

MEMORANDUM

July 31, 2023

TO: F. Mike Miles
Superintendent of Schools

FROM: Allison E. Matney, Ed.D.
Executive Director, Assessment, Accountability, and Compliance

SUBJECT: **INTERNATIONAL BACCALAUREATE PROGRAM EVALUATION, 2021–2022**

The International Baccalaureate (IB) program offers students a strong curriculum monitored by an international consortium of educators headquartered in Geneva, Switzerland. The organization originated over fifty years ago in Europe as an effort by international schools to assure quality educational standards for students, regardless of where they lived. Today, the organization uses the talents of educators around the world to continuously update curriculum, train teachers, assess student work, and evaluate the program. Currently, 5,500 schools in 160 countries around the world offer the IB diploma, which is recognized at colleges and universities around the world (IBO, 2022a).

The International Baccalaureate Organization adopted a mission statement with the following goals. The IBO offers schools a comprehensive and balanced curricula with challenging assessments to assist in developing the individual talents of young people and in teaching them ways to relate the classroom experience to real-world application. In addition to intellectual rigor and high academic standards, emphasis is placed on international understanding and responsible citizenship, so that IB students become critical and compassionate thinkers, lifelong learners and informed participants in world affairs (IBO, 2022b).

Each IB course is guided by a syllabus from the International Baccalaureate office in Wales, which also monitors the coursework and prepares the examinations in each subject area. The IB program provides syllabi and teacher training, and monitors coursework through classroom visitations and through inspection of instructional materials such as lab notebooks which are mailed to internationally designated educators. In addition, completed IB coursework is rigorously evaluated through IB examinations which are conducted at the students' high schools. However, due to the COVID-19 pandemic, students in HISD were assessed by the non-exam route in 2020 and 2021. The non-exam route used a combination of internal assessments that were externally assessed, teacher predicted grades, and historic data. As a result of the loss of instructional time which impacted students who began their studies in 2020, assessment adaptations were put in place for 2021 and 2022 (IBO, 2022i).

Key findings include (general memo guidelines):

- For 2022, 1,097 IB students in HISD took a total of 2,942 IB examinations and 1,489 scored 4 or higher, on a scale of 1 to 7.
- Hispanic and African American students are less likely to enroll in IB courses compared to their White and Asian peers.
- When looking at performance on IB exams by score distribution and race/ethnicity, Asian and Hispanic students had the highest percentage of exams scored at 7 (4.7 percent and 4.6 percent, respectively) while African American students had the highest percentage of exams scoring at 1 (17.9 percent).

Should you have any further questions, please contact Allison Matney in Assessment, Accountability, and Compliance at (713) 556-6700. Further distribution of this report is at your discretion.

AEM

Attachment

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RESEARCH

Educational Program Report

**INTERNATIONAL BACCALAUREATE
PROGRAM EVALUATION, 2021-2022**



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International Baccalaureate Program, 2021–2022

Executive Summary

Program Description

The International Baccalaureate (IB) program offers students a strong curriculum monitored by an international consortium of educators headquartered in Geneva, Switzerland. The organization originated over fifty years ago in Europe as an effort by international schools to assure quality educational standards for students, regardless of where they lived. Today, the organization uses the talents of educators around the world to continuously update curriculum, train teachers, assess student work, and evaluate the program. Currently, 5,500 schools in 160 countries around the world offer the IB diploma, which is recognized at colleges and universities around the world (IBO, 2022a).

The International Baccalaureate Organization adopted a mission statement with the following goals. The IBO offers schools a comprehensive and balanced curricula with challenging assessments to assist in developing the individual talents of young people and in teaching them ways to relate the classroom experience to real-world application. In addition to intellectual rigor and high academic standards, emphasis is placed on international understanding and responsible citizenship, so that IB students become critical and compassionate thinkers, lifelong learners and informed participants in world affairs (IBO, 2022b).

Each IB course is guided by a syllabus from the International Baccalaureate office in Wales, which also monitors the coursework and prepares the examinations in each subject area. The IB program provides syllabi and teacher training, and monitors coursework through classroom visitations and through inspection of instructional materials such as lab notebooks which are mailed to internationally designated educators. In addition, completed IB coursework is rigorously evaluated through IB examinations which are conducted at the students' high schools. However, due to the COVID-19 pandemic, students in HISD were assessed by the non-exam route in 2020 and 2021. The non-exam route used a combination of internal assessments that were externally assessed, teacher predicted grades, and historic data. As a result of the loss of instructional time which impacted students who began their studies in 2020, assessment adaptations were put in place for 2021 and 2022 (IBO, 2022i).

