtwide magnet events where students and parents can speak with representatives from each program. More specific information about the Diploma Programme at Hillsborough High School is presented by HHS IB administrators at student assemblies at each of the feeder middle schools in the HHS attendance area and at the district's MYP middle school. Some middle schools require all students to attend these assemblies, while other middle schools restrict attendance to students who will have completed Algebra I by the end of 8th grade (an entrance requirement for IB in SDHC). HHS also holds an evening open house where students and parents can visit the school, meet teachers, and take smaller, more personalized tours. There is also a shadowing program available for students prior to the application process, which many HHS IB affiliates credit with helping students find the right fit. One teacher reflected:

We have a really good system for getting those kids to come over and spend the day...it's an excused absence, it's school business, I guess, and they come and they go to all of the classes and they get a tour of the school and they get to go to lunch...it's a chance to see the teachers, to see the school, to kind of figure out what it's all about.

District administrators also send out additional program information to encourage applicants from specific underrepresented groups. One SDHC administrator reiterated the district's commitment to diversity in its magnet programs, stating that "in the context of all the magnet schools that are in place in our county, diversity is the reason—it started with that as a key goal," in the process of discussing targeted IB outreach for minority students:

Well, it's who you recruit. We have special letters that go out to every minority kid, to make them aware of IB...You might do everybody in 8th grade, and then you do followup, and this is a targeted population, and then we do outreach to different groups that would be able to identify minority kids who would be eligible and who would be successful in the program. We might have church groups. We'll have people in the choice office go and talk particularly about those programs...We used to have people within the district who would target kids in their churches who they thought would be successful, and they'd encourage their parents to come to the meetings and to help them get in.

In addition, school administrators at HHS follow up with further outreach to academically eligible students from underrepresented groups. One HHS administrator explained that certain school staff have access to student-level data for 8th graders in the HHS attendance area and will comb through the data in order to actively identify and recruit promising students—particularly those whose families may not be aware of the Diploma Programme—by explaining the program's value:

I'm certainly looking at potential candidates, and I can see, you know, you have kids whose test scores look the same as the kid who's in an affluent situation, [who are] in a

free or reduced lunch situation...and certainly, if I see a child in my research that looks like a very viable candidate, I have no problem contacting them or helping them get the information. You know, if we see free or reduced lunch and we see some of these other characteristics [related to student preparedness] that are off the chart, then that certainly sends a signal to me that we need to hone in on that student.

Emphasizing student motivation as key to success allows for recruitment that reaches beyond the highest-achieving students.

Administrators for both of the case study schools and corresponding districts insist that the Diploma Programme is not for the highest-performing or highest-aptitude students, but rather for those students with the highest levels of motivation and willingness to work hard. Moreover, students at both schools were nearly universal in first mentioning work ethic or dedication when asked what it takes to succeed in the IB program. While grade-level or higher academic performance is typically a requirement for entrance into each school's Diploma Programme, teachers and administrators at both programs—particularly at Lamar—strongly emphasize the importance of student motivation as a prerequisite to success in the Diploma Programme. These themes are reiterated throughout the recruitment and selection processes for each program, including the word-of-mouth elements of program outreach that have become such a central part of each district's overall recruitment strategy.

Students, parents, teachers, and administrators at Lamar are all similarly quick to highlight the significance of the connection between work ethic and success in the IB program; indeed, this comes across as a substantial point of pride among program participants and an important element of the Diploma Programme's reputation in the surrounding community. Staff and students report that some misperceptions do exist, primarily focusing on the idea that IB is "for the smart kids" instead of the hardest workers, but they are quick to correct these misconceptions and reinforce the association between hard work and Diploma Programme success. One teacher explained:

I think what some people think about IB is that we have all the smart kids. And I say, "No, I don't have all the smart kids. There are smart kids everywhere. I have the determined kids." That makes a big difference. "How determined are you? Do you see the importance of this education...How hard are you willing to work?"

Many Diploma Programme students corroborated this association based on their own personal experiences. One student reflected:

It's all about motivation and time management. I mean, we don't have the smartest kids—even though everybody thinks that—"oh, they're all just smart kids"—but it's really anybody, if you work hard enough and manage your time well enough, that can do the program. It's rigorous, but it's doable.

This emphasis on student motivation, when combined with the word-of-mouth elements of student recruitment, appears to introduce a somewhat deliberate element of self-selection into the Diploma Programme applicant pool. While teachers and administrators seem eager to reach out to potential students and explain the value of the program, many appear cognizant of and comfortable with the idea that the Diploma Programme is not for everyone. A Lamar Academy teacher who used to teach at one of the district's traditional high schools illustrated:

I had the siblings of students who were here [at Lamar], and I asked them, "Are you going to go to IB?" And they said, "We don't want to work that hard." They look at it not, "I don't want a good education," but "I'm just not willing to put in the hours that it requires." And I think the kids see it that way too, that it's a lot of work...It is much more demanding, and we do make them think a lot more.

Given this emphasis on student motivation and work ethic, administrators do not report targeting Lamar's recruitment towards specific groups of students. Instead, they emphasize that recruitment is intended to

engage all students interested in the program, regardless of their background. One McAllen ISD administrator explained, "We don't target a specific population, because we want this [program] to be available for all students." Another administrator illustrated the success of this open access model in recruiting some students who are underrepresented not just in IB Diploma Programmes nationally— which is the case for many Diploma Programme students in this high-minority, high-poverty school district—but who might be typically underrepresented in the most rigorous academic programs within the district. This administrator explained, "We have children that—they're not just the CEOs' children. They're children that are first-generation going to college. It's that child that has the potential, has the drive—it's minorities, it's those less fortunate as well as more fortunate."

Hillsborough High School and SDHC administrators also emphasize the importance of hard work and motivation as an element of student success in the Diploma Programme, and this connection seems to be apparent for many students, parents, and community members as they learn about the program. When asked to describe the Diploma Programme, one parent of an MYP student succinctly stated, "I will' is just as important as IQ. You have to have the IQ, but also the 'I will." However, this association between hard work and Diploma Programme success does not seem to be emphasized with the same frequency or focus in Hillsborough's outreach efforts as in Lamar's, and internal and external characterizations of the program accordingly reflect that motivation is a necessary but not sufficient component for admission to and success in the Diploma Programme. One teacher described the Diploma Programme students as follows:

Most [HHS Diploma candidates] are fairly intelligent students. They have to get recommendations from their middle school teachers, they have to write an English essay. They have to show that they have the ability to be here...But the majority of the students come in wanting to do a good job...They work hard. Some of them work really, really hard. They may not be as smart as some, but they come across, you know, with such hard work that they do make it in the program.

As is the case at Lamar, administrators at Hillsborough recognize that IB is not necessarily the right fit for high-aptitude students who are not willing to put in the requisite amount of work, and administrators are comfortable allowing the recruitment process to naturally weed out such students. One teacher observed, "I think it's a choice. There are very, very talented kids that could participate in IB—they have the skills to get the full Diploma and be very successful—but they don't want to. But there are kids that really fit well with it, that want it."

A focus on college opportunities during the recruitment process promotes student interest in the Diploma Programme and motivates students to take on the program's demanding workload.

The Diploma Programmes in each district have strong local reputations for providing thorough college preparation and extensive scholarship opportunities, supplying much of the impetus for student and family interest. Administrators in each district leverage these connections during their outreach processes, using outreach events not only to explain the particulars of IB and to set expectations, but to promote and emphasize the value of the IB Diploma in terms of postsecondary admission and scholarship opportunities. The intention is to motivate students to participate in the Diploma Programme despite its substantial workload.

Many Lamar students reported that they became aware of the link between the Diploma Programme and successful college outcomes when they applied, and that college aspirations played a major role in attracting them to the Diploma Programme. One student stated, "I thought IB would be a good way to get into college, because it's an internationally recognized diploma." Another explained, "College teachers know when they see an IB student because of the way that we write. And I think that helps immensely, because writing is key to expressing your ideas."

While many Lamar students and their families enter the program with highly ambitious postgraduate plans, teachers and administrators continually emphasize that the program is not intended or marketed

exclusively for an "elite" group of students. One teacher who has taught at Lamar since the establishment of the Diploma Programme explained:

I would say that, especially at the beginning, we didn't necessarily attract the "elite" group at all. We had many students who saw this program as an opportunity, simply, to get well prepared for college work and hopefully to be able to get a scholarship to attend college, because otherwise their parents would not be able to afford it. And certainly that has been true, that this program has opened avenues for these students who simply would not have been able to move on to this next avenue in their education because of money.

Another teacher reiterated the program's emphasis on college and the resulting impact on students:

We talk about it all the time. I mean, I talk about it *all* the time. We start talking about college and the importance of it and that you're learning your whole life...it's such a big thing, especially for these kids. Some of them have never left the Valley. It's a different atmosphere here. And for them to at least see some part of the state they've never seen before, or maybe branch out and go to California, go to the East Coast, go somewhere, experience something new...we talk about these things.

Lamar administrators also leverage connections with local institutes of higher education and the local business community to further reinforce the value of the IB Diploma. For example, the University of Texas Pan American (the local University of Texas campus)—which provides free tuition, substantial course credit, and articulation agreements with medical and dental schools for IB Diploma recipients and attracts many Lamar graduates—recently ran a two-page newspaper advertisement prominently featuring Lamar IB graduates as it promoted its programs. One teacher explained, "Pan American wants—we were having a brain drain here in the valley, so they want the good students to stick around…and more recently, [more students] are staying here and going to UTPA because it's free."

As with Lamar, the academic success and college preparation provided through the HHS IB Diploma Programme creates a community reputation that may encourage students to apply and instill in them the willingness to persevere through the hard work associated with the program. One teacher explained:

This program's been around for a while, so it does have a reputation for being successful and moving kids on to college. And you know, as that word sort of trickles back through, you hear stories of kids being prepared for college, and that they learned skills here that made college a positive experience, so I think that all that circulates back in the community as all positive, so as time goes on, people hear about it and decide that they want their kids to be a part of that.

SELECTION AND PERSISTENCE

After student recruitment, the next phase of the process for students to gain access to the Diploma Programme is selection by program staff. Both Lamar and Hillsborough currently use a two-stage admission process to select students for their Diploma Programmes, initially considering applications for enrollment in a Diploma Programme "track" in 9th grade and then automatically admitting those students who successfully complete 10th grade into the full Diploma Programme. Both programs use a series of common elements in their admission processes—each program specifies minimum academic criteria (defined in each case as performance at or above grade level) for 9th-grade selection, and each program considers quantitative academic performance information in conjunction with teacher recommendations, essays or interviews, and other more qualitative information that sheds light on qualities such as student motivation, intellectual curiosity, and work ethic.