Highlights

- For 2022, 1,097 IB students in HISD took a total of 2,942 IB examinations and 1,489 scored 4 or higher, on a scale of 1 to 7.
- Although the number of students earning an IB Career-Related Program (CP) Certificate has increased from 49 in 2021 to 73 in 2022, the number of students earning an IB diploma has decreased from 197 in 2021 to 131 in 2022.
- For students enrolled in grades 11 and 12 districtwide, eight percent were enrolled in at least one IB course.
- Hispanic and African American students are less likely to enroll in IB courses compared to their White and Asian peers.

- IB Exams taken in the Individuals and Societies academic area represented the highest number of exams for both 2021 and 2022.
- Out of 40 IB Exams where 5 or more students tested, HISD exceeded world mean scores on four exams. These were Spanish B HL, Geography SL, Astronomy SL, and Music SL.
- When looking at performance on IB exams by score distribution and race/ethnicity, Asian and Hispanic students had the highest percentage of exams scored at 7 (4.7 percent and 4.6 percent, respectively) while African American students had the highest percentage of exams scoring at 1 (17.9 percent).

Recommendations

1. Consider alternative funding streams to help off-set the cost of offering IB programming.
2. The extra demands made upon IB teachers and the extra commitment IB schools have made to their students should be recognized by the district and the community. Stipends would be an appropriate recognition of the extra time and effort required of IB teachers and coordinators. Moreover, IB training is costly so financial incentives to retain IB teachers would be an important cost-effective measure.
3. Consider methods to strengthen vertical alignment between 9th and 10th grades to the Diploma Programme of 11th and 12th grades.
4. Consider providing additional instructional and emotional supports for underrepresented groups based on IB performance data.
5. Teacher surveys indicated the need for better planning and teamwork and creating a campus framework for success by implementing the following recommendations to ensure the IB program is implemented with fidelity:
 - a. strengthening the level of support from the district and school administrators by:
 - i. ensuring administration and teacher buy-in and understanding of the IB program,
 - ii. improve **student recruitment strategies** to provide a more **equitable** program,
 - iii. consider the creation of a true pre-IB program, including IB training,
 - iv. increasing the budget to provide quality professional development for both teachers and administrators,
 - v. increasing the resources needed by teachers,
 - vi. dedicated planning time and compensation for providing support for struggling students,
 - vii. reducing the teaching load, especially for coordinators that also taught,
 - viii. providing smaller class sizes, and
 - ix. hiring more IB teachers.
6. Consider conducting a districtwide needs assessment and soliciting topics of interest from new IB teachers, such as internal assessments, and have veteran IB teachers address that topic districtwide. Provide a stipend for veteran teachers to provide training designed to specifically address areas of need.

Introduction

Program Description

The International Baccalaureate (IB) program offers students a strong curriculum monitored by an international consortium of educators headquartered in Geneva, Switzerland. The organization originated over fifty years ago in Europe as an effort by international schools to assure quality educational standards for students, regardless of where they lived. Today, the organization uses the talents of educators around the world to continuously update curriculum, train teachers, assess student work, and evaluate the program.

The International Baccalaureate Organization is a nonprofit international educational organization established in 1968. The organization offers the International Baccalaureate (IB) Diploma program for students aged 16–19. The IB Diploma Programme is a two-year course of study that prepares students for college. The IB Diploma Programme is recognized and accepted by universities around the world. The IB organization also conducts periodic reevaluations of member schools and provides ongoing teacher training. Currently over 5,500 schools in 160 countries offer the International Baccalaureate Program (IBO, 2022b).

Background

The International Baccalaureate Diploma Programme was first approved for students in the district at Bellaire High School in 1979 (IBO, 2023). The Houston Independent School District School Board described the program's value as motivating academically talented students toward greater achievement, by providing a challenging, advanced level program with emphasis on the philosophy of learning. By 1990, the IB program was offered in the following nine high schools in HISD: Bellaire, Jones, Lamar, Wisdom, Madison, Scarborough, Sharpstown, Waltrip, and Westbury. From 1990 to 2000, the diploma program was terminated in all but three schools, Bellaire, Lamar, and Waltrip high schools. Waltrip High School formally closed its IB diploma program in the 2005–2006 school year. During the past six years, the following high schools were authorized to offer the Diploma Program: Heights High School (2016), Chavez High School (2017), Yates High School (2020), and Sharpstown International (2021).

The IB Program

The IB coursework and examinations take place in each of six subject groups: studies in language and literature; language acquisition; individuals and societies; sciences; mathematics; and the arts. Students may opt to study an additional sciences, individuals and societies, or languages course instead of a course in the arts. Diploma candidates take one examination in each of the six subject groups: at least three but not more than four exams at the higher level (240 teaching hours), and the remaining exams at the standard level (150 teaching hours). Students are expected to demonstrate a greater body of knowledge, understanding, and skills at the higher level (IBO, 2022c). Two standard level exams are taken at the end of the junior year, and the other four exams at the end of the senior year. Students who are not diploma candidates may take exams for certificates. Most colleges honor certificates and IB diplomas with advanced standing and/or college credits.

In addition to six areas of study, the IB program includes three major requirements. The Theory of Knowledge (TOK) course, designed to stimulate critical and reflective thinking among students, challenges students to question the bases of knowledge, to be aware of subjective and ideological biases, and to develop a personal mode of thought based on analysis of evidence expressed in rational argument. An IB candidate must document Creativity, Action, and Service (CAS) activities, including artistic activities such as music or theater; sports or other physical exercise; and community service activities. One of the stated

goals of IB is to educate students for compassion as well as competence. Finally, Diploma candidates are required to undertake original research and write an Extended Essay of some 4,000 words in length (IBO, 2022d).

Achievement of the IB Diploma

Each examined subject is graded on a scale of 1 (minimum score) to 7 (maximum score). The award of the diploma requires students to meet defined standards and conditions including a minimum total score of 24 points, and the satisfactory completion of the extended essay, Theory of Knowledge course (TOK) and CAS (creativity, action, service) activities. The maximum score of 45 includes three points for the combination of the extended essay and work in TOK. All students are encouraged to engage in the full diploma program. Students who are not diploma candidates may take selected IB courses and sit for IB examinations. Upon scoring of a four or higher in an IB examination, such students are awarded an IB certificate in that subject area, for which many colleges grant college credit.

Scoring of the Extended Essay (EE) and Theory of Knowledge (TOK)

The extended essay and TOK paper are graded on an A–E scale scored on a rubric. The Theory of knowledge (TK) is assessed through an oral presentation and a 1,600-word essay (IBO, 2022e). The extended essay is externally assessed on a scale from 0 to 34. This numeric score relates to a band which includes (IBO, 2022f):

- A—work of an excellent standard
- B—work of a good standard
- C—work of a satisfactory standard
- D—work of a mediocre standard
- E—work of an elementary standard

The International Baccalaureate (IB) Career-related Programme (CP)

The CP combined the values of the IB into a program addressing the needs of students engaged in career-related education (IBO, 2022g). The educational framework includes courses from the IB Diploma Programme, the CP core, and career-related studies. Students must complete a reflective project, which can be submitted in different formats. There are four schools that are authorized to offer the CP Diploma: Chavez, Heights, Lamar, and Worthing high schools.

Program Cost

The district cost for the IB program is \$11,650 per school with the Diploma only, \$13,130 per school with both Diploma and Career-related program, and \$8,500 per school with Career-Related program. The district paid the annual fees for nine campuses that were identified as Superintendent Schools: Worthing HS, Yates HS, Henry MS, Cullen MS, Houston MSTC, Foster ES, Woodson ES, Mading ES, and Shadydale ES. In addition to the annual fee, there is an exam fee of \$119. Therefore, the exam fee costs for a Diploma candidate, based on the required six exams would be \$714. However, some candidates may take seven exams for a cost of \$833. Career-related candidates are required to take 2 IB exams at \$119 per exam but may take more. There is no fee for the Extended Essay and Theory of Knowledge for IB Diploma Candidates. If a non-Diploma Candidate takes the Extended Essay or Theory of Knowledge, the fee is \$46 for the Theory of Knowledge and \$91 for the Extended Essay. For the 2021–2022 school year, the district paid a total of \$489,530. This total includes the cost of IB exams for all students. The state provides a \$40 subsidy for economically disadvantaged students.

Program Evaluation

The purpose of this report was to describe the IB Diploma program as an educational opportunity available to HISD students by addressing the following research questions:

1. During 2021–2022, what was the demographic profile of an IB student and how did the participants compare to those in the district?
2. In which IB examinations did HISD students participate, what were their scores, and how did district and school results compare to world results?
3. How many HISD students achieved the IB and CP diplomas and how did this compare with previous district and world results?
4. What recommendations for support and improvement were made that would enhance the learning opportunities for students in the program?