However, each program considers and balances this information differently in the process of selecting and retaining students. Lamar is structured to have more open access, but experiences higher student attrition; Hillsborough employs a more selective admission process but retains a large majority of its initial

enrollees. While both schools have leveraged their models to produce unusually successful results for students who attempt the IB Diploma, they also illustrate some of the tradeoffs and considerations that schools and districts face in their efforts to expand access to and performance in the Diploma Programme for underrepresented students.

Relatively open admission to MYP in 9th grade and to the Diploma Programme in 11th grade at Lamar enables nearly any interested student to try IB, with those students who find they cannot keep up typically returning to their home high schools.

Lamar and McAllen ISD personnel state that they are committed to ensuring access to IB for as many interested students as possible. Indeed, offers of admission to the Diploma Programme have traditionally been extended to the large majority of applicants, and this trend has continued with admission to the 9th-grade MYP in each year since it began at Lamar in 2006. One Lamar teacher explained:

[IB] is made available for, really, anyone—the Diploma Programme, Middle Years Programme, Primary Years Programme—for anyone who is willing to work hard. So the parents and the students know the rigor and the coursework that they'll have to go through, and if they're willing to accept that challenge, we open our doors. We are very welcoming, as opposed to being elitist and saying 'no, your GPA or your SAT score, etc., doesn't meet the requirements.' We usually try to be as accommodating as possible, and then allow a huge spectrum of students to come through our programs.

Lamar does use a formal application process, with a combination of qualitative and quantitative criteria, to gauge student readiness for entrance into both MYP and the Diploma Programme, with performance at or very near grade level considered to be the basic threshold for admission. Applicants are considered on the basis of grades, standardized test scores, teacher recommendations, writing and math exams, and a student interview. Race, ethnicity, and poverty level are not explicitly considered, since the program is intended to be similarly accessible to all students through this system of open access (such considerations would be largely irrelevant for the purpose of attracting students in nationally underrepresented groups to the Diploma Programme at Lamar, since nearly all McAllen ISD students are considered underrepresented by IB's measure).

Over the three application cycles since MYP was introduced at Lamar, the program's acceptance rate has held steady in the high 80% range, with 86% of applicants admitted for the Class of 2011 (95 of 110) and 89% of applicants admitted for the Classes of 2010 (66 of 74) and 2012 (107 of 120). For the members of the Class of 2009 who applied to enter MYP at Lamar as sophomores in the initial year of the program, the admission rate was similar, with 87% of applicants (26 of 30) offered admission (see Exhibit 7).

	Students Applying to Enter MYP for 9th Grade	Students Accepted to MYP for 9th Grade	9th Grade MYP Enrollment	Students Applying to Enter MYP for 10th Grade	Students Accepted to MYP for 10th Grade	10th Grade MYP Enrollment
Class of 2009*				30	26	25
Class of 2010	74	66	52			
Class of 2011	110	95	91			
Class of 2012	120	107	105			

Exhibit 7 Lamar Academy MYP Student Selection Process, 2006 through 2008

* Students from the Class of 2009 were sophomores when MYP was first implemented at Lamar. While Lamar typically allows students to enter MYP only as freshmen, administrators made a one-time exception for the Class of 2009 because MYP was not available during their freshman year.

Source: Lamar Academy internal applicant and enrollment data.

Student access to the Diploma Programme has been similarly open. Over the last 5 years, admission rates to the Diploma Programme have typically hovered near or above 90%, with the admission rate dropping below 85% only once (in 2006, when 50 of 67 students were admitted; see Exhibit 8).¹⁹

]	Students Applying to Diploma Programme	Students Accepted to Diploma Programme	11th Grade Diploma Programme Enrollment
Class of 2006	46	45	42
Class of 2007	60	53	42
Class of 2008	67	50	38
Class of 2009	30*	27	25
Class of 2010	65*	60	53

Exhibit 8 Lamar Academy Diploma Programme Student Selection Process, 2004 through 2008

* Diploma Programme applicants for the Classes of 2009 and 2010 include some students who did not participate in MYP. See Exhibit 9 for data on students continuing from MYP each year. Source: Lamar Academy internal applicant and enrollment data.

While Lamar's MYP and Diploma Programme selection processes eliminate a few students from consideration each year, typically due to insufficient academic credentials, teachers and administrators report that the admission process is also heavily relied upon to set expectations about the workload required of incoming students and confirm applicants' desire to participate. Workload is particularly emphasized during the admission process for MYP, which is currently the standard point of entry for the majority of Lamar students who enroll in the Diploma Programme 2 years later. One teacher asserted, "At this point, the application process is—it's not really to weed out anybody, but it's just really to show an interest, so that you know they're really interested in coming." The application process is also relied upon to provide teachers with benchmark information about student performance and the associated necessary supports. Another teacher reflected:

Well, you want something kind of set to—where they do test them, [to make sure] they do have the writing skills especially. It's not where it's, where we're going to be cutting a ton of them, but there's sometimes a child or two that, it's going to be too much of a struggle. And [some of our colleagues have been] very good about saying "Yeah, but this kid has the potential. He has the sound basis to where that child can be, with a little bit more writing, successful." And those children have made it.

This open access model appears to be implemented with a collective understanding that not all students will remain at Lamar, but that there is value in letting as many interested students as possible enroll and attempt initial preparation for the Diploma Programme. One administrator at an MYP middle school in the district explained that this understanding is incorporated into the guidance given to MYP students considering Lamar. This administrator explained, "We always tell them that it's very easy to try, and if it doesn't work for you, you can always go back to your [home] high school, and if you really are unsure and don't know, try it. Don't hold yourself back." A Lamar teacher explained how this model works once students enroll at Lamar, noting that "[we] accept most of the students that do apply, to give them that chance, to give them the opportunity, and then when we're here we try to work with them as much as we

¹⁹ The unusually selective admission process for the Diploma Programme in 2006 may potentially be attributable to a spike in interest from the attention that Lamar was receiving in the McAllen community as it prepared to open MYP that fall.

can," but acknowledging that the rigorous content and high expectations of the program do cause students to return to their home high schools. Another Lamar teacher further clarified, explaining:

We don't try to find the weakest kids and try to weed them out because we're afraid they're going to ruin our record. It's pretty much a self-weeding process. It's not that a kid is sitting there thinking, "Oh my god, I'm going to fail my IB exams." If a kid is at place where the kid is thinking that, they're probably failing the class. There's a strong congruency between the two. Performance in class generally is going to equal performance on the external exams. If a kid is failing the class, they're probably going to say, "I'm going to go back to my home campus."

Students who are receiving failing grades or otherwise struggling receive specific counseling about their options, but the ultimate choice to leave the program is frequently left up to the student. Lamar and the three home high schools have established specific points on the calendar for Lamar students to make this transition as seamlessly as possible, including the end of the first week of classes, the end of the sixth week of classes (first grading period), and the end of each semester and academic year. All students who successfully complete the 9th- and 10th-grade program are automatically admitted to the Diploma Programme in 11th grade.

While attrition necessarily occurred during the Diploma Programme in the cohorts where students did not enroll at Lamar until the beginning of 11th grade, teachers and administrators now expect that the majority of attrition for incoming cohorts of students will occur during MYP, with students who struggle or find that the program is not a good fit typically returning to their home high schools during 9th or 10th grade. For Lamar's Classes of 2006 through 2008-the most recent three cohorts of students who all entered Lamar as 11th graders—the attrition rate prior to the beginning of 12th grade was consistently in the high 20% to low 30% range. For the Class of 2009, 7 of 25 MYP students (28%) left Lamar between the beginning of 10th grade and the beginning of the Diploma Programme in 11th grade, and another 6 students (21% of original cohort) enrolled in the Diploma Programme but left prior to the beginning of 12th grade. Attrition for the Class of 2010 has thus far totaled 25%, with 7 of 52 students (13%) leaving between 9th and 10th grade and an additional 6 students (12% of original cohort) leaving between 10th grade and 11th grade. At the time of this writing, data on these students' attrition following entrance in the Diploma Programme was not yet available; however, teachers and administrators who were interviewed in December of 2008 estimated that the vast majority of this cohort had persisted through the first few months of the Diploma Programme, which is typically the period of highest attrition, and attributed this persistence to their preparation over the course of 2 full years of MYP. For the Class of 2011, 25% of students (23 of 91) left Lamar between the beginning of 9th grade and the beginning of 10th grade (see Exhibit 9).

	9th Grade Enrollment	10th Grade Enrollment	11th Grade Enrollment	12th Grade Enrollment
Class of 2006	Not applicable	Not applicable	42	30
Class of 2007	Not applicable	Not applicable	42	29
Class of 2008	Not applicable	Not applicable	38	27
Class of 2009	Not applicable	25	25 (18 from MYP)	14 (12 from MYP)
Class of 2010	52	45	53 (39 from MYP)	
Class of 2011	91	68		
Class of 2012	105			

Exhibit 9 Lamar Academy IB Program Student Enrollment and Persistence, Classes of 2006 through 2012

Source: Lamar Academy internal applicant and enrollment data.

In addition to the automatic Diploma Programme admission process for students who successfully complete MYP at Lamar, interested students from traditional high schools can apply to enter the Diploma Programme as juniors (without completing 9th and 10th grade in MYP) by completing an application process similar to that used for 9th-grade admission. In the 2 years since Lamar MYP students began enrolling in the Diploma Programme, MYP alumni have comprised a majority of Lamar's entering Diploma Programme class—accounting for 18 of 25 juniors from the Class of 2009 and 39 of 53 juniors from the Class of 2010—but over a quarter of students in each class have come from outside of MYP.

Teachers, administrators, and students reported observing a substantial gap in preparedness between many of the students who entered Lamar directly in 11th grade and their peers who went through MYP. Because MYP is only in its third year of existence at Lamar, the Class of 2009 is the only cohort for which enrollment data are available that show the persistence of MYP versus non-MYP alumni in the Diploma Programme from 11th to 12th grade. Still, even though students from the Class of 2009 only participated in 1 year of MYP at Lamar instead of the full 2-year program, attrition rates from 11th to 12th grade differed substantially between MYP alumni and those who entered the Diploma Programme from outside of Lamar, with 12 of 18 MYP alumni continuing from 11th to 12th grade at Lamar and only 2 of 7 students from outside of MYP continuing with the program.

In the years since MYP was added, more students are enrolling in Lamar's IB program than did when initial enrollment took place only in 11th grade. The two most recent 9th-grade entering classes consisted of 91 students (2007) and 105 students (2008), far exceeding the roughly 40 students that typically entered Lamar each year when enrollment began at the start of the Diploma Programme. According to Lamar staff, more students appear to be willing to try MYP in 9th grade than were willing to transition from their home high school at the beginning of 11th grade. One teacher explained, "A lot of children were afraid to apply when it was just an 11th- and 12th-grade program. Now that there's MYP...it doesn't seem as big of a risk."²⁰ Thus, while attrition rates have remained somewhat consistent across the cohorts

²⁰ Additionally, because the student population in McAllen has recently leveled off after a period of substantial growth, the district permits students from neighboring districts to enroll in the Diploma Programme without paying open-enrollment fees and even does some recruitment of these students in order to increase district enrollment and receive associated per-pupil funding. Lamar's internal IB enrollment data show between one and five students enrolling in the Diploma Programme from outside of the district in each of the last 5 years. However,

of students that entered before and since Lamar added MYP, the total number of students being served by Lamar's IB program has increased.

Teachers and administrators report that there is currently no explicit cap on admission to either MYP or to the Diploma Programme at Lamar, with offers being extended to all qualified applicants. However, if applications continue to trend upwards each year, considerations regarding both the physical size of the building in which the program is housed and the scalability of personalized, intensive program supports may come into play, potentially compelling district and school leaders to consider possibilities such as making the admission process more selective, moving the program's location, or expanding IB to another high school within the district.

The relationship between the high Diploma pass rate and the relatively high rate of student attrition at Lamar has caused some teachers and administrators to express concern about balancing the desire to maintain Lamar's high pass rate while still serving as many interested students as possible. One teacher reflected, "We've had such an outstanding record, of 100% passing the Diploma...so I think [maintaining] that is a kind of worry. But when you refocus...and say why we're here, for [each] child—if we get 100%, fantastic, but if not, we've still met the needs of these children."

As discussed earlier, school and district administrators are adamant that the Lamar IB program should be made available to all students who are interested and that specific subgroups of students should not be targeted. While the student population at Lamar does not mirror the district population as a whole, Lamar's IB program includes a diverse cross-section of students, many of whom are represented at much higher rates at Lamar than in IB programs nationwide. Exhibit 10 presents information on the number and demographic characteristics of students in IB at Lamar compared to the district as a whole, focusing on Lamar's most recent graduating class.

administrators recognize that Diploma Programme enrollment may increase from within the district as more students rise through the ranks of PYP and MYP and are interested in the Diploma Programme, and these administrators acknowledged that accommodating students from within the district will be a priority.

	· 	District- wide Enrollment, 2007-08	10th Grade Applicants to Diploma Programme for 2006-07	10th Grade Students Accepted to Diploma Programme for 2006-07	11th Grade Enrollment, 2006-07	12th Grade Enrollment, 2007-08	12th Grade Diploma Candidates, 2007-08	12th Grade Diploma Recipients, 2008
Overall	Total student population	24,902	67	50	38	27	24	23
	African American students	132 (1%)	Not available	Not available	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	Hispanic students	22,773 (91%)	Not available	Not available	19 (50%)	17 (63%)	15 (63%)	14 (61%)
Race / Ethnicity	White students	1,510 (6%)	Not available	Not available	12 (33%)	5 (19%)	4 (17%)	4 (17%)
	Asian students	465 (2%)	Not available	Not available	7 (18%)	5 (19%)	5 (21%)	5 (22%)
	Multiracial/ other ethnic background	22 (<1%)	Not available	Not available	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Poverty	FRPL students	17,206 (69%)	Not available	Not available	12 (32%)	10 (37%)	8 (33%)	7 (30%)

Exhibit 10 Selection, Participation, and Persistence for Lamar Academy IB Class of 2008, by Demographic Category

Note: Percentages do not always add to 100 due to rounding error.

Source: Lamar Academy internal applicant and enrollment data.

Compared to the district as a whole, Asian and White students were substantially overrepresented from the point of initial enrollment, while Hispanic students and students receiving free or reduced-price lunch were underrepresented.²¹ This distribution appears to underscore the challenges of recruiting prepared students from poor and/or minority backgrounds even in a community where such students comprise the majority of the population. However, once enrolled, Hispanic students and FRPL students from the Class of 2008 persisted in the program at rates that were comparable to or higher than their White and Asian counterparts. Fifteen of 19 Hispanic students (79%) and 8 of 12 FRPL students (67%) who enrolled in the program attempted the IB Diploma, compared with 5 of 7 Asian students (71%) and 4 of 12 White students (33%).

Selective "pre-IB" admission in 9th grade at Hillsborough enables the program to focus on students who have the highest potential to earn the IB Diploma.

Admission to the Diploma Programme at Hillsborough High School is selective, with admission decisions based on specific qualitative and quantitative criteria to which points are assigned. Students are eligible to receive a composite score of up to 60 points based on transcripts (course grades from all of 7th grade and the first half of 8th grade are considered), standardized test scores, teacher recommendations, and a graded writing sample. Students who have attended the MYP middle school and students who have siblings in the program are eligible to receive a few extra points, but teachers and administrators report

²¹ While no African American students were enrolled in the Diploma Programme in the Class of 2008, this enrollment data is consistent with the extremely low rates of African American enrollment across the district as a whole.

that these bumps are relatively small and do not tend to result in the admission of students who are not prepared for the program. One administrator familiar with the selection process asserted that, "[for] a lot of kids, [the incorporation of these additional points] hardly makes a difference with the scores."

Additionally, program participation is contingent upon satisfactory completion of Algebra I by the end of 8th grade, so applicants must be on track to complete this course by that time. The Algebra I requirement is relatively new and corresponds with the district's emphasis on Algebra I at the middle school level. One district administrator reflected:

At the beginning you couldn't put a prerequisite like that on it because we would have had kids come in who were just as talented or more talented as other kids who got in, but it was just the school they went to [did not offer Algebra I]. Now, [there is] such a widespread use of Algebra I at middle schools that it would be virtually impossible for a kid who would make it in [the IB high school] screening not to have had Algebra I.

The desired size of the entering class is 145. Thus, once student scores are compiled, the district selects the students with the top 145 scores from the HHS attendance area, plus a small additional number of students to account for the expectation that some students will turn down their spots. Additionally, the district puts together a ranked waiting list, and students are admitted off of the waiting list through the spring and summer and into the early fall, shortly after 9th grade has started.

Over the past five application cycles, the acceptance rate for the HHS program has ranged from a low of 46% (164 of 355) for the Class of 2009 to a high of 80% (201 of 251) for the Class of 2010, while the rate of students accepting their spots in the program has ranged from 88% (145 of 164) for the Class of 2009 to a low of 71% for the Class of 2011 (see Exhibit 11). The drop in applicant numbers between the Class of 2009 and the Class of 2010 can be explained by the fact that the Class of 2010 was the first graduating class in which applicants were placed in three IB Diploma Programme high schools across the district instead of two, while the rapid increases in applicant numbers through the Classes of 2011 and 2012—with the Class of 2012 applicant total similar to applicant totals from years prior to the addition of the third program—suggest that the school and district are doing an effective job of continuing to expand the pool of students who are interested in the Diploma Programme.

	Students Applying to IB Program	Students Accepted to IB Program	9th Grade Enrollment
Class of 2008	391	190	146
Class of 2009	355	164	145
Class of 2010	251*	201	144
Class of 2011	327	204	145
Class of 2012	357	188	144

Exhibit 11 Hillsborough High School IB Program Student Selection Process, 2004 through 2008

* Note that SDHC added an additional IB Diploma Programme in 2006, with the Class of 2010 applicants being the first to be placed in IB across three schools instead of two.

Source: HHS internal applicant and enrollment data.

As stated earlier, it is the district's intention to have program enrollment represent a broad cross-section of district students, but there is no quantitative consideration for race, ethnicity, or poverty in the selection process. The objective of diversity in the applicant pool is initially addressed through the targeted recruitment practices described above. One administrator noted, "I just think there has always been a

conscious effort on our part...to make sure that that type of underrepresented student was included in the presentations." Some attention is also paid to student demographics in the selection process, but this is achieved by looking broadly at the composition of the applicant pool and considering underrepresented students who may be on the cusp of admission rather than by assigning points based on categories such as ethnicity or poverty. Another administrator described the process as follows:

We've never done a quota system. We've always done [the selection process] honestly and truly with the idea of keeping diversity first, without a quota...We always shot to have about 20% [African-American and/or Hispanic] students in any given year, but as we looked at the applications, we realized that we weren't doing anyone a service if we admitted students who just weren't prepared for the program, so that's always been one of the things that we've strived to achieve.

Once students enroll in IB at Hillsborough High School, most (approximately 85%) persist through the completion of the Diploma Programme. School administrators report that an average of 125 students sit for the exams at the end of 12th grade each year, with the number rarely falling below 120 or rising above 130. See Exhibit 12 for enrollment and persistence data for Hillsborough High School's current students and most recent graduating class.

	Classes of 2006 through 2012							
	9th Grade Enrollment	10th Grade Enrollment	11th Grade Enrollment	12th Grade Enrollment				
Class of 2008	146	128	123	122				
Class of 2009	145	130	130	130				
Class of 2010	144	129	125					
Class of 2011	145	130						
Class of 2012	144							

Exhibit 12
Hillsborough High School IB Program Student Enrollment and Persistence,
Classes of 2008 through 2012

Source: HHS internal applicant and enrollment data.

Those students who do leave the program tend to do so in the 9th or 10th grade, with more leaving during or after 9th grade than any other time. Administrators report that students who successfully complete the 9th- and 10th-grade pre-IB program continue into the Diploma Programme nearly universally. One administrator reflected, "If a kid makes it to the first day of their 11th grade year, I'm getting a feel for the fact that that kid's going to stay. That seems to be the [sense at the] end of 10th grade, 'alright, this is it.'... We have very, very few at that point that drop out." The only new students permitted to enter the program any time after 9th grade are those who moved from another district where they were enrolled in an IB program, and administrators report that this situation is quite rare. Additionally, in order to discourage students from enrolling at HHS or another IB high school in order to receive additional GPA points only to leave shortly before graduation, SDHC does not add rigor-related points for any Diploma Programme (11th- and 12th-grade) coursework to the GPAs of students who return to their home high schools after the beginning of 11th grade.

According to school and district personnel, some students who leave in 9th grade and nearly all who leave in 10th grade or later do so for personal reasons (e.g., family move), with the remainder leaving for academic reasons. The attrition that occurs for academic reasons tends to be relatively spread out throughout the school year (primarily in 9th grade), with teachers and administrators frequently encouraging students to wait until the transition points between grading periods to make a final decision on whether to return to their home high schools. An HHS administrator described student attrition as follows:

We have maybe one or two kids that just very much [struggle] at the beginning, that we try our best to say, "well, wait until the 9 weeks," "wait until the semester," because for those kids, we're trying to let the light bulb come on. There are maybe one or two kids who were just, "I'm out. I've got to go back to my school. You're killing me. This is crazy." I can only think of one kid this year that we had like that. But...you hit the semester break, maybe only one or two at each school stop along the way, first semester, maybe one or two, and then at the end of the 9th grade year, another one or two. They get to the sophomore year, they're probably here for the duration, maybe again, another one or two the first semester of sophomore year. But probably at little equal intervals throughout the time. The semester break is usually when [the most attrition] happens.

As discussed earlier, SDHC has made it a priority to ensure the representation of a broad cross-section of SDHC students at HHS and other district IB programs—as one administrator described, "we were very cognizant [from the beginning] that the program should not be an all-white program in a minority school"—and the district has taken steps to encourage the preparation of more underrepresented students for IB and to ensure the inclusion of qualified low-income and minority students through the recruitment and selection process for the HHS Diploma Programme. The HHS Diploma Programme indeed includes a diverse cross-section of students, although—as with the Diploma Programme at Lamar—it does not mirror the district population as a whole, further underscoring the challenges in recruiting and selecting prepared underrepresented students. Exhibit 13 presents information on the number and demographic characteristics of students in IB at Hillsborough High School compared to the district as a whole and the applicant pool, focusing on the most recent HHS graduating class.

Compared to the district population as a whole, Asian and White students were overrepresented while African American and Hispanic students were underrepresented in the applicant pool for the HHS IB Class of 2008. These differences are even more pronounced in the cohort of students who were selected for the program, suggesting that a higher proportion of those African American and Hispanic students who do apply are not prepared to enter the Diploma Programme. Students receiving free or reduced-price lunch were even more dramatically underrepresented in program enrollment (no data are available describing the FRPL status of applicants). Additionally, female students were overrepresented and male students were underrepresented in the applicant pool and to a lesser extent in the groups of students selected for and enrolling in the program. Here, however, the primary distinction appears to be a matter of self-selection, with male and female applicants experiencing relatively similar success in the application process but with over 60% more girls than boys applying.

		District- wide 8th Grade Enrollment, 2003-04	8th Grade Applicants for 2004-05	8th Grade Students Accepted for 2004-05	9th Grade Enrollment, 2004-05	10th Grade Enrollment, 2005-06	11th Grade Enrollment, 2006-07	12th Grade Enrollment, 2007-08 (Diploma Candidates)	12th Grade Diploma Recipients, 2008
Overall	Total student population	14,039	391	190	146	128	123	122	89
	African American students	3,226 (23%)	33 (8%)	7 (4%)	5 (3%)	5 (4%)	5 (4%)	5 (4%)	3 (3%)
	Hispanic students	3,370 (24%)	66 (17%)	26 (14%)	20 (14%)	19 (15%)	17 (14%)	18 (15%)	14 (16%)
Race / Ethnicity	White students	6,681 (48%)	222 (57%)	117 (62%)	82 (56%)	68 (53%)	65 (53%)	64 (52%)	50 (56%)
	Asian students	322 (2%)	49 (13%)	30 (16%)	29 (20%)	26 (20%)	26 (21%)	25 (20%)	15 (17%)
	Multiracial/ other ethnic background	440 (3%)	21 (5%)	10 (5%)	10 (7%)	10 (8%)	10 (8%)	10 (8%)	7 (8%)
Poverty	FRPL students	6,485 (46%)	Not available	Not available	7 (5%)	10 (8%)	11 (9%)	13 (11%)	10 (11%)
Gender	Male	7,155 (51%)	149 (38%)	66 (35%)	58 (40%)	52 (41%)	50 (41%)	48 (39%)	37 (42%)
	Female	6,884 (49%)	242 (62%)	124 (65%)	88 (60%)	76 (59%)	73 (59%)	74 (61%)	52 (58%)

Exhibit 13 Selection, Participation, and Persistence for Hillsborough High School IB Class of 2008, by Demographic Category

Note: Percentages do not always add to 100 due to rounding error.

Source: SDHC internal districtwide enrollment data; HHS internal applicant/enrollment data.

However, similarly to their counterparts at Lamar, HHS Class of 2008 students from underrepresented groups persisted in IB at rates that were higher than their White and Asian counterparts. Eighteen of 20 Hispanic students (90%) and all 5 African American students who enrolled in the program attempted the IB Diploma, compared with 25 of 29 Asian students (86%) and 64 of 82 White students (78%).²²

While students who applied and were admitted to the HHS IB Class of 2008 had higher 8th-grade Florida Comprehensive Assessment Test (FCAT) scores than their peers across the district, there was variation within the class in math proficiency and even more so in reading proficiency prior to entering IB at HHS. Exhibit 14 displays the 8th grade FCAT score distribution for IB Class of 2008 applicants, admits, enrolled students at each grade level, and Diploma recipients, enabling analyses of Diploma Programme persistence and success among students who entered the program at each FCAT proficiency level.

²² The number of students receiving free or reduced price lunch in the HHS Class of 2008 actually rose each year that the cohort was enrolled in high school, likely due to additional students applying for FRPL status. This pattern prevents the tracking of FRPL students' persistence in the HHS IB Class of 2008, since attrition in a given year may be masked by students who had recently qualified for FRPL.

						,			
		District- wide 8th Grade Enrollment, 2003-04*	8th Grade Applicants for 2004-05	8th Grade Students Accepted for 2004-05	9th Grade Enrollment, 2004-05	10th Grade Enrollment, 2005-06	11th Grade Enrollment, 2006-07	12th Grade Enrollment, 2007-08 (Diploma Candidates)	12th Grade Diploma Recipients, 2008
Overall	Total student population	14,039	391	190	146	132	126	123	89
	5	1,685 (12%)	125 (32%)	Not available	79 (54%)	74 (56%)	69 (55%)	66 (54%)	53 (60%)
	4	2,106 (15%)	136 (35%)	Not available	58 (40%)	51 (39%)	50 (40%)	50 (41%)	33 (37%)
8th Grade FCAT	3 (Proficiency threshold)	4,492 (32%)	42 (11%)	Not available	6 (4%)	6 (5%)	6 (5%)	6 (5%)	3 (3%)
Score Math	2	2,948 (21%)	7 (2%)	Not available	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	1	1,965 (14%)	1 (<1%)	Not available	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	No test data available**	842 (6%)	80 (20%)	Not available	3 (2%)	1 (<1%)	1 (<1%)	1 (<1%)	0 (0%)
	5	562 (4%)	86 (22%)	Not available	65 (44%)	62 (47%)	59 (47%)	58 (47%)	44 (49%)
	4	1,965 (14%)	86 (22%)	Not available	45 (31%)	44 (33%)	41 (33%)	39 (32%)	30 (34%)
8th Grade FCAT Score Reading	3 (Proficiency threshold)	3,650 (26%)	90 (23%)	Not available	29 (20%)	21 (16%)	21 (17%)	21 (17%)	13 (15%)
	2	3,650 (26%)	38 (10%)	Not available	4 (3%)	4 (3%)	4 (3%)	4 (3%)	2 (2%)
	1	3,369 (24%)	11 (3%)	Not available	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
	No test data available**	817 (6%)	80 (20%)	Not available	3 (2%)	1 (<1%)	1 (<1%)	1 (<1%)	0 (0%)

Exhibit 14 8th Grade Math and Reading FCAT Distribution for Hillsborough High School IB Class of 2008 (Applicants, Admits, and Enrolled Students)

* Districtwide totals of students earning each FCAT score are approximate. Publicly available data from the Florida Department of Education lists only the percentage of SDHC 8th graders earning each FCAT score (rounded to the nearest whole number) and the total number students who took the test; we multiplied these percentages by the district-provided 8th-grade enrollment total for 2003-04 to arrive at approximate numbers of students earning each score.

** District administrators explained that the IB applicants for whom no FCAT data were available may have been applying from outside of SDHC (typically from private schools).

Source: Districtwide FCAT data from publicly available Florida Department of Education statistics retrieved December 5, 2008, from http://fcat.fldoe.org/results/default.asp; all other information from SDHC internal student performance data.

Using 8th-grade reading and math FCAT scores as a rough proxy for the academic preparedness of these students upon exiting middle school, a student's level of proficiency upon entering pre-IB in 9th grade does appear to be associated with the likelihood that a student will achieve the full IB Diploma at the end of senior year. For example, students with 8th-grade reading FCAT scores above grade level (4 and 5) were more likely than students with reading FCAT scores at or below grade level (2 and 3) to receive the IB Diploma. Of the 97 Diploma Programme seniors with 8th-grade reading FCAT scores of 4 (39

students) or 5 (58 students), 76% (74 students total) received the Diploma; of the 25 Diploma Programme seniors with FCAT scores of 2 (4 students) or 3 (21 students), 60% (15 students total) received the Diploma.

Nonetheless, it is noteworthy that over a fifth of the students enrolled in HHS IB as freshmen in 2004-05 entered the program reading at or below grade level and that nearly half of this group successfully completed the requirements for the IB Diploma, suggesting that the instruction and supports available through the HHS IB program are sufficient to prepare students performing at and even below grade level upon entrance for the rigors of the Diploma Programme. To the extent that underrepresented student populations in the district lag behind in overall preparation, this finding has important implications for the continued recruitment and selection of underrepresented students for the HHS Diploma Programme.

CHAPTER 4 SUPPORT SYSTEMS

IB students at both Hillsborough High School and Lamar Academy are exposed to a series of programs and structures at the school level designed to provide the academic and social support that will ensure success in the Diploma Programme. Additionally, students at both schools benefit from support and resources made available to their schools' IB programs by district and state entities. School officials frequently attribute their successful student outcomes to a combination of these school-level and external programs and resources. In this chapter, we explore those school, district, and state supports identified as most conducive to student success at each school.

SCHOOL-LEVEL SUPPORTS

Officials at Hillsborough and Lamar have worked to encourage student success in their respective Diploma Programmes through a series of common strategies. Each school offers a 9th- and 10th-grade feeder program to provide explicit preparation for students prior to their entrance into the Diploma Programme; each school works to ensure a strong sense of community within the Diploma Programme; each school carefully monitors student progress; and each school offers a series of tutoring and mentoring opportunities to keep students on track.

As discussed in the previous chapter, both schools emphasize hard work and motivation as critical factors contributing to student persistence and eventual success in the Diploma Programme. These qualities are highlighted during each school's recruitment and selection process and continue to play an important role over the course of a student's tenure in the program. Accordingly, elements of each school's support systems concentrate specifically on reinforcing associated traits and skills, such as personal responsibility and time management, intended to encourage student success.

It is also important to note that, at both sites, school and district personnel did not report differentiating the supports that they offer to students who are traditionally underrepresented in IB programs. Instead, because both schools emphasize a commitment to providing all of their IB students with the necessary attention to succeed in the program, supports are made available to every student, with differentiation occurring only in cases where students request or are identified for additional assistance based on academic performance. As a result, our findings relating to supports and interventions for underrepresented students are discussed in the context of supports for all students.

9th- and 10th-grade feeder programs—MYP at Lamar and "pre-IB" at Hillsborough—ensure that students entering the Diploma Programme in 11th grade are well prepared.

Hillsborough and Lamar both offer 2-year preparation programs for 9th and 10th graders prior to entrance in the official Diploma Programme at the beginning of 11th grade. At Hillsborough, enrollment in the 9th and 10th grade "pre-IB" program is compulsory for Diploma Programme entrance. At Lamar, although enrollment in the recently established 9th- and 10th-grade MYP is not a formal requirement for entrance into the Diploma Programme, a substantial majority of students in the most recent entering classes for the Diploma Programme moved up from MYP. Faculty, students, parents, and administrators at both programs report that the 9th- and 10th-grade feeder programs are critical to preparing students for the demands of the Diploma Programme, with preparation including subject-matter content as well as skills necessary for success.

At Hillsborough, pre-IB has been an integral component of the Diploma Programme since its establishment in 1990. According to one SDHC administrator who played a role in starting the program,

pre-IB was necessary to ensure that students from across the district would be prepared to attempt the IB Diploma at the end of senior year despite varying levels of preparation upon arriving at Hillsborough:

I couldn't expect kids to get the kind of preparation that they needed at all 20 schools in this district, and so we put them into the program, accepted them in 9th grade and said "If you want to come, you come for the Diploma at the end of 12th. If you leave the program, you go back to your own [home] school."

HHS affiliates report that the pre-IB program is highly successful in preparing students from different academic backgrounds for success in the Diploma Programme by exposing students to the day-to-day realities and expectations of IB and by emphasizing both academic content and study skills. One SDHC administrator reflected:

Before they get to the 11th- and 12th-grade years, we have 2 years where they're learning the skills, and learning the vernacular, and building the relationships with the teachers, and you know, they're getting coached up, for lack of a better term. Their weaknesses are identified early on in the process, and they're addressed. It's not just, "OK, well that kid can't make it, kick him to the curb." We work with the teachers, we sort of identify and circle the wagons and try to [get students up to speed]—there's a culture of that here.

In addition to offering coursework that aligns with the Diploma Programme subject matter, the pre-IB program at Hillsborough aims to prepare students for the challenges of IB through a course called Inquiry Skills, which fosters more general skill development and college readiness. One SDHC administrator explained:

Inquiry Skills is considered a separate class. And in that class, they start to learn about the IB philosophy, they learn a lot of the research techniques they're going to need later on for their extended essay, and they get exposed to the college selection process. It's a year-long course that really serves as an introduction to the program, to a certain extent, but a lot of it is just learning the skills that are going to be necessary to be successful into the program in the later years.

HHS teachers, administrators, students, and parents were all particularly consistent in citing the Inquiry Skills course as a major factor contributing to students' success. One teacher discussed the value of Inquiry Skills in teaching students effective rhetoric, asserting that the course "helps children come into a very difficult, complex academic environment and learn how to both formulate and develop arguments [and] also to do the research to support the arguments and learn the style and tools of that research." A parent underscored the course's value in improving students' organizational and study skills, explaining that while students may have entered HHS without strong organizational skills, now "their planner is like a bible to them."

At Lamar, the 9th- and 10th-grade MYP was established relatively recently—the first cohort of freshmen to participate in the program were juniors in 2008-09—but the rationale for starting the program aligns closely with Hillsborough's. MYP had been introduced at the middle school level in McAllen ISD a few years prior to the adoption of MYP at Lamar, and according to district administrators, the expansion of MYP into 9th and 10th grade at Lamar was a logical next step as part of McAllen ISD's widespread adoption of IB programs. One administrator explained, "With the success rate that we were getting from the students that were receiving the IB Diploma…we wanted to build the capacity [for more students]."

Indeed, the 9th- and 10th-grade MYP has expanded access to IB at Lamar and, according to teachers and administrators, has provided strong preparation for students prior to the Diploma Programme. The 2008-09 academic year is the first year in which some students enrolled in the Diploma Programme have completed the full 2 years of MYP at Lamar; while no formal persistence data were available as of this writing, teachers and administrators reported that there seemed to be an unusually low rate of attrition in the first few months of the Diploma Programme among students who completed MYP. Teachers and

administrators attributed this persistence directly to the knowledge and skills that students gain through MYP at Lamar. When asked to describe the level of impact that MYP has on students' readiness for the Diploma Programme, one Lamar teacher replied:

Tremendous. Tremendous. The level of work that the students are exposed to...and the expectations are there initially. And so they know exactly what their commitment has to be to be successful in the Diploma Programme...There is no myth here. The students understand exactly what the expectations are, both the coursework as well as the rigor.

Enclosed IB structure, relatively small program size, and teacher and student choice contribute to strong program buy-in and family-like relationships.

Students, parents, teachers, and administrators at both Diploma Programmes identified a strong sense of community as a crucial factor contributing to student persistence and success. One Lamar parent explained that "the environment is so healthy and so loving and nurturing that even the hard work doesn't make them want to leave," while an SDHC administrator expressed the opinion that "just that whole idea that it's a family kind of [atmosphere] and people are there to support you—I think that's the key to success." The two programs share several common features that appear to contribute to this sense of community. Students, parents, and staff alike attributed the tightly-knit atmosphere in part to the enclosed all-or-nothing nature of the Diploma Programme at each school and to each program's relatively small size. Additionally, students, parents, and staff expressed particular appreciation for the shared values that motivate students and teachers to participate in the Diploma Programme and for the resulting relationships and support that these shared values engender.

Administrators from both case study schools and corresponding districts cite the decision to require all juniors and seniors enrolled in IB to attempt the full Diploma as an important element of program buy-in and success, particularly given the emphasis placed on hard work and motivation in each program. Administrators in Hillsborough County see a direct link between student buy-in and the enclosed structure of the Diploma Programme. One administrator discussed the commitment demonstrated by students choosing to enroll in the full Diploma Programme: "I think that the difference...is that it's all-ornothing, and it's very purposeful, and parents and students understand that when they come. They have to commit for the full 4 years and the full program and the Diploma at the end of it." Another administrator connected the enclosed program structure with the establishment of a sense of community:

Another thing that's helped the program...is the fact that ours is strictly a Diploma Programme rather than [offering a certificate option], because every kid has that team of teachers supporting them. You wouldn't have that if they were just dropping in for other classes the way they do for AP.²³

The relatively small size of the Diploma Programme at each school combines with the enclosed structure to ensure that students and faculty are able to forge close relationships and develop these relationships over time. These relationships are widely viewed as defining characteristics of the two programs— students, parents, teachers, and administrators were nearly universal in describing the IB community as "like a family." One SDHC administrator explained that "I think it's a manageable size, and I think every IB student feels really at home in the program." A Lamar teacher elaborated on this statement: "What I hear from the kids is they like smaller classes. They like the intimate feeling… They like the rapport with the teachers… You talk to them about the other campuses and it's, 'Oh, it's too big and scary." Indeed, the sense of community is cited by many students as a key reason for their initial interest and continued persistence in the program. As one Lamar student stated, "I was very interested because…it was a smaller

²³ At schools that do not require all seniors enrolled in IB to attempt the Diploma, students that sit for one or more exams but do not attempt the full slate of exams necessary to receive the Diploma are designated as certificate candidates.

community. I felt it would be a great opportunity to learn. It's been very helpful for growth personally and as a student."

Because each program is sufficiently small to encourage close relationships within and between students and faculty, there are members of the IB community at each school who are personally invested in each individual student's success, thereby strengthening program buy-in and student supports. One Lamar teacher explained, "We feel responsible for what happens here. That's a feeling that you lose as you get bigger. I think we all feel ownership of the program." An administrator at SDHC who used to work at HHS explained how this level of personal involvement encourages closer student monitoring and thereby more targeted academic supports (discussed in detail in a subsequent section):

One of my really big things when I was [at HHS] was, by Christmas, I would know every kid by their first name. You know, if I stopped them in the hall, I could have a conversation with them, and it's that kind of relationship with the teachers, the administrators, and the counselors that I think really helps make the program successful...If a student feels comfortable with an adult at the school, it's going to make them more successful...In the course of your 4 years, there's a good chance you may have every single IB teacher, so you have those relationships.

An administrator at Lamar concurred, comparing the student experience at Lamar to the traditional high schools in the district: "You see some of these kids that, you know in your heart, they probably wouldn't have blossomed in such a large setting." Many students, teachers, and administrators stated that the targeted attention and other features from this small, close-knit community have thus far been maintained as the program has grown in recent years, but several mentioned that the scalability of these supports will need to be evaluated carefully as the program continues to expand.

Relationships and supports among and between students and teachers are further strengthened by the shared values that motivate members of each group to opt to participate in the Diploma Programme. Because students and teachers both choose to be a part of IB, they have mutual respect for one another due to a shared understanding of each participant's personal investment in the program. One Lamar student asserted that students who do not personally wish to be in the program rarely persist. The student explained, "The thing with us is we pushed ourselves. We wanted to come. So it was kind of different from if people were forced here. It's enjoyable." This level of student commitment is prevalent at both schools and is not only appreciated by their teachers, but is frequently cited as a primary motivating factor for teachers to commit to teaching in the Diploma Programme. One Lamar administrator reflected:

Students have drive and desire, and teachers have classrooms full of these kids. So it is a lot of work...but they have the pleasure of teaching these children and also being a part of helping our students graduate and pass these tests. There's a type of fit that you have to make sure you have...They give the children their cell phone numbers. They're teachers that really have the interest for that child. And they love to have children that—that type of child that you really want to work with.

At Hillsborough, teachers are similarly motivated to pursue and accept assignments in the Diploma Programme and, as a result, share a commitment to the program, which in turn leads to student success. As one HHS administrator explained, "the teachers, to me, are the best group you could find" because "they really work with the kids." Students also acknowledge and appreciate the energy that teachers put in to the Diploma Programme. One Lamar student described the mutual respect that develops as result of teachers and students seeing each other working hard: "You have a really great relationship with the teachers you have, and there's always a really strong support system between teachers and students…everybody's really understanding, because even though the students have so much to do, the teachers have just as much to do." Likewise, a teacher explained, "[The students] see that we'll do anything we can to try to make our kids successful in the Diploma Programme, [even] if that means coming after school or coming in on weekends and doing activities with them. They like that." In addition to strong student-teacher relationships, the IB programs at both schools engender similarly robust and supportive peer relationships, which are reinforced by the fact that all students are striving to achieve the same goal. One Lamar student said, "I'm not brilliant or anything, but it's all about applying yourself...It's really a motivational atmosphere. I feel a lot of support from my senior class, and it just pushes you to move on and keep going." A Hillsborough student concurred: "I thought that IB would put me in an environment with like-minded students. I'm not doing as well academically now [as I was in middle school], but just being around other driven people here, I really like that."

This pervasive level of mutual respect among students at both Diploma Programme schools appears to contribute to a more open, accepting environment than might be the norm at the students' home high schools. One teacher at Lamar observed, "They're very close as a class, each group. And that's one of the things that the students like, I think. We don't have, like at the regular campuses, those cliques. They're more like a family." A Hillsborough teacher corroborated this assertion: "I think the students themselves have a strong bond. When they come here, they immediately—I don't mean the first day, but within that first grading period—find kindred spirits and souls, and they last through the good times and the bad times."

While students appear to establish many of these relationships on their own, staff members at each school actively encourage student cooperation and leverage close student relationships to reinforce student supports. One HHS administrator explained, "We tell kids, 'This is the IB way. You have to work together.' Peer support is a big deal." To this end, both schools encourage peer tutoring by offering CAS (Community, Action, and Service) hours for more advanced students who tutor their peers. Additionally, staff at both schools promote less formal peer tutoring and the formation of study groups. One teacher at Lamar discussed the value of peer tutoring based on an observation from her Advisory (study hall) class the previous year—a more advanced student tutored her peers in biology after some material presented by the teacher went over the heads of her peers and, because of the language she used, "she was able to explain it so that they all understood." School staff also leverage peer relationships with alumni to motivate students to persist and work hard in preparation for college. At both schools, Diploma Programme alumni often return during breaks and communicate with current students about their experiences. One Lamar teacher noted:

I think it's not until the first semester of their college years that they see that all of that hard work was for a purpose, for a reason. They're not struggling. It comes easily to them. They have the work ethic. They don't have problems with time management. And the [current] kids see that. They'll listen to them, and they'll get encouraged to keep on trying and keep on going.

Finally, these close family-like relationships extend to some extent to the parent communities at each school. Administrators, teachers, and students at each school site report that most parents are very much aware of the value of IB and that many parents are highly engaged in and supportive of the program as a whole as well as of their own students. The IB Alliance at Hillsborough and the Friends of IB organization at Lamar exist to centralize and direct this support, fulfilling functions parallel to Parent-Teacher Associations at other schools such as fundraising and volunteer coordination for extracurricular activities. Hillsborough's IB Alliance is also especially active in providing support for individual students and families who encounter financial need or other challenges. As one teacher described, "If there are issues for children who can't buy their books, or are having some other kinds of financial problems, the IB Alliance very often will contribute money." A parent involved in the IB Alliance elaborated, explaining the desire for general community well-being that is involved in fulfilling these requests:

Sometimes there are unique situations that arise, and there are anonymous names submitted. We just get a phone call sometimes—"I have a student...can you do this?" Very often we don't even know which child it is. We just know—you've gotten this far, we're going to help you get the rest of the way. You need new glasses? You need the

electric bill paid? We want the kids to be successful, so if there's something to do with their home life that we can help with, [we'll do whatever we can].

Small program size, close communication among teachers, and use of data facilitate careful monitoring of student progress.

At both sites, teachers are expected to keep close tabs on the performance of the students in their individual classes, and teachers meet regularly to discuss student progress and determine interventions for struggling students. Frequent formal meetings are augmented by more informal discussions between individual staff members, ensuring that the teachers and administrators at each school have a sense of which students are on track to succeed in the Diploma Programme and which students are struggling. Teachers and administrators at each school report that serving a relatively small student population facilitates increased attention to each student during the monitoring process.

Staff at Hillsborough hold grade-level meetings in the middle of every 9-week grading period, in which all of the teachers at each grade level come together with administrators to evaluate student progress. Teachers are asked to be prepared to discuss any student at or below a specific threshold—defined as any grade of D or F or consistent Cs—as well as any student whose behavior or academic performance raises any specific concerns. At these meetings, school staff evaluate the performance of individual students to determine whether poor academic performance or other teacher concerns are restricted to one class or are more pervasive and to determine a course of action. When the issue is confined to one individual class, the relevant teacher will often meet one-on-one with the student to discuss supports, but the student's other teachers are made aware so that they can monitor the student more closely for similar performance issues. When the issue affects more than one class or continues consistently in a single class, a school administrator will typically convene the student and parent(s), along with each of the student's teachers, for a discussion that covers performance concerns, any issues that might be contributing to the student's academic challenges, available supports, and next steps. One SDHC administrator, when asked about the features of IB that contribute to student success, cited this collaborative nature of the student monitoring system in keeping all teachers aware of student challenges:

When you do have a troubled student and you have to have a parent conference, from day one, it's always been the philosophy that you would have a parent conference with all six teachers and an administrator, so that any problems that were there, we were going to go into detail, and we were going to find out, is it a problem just in your math class, or do the other teachers have information—so that's another big factor for the struggling students.

At the conclusion of such a conference, administrators typically set up a "contract" for struggling students that stipulates specific performance goals required to stay in the program. One teacher explained, "I know there are students who have to make all Bs, or at least all Bs, and I think there are some who are actually contracted to make Cs and Bs, but the idea is then that the child is invested...we try to get the parents directly involved [as well]." Staff are expected to monitor these students more closely, with certain teachers who have close or especially effective relationships with the students often taking a lead role in the monitoring and mentoring process. One HHS administrator discussed the value of this team approach in ensuring student success:

I would say...to the staff, "If we dropped every student every time one of you thought they weren't going to be successful, we wouldn't have any students left in the end." But because it's not one teacher, but rather a team of teachers working with those students, you always find those people who believe in them and make them successful.

In a less structured context, HHS teachers who notice small declines in performance or other student challenges that do not warrant formal discussion will sometimes collaborate with other teachers to strategize about how to get through to a given student most effectively, often approaching teachers who lead extracurricular activities or teach classes where the student is more successful. Teachers sometimes

share relevant information about a student's interests and skills that might engage that student. One teacher reflected:

It usually isn't the case where someone is doing poorly in one class and well in all the others, but it happens occasionally. Sometimes I'll talk to the student and tell them that we had a meeting and were talking about your grades—"I had no idea you were so clever in math, or that you were a concert violinist"—we'll try to find something that the student does well [and say] "...that leads me to believe you could do well, especially since you're going to have to do this for 4 years." That usually works.

In addition to the staff's monitoring of student progress, HHS IB teachers are required to post student grades for each assignment to an online database that is accessible to parents and students, who are, in turn, expected to follow up with teachers if they have concerns.

At Lamar, staff members cite the school's size as an especially important element of the monitoring process. One teacher stated, "I think that the ability to watch over every kid and know how they're doing and get a big picture is critical for keeping them going and not letting them fall through the cracks." As with Hillsborough, student grades at Lamar are available online for students and parents to monitor, and progress reports are issued every 3 weeks with full report cards every 6 weeks. The smaller student and staff population at Lamar facilitates frequent informal discussion of student performance among the entire staff—for example, most Lamar staff members eat lunch together in a staff lounge, and, as one teacher described, "It's almost a working lunch on a daily basis"—but the entire program staff holds more formal meetings on a relatively frequent basis as well. One teacher illustrated these meetings as follows:

In general, we meet once every 2 weeks. We might do once a month. And that's where we discuss general goings-on...it's the first time I've been in an environment where there are so few students that you can pretty much talk about every student and where they are. And then there's an attempt to deal with each of those students that are having problems, and it's just sort of highlights to ask what we need to do and then also, [the coordinator] will have a one-on-one and ask what's going on and talk to the parents. We work pretty hard...to make sure that students don't get lost in the system.

If the school staff determines that a child is not meeting standards that suggest continued progress towards the IB Diploma—defined as maintaining at least a 75 average across all subjects and a minimum of 70 in each class—the IB coordinator and teachers in relevant subjects hold discussions with students and subsequently with parents. One Lamar administrator described the structure of these meetings:

There's a process. I first have a conference with the student. What I do is I usually present their grades, again always going back to the data, and if we feel like the progress isn't there, then I'll call the parent, too. Then we have a meeting with the parent and the student. You know, especially after the parent is brought in—a lot of the kids don't want to leave, they're very comfortable here, they have close relationships here, they like the smaller atmosphere—but we also have to look at what is best for the student.

These discussions are used to evaluate whether a student wants to stay at Lamar and to determine whether that student feels sufficiently motivated to take the requisite steps to succeed. If a student wishes to stay, subject-specific tutoring options are discussed along with any organizational skills that may need improvement, with the student being reminded to take initiative in contacting teachers for needed assistance.

Widespread and readily available academic supports help ensure that students are able to keep up with academic content, improve study habits, and manage demanding workloads.

Staff members at both Hillsborough and Lamar are readily available to provide students with a range of academic assistance—from relatively informal drop-in question-and-answer sessions to highly intensive, structured tutoring—and many students, teachers, and administrators at both schools cited this availability

as an especially important factor contributing to student success. Supports at Hillsborough are more structured, while supports at Lamar are readily available but more informal, perhaps due to the program's small size. In keeping with the emphasis on student motivation as a prerequisite for success in the Diploma Programme, teachers and administrators at each site expect students to be proactive in asking for help.

Students at Hillsborough are highly aware of the importance of taking responsibility for seeking needed assistance. One explained, "The teachers are available—there's an open door policy—but it's our responsibility to ask for help," while another reinforced, "Help is available, but you have to want to be helped. They're not going to spoon-feed you." Still, teachers and administrators are eager to provide the requisite assistance. One Hillsborough teacher reflected:

Our goal is for every child to be successful...This is not a weed-them-out program...[We] take these kids, wherever they are, and work with them, and in some cases that means teachers working after school with kids, sometimes it means that—we have a study hall, and during that study hall, we coach and teach kids who are having problems in our classes.

Student supports at Hillsborough take a few specific forms, with the most explicit opportunity for tutoring made available through the JA program. JA (Journée Academique—as one student explained, "it's French for study hall") is a 90-minute period in the middle of the school day where students are expected to report to a specific teacher's classroom but can then approach other teachers or peers for help with specific subjects or skills. JA was put into place with the expectation that students would regularly seek out tutoring or mentoring opportunities, with teachers using the period to work with students seeking such assistance in addition to supervising the JA students assigned to their classroom. One teacher observed, "There's certainly a higher level of expectation than just 'everybody come in here and do your homework and be quiet." In explaining the value of JA, one SDHC administrator explained:

It's a great support for kids, and it allows, you know, that whole concept of relationships with teachers. I would think that it's one of the strongest supports for that, because the kids develop the relationships with the teachers, and they have access to the teachers in the times when they need it. So a kid may need math/science stuff—could be really good at humanities, but math/science is a stretch—and you've got people who are available. And it is a support, and you do get to know each other. It becomes very much a tight-knit group.

The JA system at Hillsborough is structured such that, although a given student's teacher might not be free to meet during that student's JA, another teacher from the department with similar content expertise should be available. Some departments go even further to ensure productive JA tutoring opportunities between any student and any department staff member, providing information such as syllabi and answer keys for certain courses to all teachers in the department. For example, one teacher described the practices in the math department:

The math teachers have all the answers to all the problems for the 9th graders—every math teacher does—so when a 9th grader needs to talk to a math teacher, the math teacher knows what the 9th-grade [class] is working on. Even if she only teaches calculus, she's got what the 9th graders are working on, and she has the answers to the questions and all of that available, so I can send a kid from my study hall up to see her.

IB students at Hillsborough also are assigned to a homeroom that they stay in—with the same students and the same teacher—for all 4 years. This provides students with an additional opportunity to build close relationships with students and staff and facilitates additional student support and monitoring. A district administrator reflected:

[Teachers at Hillsborough] know the kids in their homeroom. There is what we call a level of coaching that goes on through the 4 years, through their homeroom. So, you know, the homeroom teacher sees the report card and talks to kids about their grades, so there's an added level of accountability that the kid has here as part of that teacher-student relationship...I think that is a huge component [of student success].

In addition, Diploma Programme courses at Hillsborough are structured to build in substantial time for review prior to IB exams in May of the senior year. One teacher noted, "Content is the focus in 11th grade and then first semester of 12th grade, and then review takes over—because their exams start in May, so I think in February they start reviewing and preparing and getting ready for the exams."

At Lamar, where student motivation is paramount, student supports are less structured but are readily available to students who seek them out. Teachers typically have one to two 90-minute prep periods during each school day, during which time they frequently hold informal "office hours" for students, and most teachers also report spending a substantial amount of time at school before or after the formal school day in order to make themselves available for academic assistance. Additionally, it is "not a policy, but an expectation and a practice" that teachers provide students with their personal home or cell phone numbers in order to make themselves available when they are not on school grounds. Teachers take their responsibility to assist students seriously and are highly vocal about the expectation that students request help when needed. In describing the academic supports at Lamar, a teacher explained that students learn to be proactive about seeking assistance:

There's no structure, other than, it falls on the teacher to communicate to the student that it is their responsibility—they just can't simply hide, and at the end of the semester, figure out, "Oh, I'm not doing well at all." Rather, it's something that we try to rectify as we go through the year, and the students are very well aware of that. They feel very comfortable approaching us, and saying, you know, "I've never struggled with math before, math was always my strong point, and I'm struggling now. Can you please help?"

For many teachers, this ethos extends to classroom instruction as well. Another Lamar teacher commented, "I've noticed they don't have a hard time saying 'I don't understand. You need to stop.' And I explained that to them at the very beginning, you know, 'You need to let me know when you're confused. If you don't say anything, I'll assume you know it.'"

Lamar does require an "advisory period"—similar to a study hall—for 9th- and 10th-grade MYP students during periods where they have no classes scheduled (most 9th- and 10th-grade students have one such 90-minute period per day, but this depends on enrollment in electives). Studying is encouraged during this period and students are permitted to seek out tutoring, but this is not the primary purpose of the advisory period in a manner similar to JA at Hillsborough. Diploma Programme students are permitted to use their free periods however they please, with the expectation that they will make efficient use of their time and resources.

DISTRICT AND STATE SUPPORTS

The Diploma Programmes at HHS and Lamar have ample student supports at least in part because of the resources and other assistance they receive from school and district leaders. School and district leaders in turn receive support through a combination of state incentives and statewide organizations that encourage the development of IB programs.

District commitment to the IB approach ensures that IB programs have the staffing and other resources needed to support implementation.

At both sites, teachers and school-level administrators reported that district leaders have demonstrated support for the Diploma Programme through the provision of staffing, funding, and training resources.²⁴ One HHS administrator, having recently returned from a conference with personnel in similar positions at other IB schools across the state of Florida, discussed SDHC's support of the program in the context of these other schools:

One of the things they mentioned at [a recent IB] training I was at was that a lot of IB programs don't feel like they have the support of their building principal, or their district office is sort of wishy-washy on it, and that kind of blew me away, because we're the total opposite of that. Our principal loves IB...and certainly our district office [does as well]. Our superintendent is a tremendous supporter of IB, and loves it, and wants to grow it, so she's certainly on board...So now, at the highest levels of our district, IB has strong support. So that—what other IB programs say are the problem—I think that goes a long way towards preventing a lot of issues here.

One of the ways in which the districts support the Diploma Programmes is to allow for site-based hiring decisions. Because of the role that teacher buy-in plays in the success of each IB program, school and district staff members at both sites prioritize the selection of teachers that are well matched to the IB program. Thus, with district leaders' support, both Hillsborough and Lamar have special staffing provisions in place that differ substantially from the processes for traditional schools in the district. For example, while priority for intra-district teacher transfers is typically based upon seniority, administrators at both Hillsborough and Lamar are given substantial authority to select those teachers that fit best with the needs and goals of the IB program. As one SDHC administrator explained, this process is put into place for teaching positions in all magnet programs: "What the magnet office does is it protects magnet teaching positions from what we call pool placement [which is based on seniority.]" Instead, teachers for each magnet program are selected by a committee of that program's administrators, teachers, and parents. The selection process is not as formalized at Lamar, but Lamar's IB administrators retain a tremendous amount of authority with regard to hiring decisions.

Additionally, both districts provide financial support for their IB Diploma Programmes, further underscoring the value district leaders place on IB. In each district, the central office covers the cost of student exam fees for both AP and IB—which, in the words of one McAllen ISD official, "takes a big chunk out of the budget." The SDHC central office also covers the cost of IB-specific textbooks and provides access to "additional resources that would support their instructional programs," such as materials for science labs. Most substantially, district officials support the use of differential pay for teachers at all SDHC high schools, allowing IB teachers to be compensated at a level equivalent to an additional sixth of their salary for giving up a planning period to lead a JA and for staying on site for an extra hour before or after school to provide additional tutoring availability to students. At Lamar, additional financial support is provided to the IB program in the form of district accommodation of student-teacher ratios that are kept deliberately low relative to schools elsewhere in the district. As one administrator explained, these student-teacher ratios are kept purposefully low to accommodate for the substantial additional effort required of IB teachers to ensure student success in the Diploma Programme:

Our teachers really give a lot of feedback in order for students to be successful...They have informal assessments to do, and external assessments to do, looking at personal

²⁴ In fact, leaders in both districts have been involved with IB at the state or national level. The superintendent at SDHC was instrumental in bringing the IB program to the district and has served as an IB board member, and the recently retired IB coordinator in McAllen ISD was cited by other district staff as having been instrumental in negotiating the original articulation agreements with the state of Texas that secured automatic college credit hours for IB Diploma recipients.

projects, the extended essay, those other aspects of the program—if you keep on adding more [students per teacher], what is the breaking point as far as the demand on the teachers? And also the quality, and the success rate of the Diploma Programme?

In certain cases, student-teacher ratios at Lamar are considered problematically low even within the IB program—for example, some Higher-Level (HL) Diploma Programme courses serve only one to two students, which is a particular strain on resources. However, administrators anticipate that these instances of exceedingly low student-teacher ratios will be phased out over the next few years, since Diploma Programme enrollment is expected to rise due to increased student preparation and interest facilitated through the MYP in 9th and 10th grade at Lamar.

Finally, both districts encourage and support frequent professional development opportunities for IB teachers. With financial and logistical support from district leaders, teachers new to the IB programs at both Hillsborough and Lamar attend discipline-specific statewide IB training before the start of the school year. The "Level 1" training that new IB teachers attend is the first in a graduated series of teacher professional development programs and provides a basic introduction to IB curriculum, assessment, and teaching methods. One Lamar teacher described, "Level 1 is for when you're just getting your feet wet. It's 'here's what it's all about.'" Experienced teachers from both schools also participate in IB-sponsored professional development activities, with several teachers from each school reporting participation in the more advanced "Level 2" and "Level 3" training (focusing more deeply on internal and external assessments).

Teachers and administrators from both sites reported benefits from several aspects of the IB-specific training sessions. Teachers valued opportunities to brush up on content knowledge and learn about IB's expectations and methods of grading—as one Lamar teacher explained, the IB training "goes through the proscribed aspects of IB, and that really makes it all practical, so when I get into the classroom, I won't get on some tangent and wander off into something that isn't in the curriculum, or isn't a part of what they're assessed on." Additionally, many teachers and administrators are especially appreciative of the opportunity to meet informally with people in similar positions at other schools, explaining that these meetings allow them to learn about variations in the implementation of IB from site to site, share best practices, and brainstorm new ideas to further strengthen their own programs.

Additionally, IB teachers at HHS and the other SDHC IB high schools receive professional support from the district for networking and mentoring activities in order to maintain quality across the district's Diploma Programmes. Several times per year, teachers meet with their counterparts at the district's other IB high schools to discuss best practices—as one SDHC administrator explained, "during professional days, we let them come together and just sort of bounce ideas of one another." New SDHC IB teachers also have the option to participate in a mentoring program with more experienced teachers in their discipline; while this primarily occurs at the school level, one administrator explained that "at times, we've hooked up a teacher who's new to the program or new to a course…with an experienced teacher at another school" in order to ensure that the teacher receives targeted, discipline-specific guidance. Similar teacher networking activities occur at Lamar, but are coordinated more informally at the school or individual department level due to the program's smaller size and the fact that it is the district's only Diploma Programme.

Supportive state policies, combined with strong state-level IB organizations, create an environment conducive to the development and expansion of IB programs.

With a critical mass of IB programs in schools across both Florida and Texas, IB stakeholders in these states have formed statewide networks—the Florida League of IB Schools (FLIBS) and Texas IB Schools (TIBS), respectively—to coordinate professional development opportunities and instructional support and to interface with International Baccalaureate's North America office. FLIBS and TIBS offer the professional development discussed in the previous section, and each of these networks also periodically convenes interested teachers and administrators for more generalized discussions of IB best practices.

Additionally, each of these networks is involved in activities to advocate for the maintenance and expansion of state-level support—for example, the FLIBS mission statement explains that FLIBS "serves to further the interests of IB schools in the state" in part by "insuring that the Florida State Legislature recognizes the importance of the IB program as a path to schoolwide improvement."²⁵

Current state-level support for the IB Diploma Programme includes financial incentives for student IB participation in Florida and for student success on IB exams in both states. In Florida, districts receive increased per-pupil funding allocations for each student enrolled in an IB (or AP) course. Additionally, each state provides funds to schools and teachers based on student success with individual exams. One SDHC administrator explained how this process works in Florida:

[For] any student who receives a 4 or above on a single exam, we receive a weighted funding for that exam, for that student. On top of that, [for] any student who receives the Diploma, we receive another additional weight for that, which is very positive...And then, in addition to that...for every student that a teacher has that receives a 4 on an IB exam], or a 3 on an AP [exam], or higher, the teacher receives a \$50 stipend, up to \$2000.

Schools in Texas are eligible for similar funding. According to a Texas Education Agency (TEA) report on state-level AP and IB support, schools may receive up to \$100 for each student who receives at least a 4 on one or more IB exams or at least a 3 on one or more AP exams. The Texas legislature has approved additional provisions for teacher-specific funding in a model similar to Florida's, but the TEA report states that this incentive had not yet been funded as of the 2008-2009 academic year. However, the state does currently provide subsidies of up to \$450 per teacher for IB-specific training.²⁶

Furthermore, each state offers numerous college admission, credit, and scholarship incentives to encourage students to complete the IB Diploma Programme and remain in state to pursue postsecondary degrees. For example, successful completion of the IB Diploma Programme is one of several methods of earning Florida's Bright Futures scholarship, which covers 100% of college tuition and fees at many state colleges and universities. Students can also earn the scholarship by completing all Diploma Programme coursework and scoring above a specified threshold on the SAT or ACT exam, regardless of whether they receive the IB Diploma.²⁷ In Texas, any student who receives the IB Diploma automatically earns 24 hours of college credit at the state's colleges and universities—as one Lamar teacher explained, "that's almost a year of college that's taken care of." This opportunity to earn college credit appeals to many Lamar students, who report being eager to save tuition money and move immediately to more advanced coursework. Additionally, many Texas colleges and universities reach out to the state's IB students via scholarship opportunities and articulation agreements with professional degree programs such as medical and dental schools.

²⁵ Florida League of IB Schools website. Retrieved December 5, 2008, from http://www.flibs.org.

²⁶ Advanced Placement and International Baccalaureate Results in Texas, 2006-07 (p. 42). 2008: Division of Accountability Research, Texas Education Agency. Retrieved December 1, 2008, from http://ritter.tea.state.tx.us/research/pdfs/ap-ib_2006-07.pdf.

²⁷ Florida Department of Education—Office of Student Financial Assistance website. *Florida Bright Futures Scholarship Program.* Retrieved January 29, 2009, from http://www.floridastudentfinancialaid.org/ssfad/bf/.

LESSONS FROM THE CASE STUDY SCHOOLS

Lamar Academy and Hillsborough High School, and their respective districts, engage in a series of practices related to student preparation, recruitment, selection, and support that appear to directly affect their high participation and success rates with students from groups underrepresented in Diploma Programmes nationwide. In this chapter, we identify lessons from the two schools and discuss recommendations that may inform the efforts of schools, district and state entities, and IB leaders to broaden access and improve outcomes for underrepresented students.

Expand program availability. For students from all backgrounds, access to the Diploma Programme begins with availability, and locating Diploma Programmes in diverse school districts such as McAllen ISD and SDHC is a first step towards ensuring access for students who are traditionally underrepresented. Moreover, district leaders in both McAllen and Hillsborough County have elected to structure their Diploma Programmes as districtwide magnets in order to expand access to more students than would be able to participate if the program were restricted to a specific neighborhood or community. As IB looks to advance the elements of its strategic plan related to expanding access, IB leaders should encourage schools and districts to add new programs and grow existing ones, particularly in locations with large concentrations of underrepresented students. School and district leaders might consider structuring their IB programs as magnets with the explicit intention of increasing accessibility to students across the district or locating programs in schools serving underrepresented students and encouraging these students to enroll. In working with schools and districts, IB should be sure to communicate that motivated students entering the program performing at, and even below, grade level have been successful in completing Diploma Programmes and that many such students have earned the full IB Diploma. Schools and districts that are considering establishing IB programs but may have misconceptions about the type of student such programs are intended to serve can look to Lamar and Hillsborough as examples of highly successful programs that reach beyond "elite" student populations.

Focus on early preparation. The nationwide achievement gap has the effect of limiting the proportion of African American, Hispanic, Native American, and low-income students who meet the grade-level performance criteria that both case study schools use as a minimum threshold for student preparedness. Both McAllen and Hillsborough have districtwide initiatives aimed at raising overall student achievement—which, it is hoped, also will have the effect of preparing larger numbers of students for the academic rigor of their Diploma Programmes. These districtwide initiatives involve efforts to increase rigor in elementary and middle schools, including but not limited to IB's own PYP and MYP programs. Importantly, each district has its Diploma Programme structured as a 4-year course of study, with students entering in 9th grade and receiving 2 years of aligned curriculum and supports prior to formally beginning Diploma Programme coursework at the beginning of 11th grade. Allowing students to enter a Diploma Programme track at an earlier juncture enables schools to provide the early preparation that appears to contribute to student success. IB should be sure school and district leaders are aware of the potential for connecting the 9th- and 10th-grade Middle Years Programme and the Diploma Programme. For their part, district and school leaders looking to both expand access and improve results should consider providing aligned programs in 9th and 10th grade.

Engage in targeted student outreach and recruitment. Increased student participation in the Diploma Programme depends on building student awareness and interest. Multifaceted program-led outreach and recruitment strategies are critical to engaging a broad range of students and informing them of the value of the Diploma Programme. To this end, leaders at both Hillsborough and Lamar systematically brand

their programs to appeal to motivated students interested in preparing themselves for higher education, and program staff work hard to attract such students through a series of open houses, school and community forums, and other recruitment efforts. Districts and schools seeking to expand the reach of their IB programs should consider engaging in strategic efforts to inform students of the program's value and to explain the qualities that program staff are looking for, as well as to dispel any misconceptions (such as those about IB being for only the highest performing students). Additionally, school and district staff should work with teachers and counselors of students in the program and encourage high-potential students to participate, perhaps nominating such students to program leaders. When combined with efforts by Diploma Programme staff and district leaders to identify prospective applicants from underrepresented groups whose academic records suggest the potential for success in the Diploma Programme, this strategy could be an especially promising means of targeting outreach. More centrally, IB leaders might consider creating recruitment tools and training administrators regarding effective recruitment strategies.

Consider the balance between selectivity and student persistence. Both Lamar and Hillsborough have achieved unusually successful results for students who attempt the IB Diploma, in spite of different approaches to the student selection process. Relatively open admission at Lamar enables nearly any interested student to try IB, but the program experiences substantial student attrition, with those students who find they cannot keep up typically returning to their home high schools. In contrast, Hillsborough employs a more selective admission process, but retains a large majority of its initial enrollees. Examined alongside one another, these two approaches illustrate some of the tradeoffs that schools and districts must consider in their efforts to simultaneously increase access to and performance in the Diploma Programme. School and district leaders who seek to expand access to underrepresented students while providing sufficient preparation for success in the Diploma Programme should reflect on the tradeoffs related to selectivity and expectations regarding student persistence and attainment of the Diploma. In particular, in expanding access, program staff should evaluate their capacity to support incoming students who may struggle with the rigor of the IB curriculum.

Monitor student progress and ensure the availability of academic assistance. For many students, persistence and success in the Diploma Programme requires that they have substantial opportunities for tutoring and other academic assistance. Ample student support is especially important for schools with relatively open admission policies. At both Lamar and Hillsborough, teachers are readily available to provide additional assistance during and outside of the school day. Programs such as JA at Hillsborough, in which students are explicitly encouraged to meet with teachers for tutoring during study hall, seem particularly effective. While teachers and administrators at both schools emphasize the need for students to take responsibility for accessing necessary support, they also put considerable effort into monitoring student progress and determining appropriate interventions. In both cases, small program size facilitates careful monitoring of student progress. To encourage school leaders to replicate these and other promising student supports, IB should support networking among affiliate schools to enable sharing of best practices in these areas. Schools and districts should carefully monitor student progress and develop early warning systems to identify students at risk of getting off track, and they should assess the adequacy of their support systems and consider additional strategies for bolstering student support.

Ensure adequate district support for the Diploma Programme. District leaders have the capacity to substantially influence school-level IB program quality along several dimensions. At both Hillsborough and Lamar, teachers and school leaders reported that district leaders embraced the Diploma Programme. Indeed, many of the programs and features that were most frequently associated with student success at both sites require strong district commitment. District leaders at both sites demonstrate support for the Diploma Programme by allowing for site-based hiring decisions, providing funding, and ensuring that ongoing professional development is available. Furthermore, leaders' decisions relating to program design have led directly to each program's enclosed structure, deliberately small size, and the fact that

students as well as teachers choose to participate. Districts considering adopting the Diploma Programme should be prepared to provide the supports necessary for student success, and IB leaders are encouraged to promote the sharing of best practices among district leaders.

Encourage state entities to adopt policies that incentivize IB participation and the establishment of additional IB programs. Florida and Texas both have more Diploma Programmes than nearly any other U.S. state. Due to the critical mass of programs in these states, IB affiliates have formed state-level organizations to coordinate professional development, provide instructional guidance, and advocate for supportive policies at the state level. This advocacy work has led state policymakers to establish financial and academic incentives that encourage student participation and the development of new IB programs, including college credit and scholarship opportunities for IB Diploma recipients and financial assistance for schools and teachers whose students are successful on IB exams. IB should continue to encourage schools and districts to form or work with existing state or regional organizations to advocate for supportive policies at the state level. Likewise, schools and districts should work together to increase awareness of the value of the Diploma Programme among state policymakers.