Methods

Data Collection and Analysis

Data collection spanned the 2020–2021 and 2021–2022 school years. International Baccalaureate test data were provided by the Director of Post-Secondary Programming. Demographic information was extracted from the summer PEIMS data file. IB courses were identified by program personnel and were used to identify students enrolled in the program. The IB Coordinators provided School Statistics reports with the World-Wide scores as well as a publication from the International Baccalaureate Organization (IBO) with more comprehensive comparative data. In addition, IB personnel reviewed the parameters of the evaluation, provided support in identifying IB courses and teachers, as well as costs of the program.

An IB teacher survey was developed with substantive feedback from the Director of Post-Secondary Programming. The survey was distributed electronically through SurveyMonkey® on March 21, 2022 and closed on June 7, 2022. Two reminders were sent on April 4, 2022, and May 3, 2022, to any teachers who had not completed the survey before it closed.

Basic descriptive statistics were employed to analyze the data. For survey items, the responses for each category were tabulated and/or percentages calculated. Due to rounding, some totals may not equal 100 percent. The response rates were calculated by dividing the number of surveys returned by the total number of emails sent. One-hundred sixteen teacher surveys were distributed and 72 were returned yielding a response rate of 62 percent. For the open-ended questions, responses were grouped into emergent categories.

Data Limitations

The Diploma Program was designed for eleventh and twelfth grade students; however, there were four tenth grade students assessed at Lamar High School. These students were excluded from the analysis as were students receiving a score of N (No grade awarded) and P (Pending).

The source used for the World-Wide scores was a statistical bulletin with the May 2022 results (IBO, 2022h). This document contained the World-Wide scores for all IB tests administered. There were slight differences in the World-Wide scores provided by each HISD school, and not all HISD schools assessed their students in the same subject areas. By using the IBO source document, the data were standardized.

Due to the disruption in education caused by the COVID-19 pandemic, students in HISD were assessed by the non-exam route in 2021. The non-exam route used a combination of internal assessments that were externally assessed, teacher predicted grades, and historic data. For both 2021 and 2022, the IBO adapted their assessment model by reducing the selected subject components (IBO, 2022i).

Data quality issues were evident by examining campus results for students enrolled in an IB course. Three students at TCAH and one student at Waltrip High School enrolled in an IB course. These campuses do not have an authorized IB program. These schools were excluded from the analysis.

Results

During 2021–2022, what was the demographic profile of an IB student and how did the participants compare to those in the district profile?

Table 1 presents the number and percent of HISD students in grades 11–12 who enrolled and completed at least one IB course by student group including race/ethnicity, gender, economic status, emergent bilingual (EB) status, gifted and talented (G/T) status, special education status, at-risk status, and homeless status. This table reflects an *unduplicated* count of students for courses. Students who were enrolled in the second semester of a two-semester course were eligible to complete an IB course.

	Students Enrolled in Grades 11–12		Students Enrolled in 1+ IB Courses		Students Completed 1+ IB Courses		Completed and Passed 1+ IB Courses	
	N	%	N	%	N	%	N	%
Grades 11 and 12 Combined - All	25,020	100.0	2,008	8.0	1,777	88.5	1,666	83.0
Race/Ethnicity								
Hispanic	15,309	61.2	984	6.4	846	86.0	759	77.1
African American	5,602	22.4	361	6.4	319	88.4	305	84.5
White	2,678	10.7	446	16.7	411	92.2	402	90.1
Asian	1,043	4.2	163	15.6	151	92.6	150	92.0
Other	388	1.6	54	13.9	50	92.6	50	92.6
Gender								
Female	12,995	51.9	1,136	8.7	1,007	88.6	945	83.2
Male	12,025	48.1	872	7.3	770	88.3	721	82.7
Special Populations								
Economically Disadvantaged	18,782	75.1	1,071	5.7	926	86.5	844	78.8
Emergent Bilingual	4,917	19.7	109	2.2	88	80.7	72	66.1
Gifted/Talented	5,470	21.9	914	16.7	849	92.9	809	88.5
Special Education	2,556	10.2	64	2.5	52	81.3	51	79.7
At Risk	13,653	54.6	634	4.6	492	77.6	404	63.7
Homeless	1,437	5.7	104	7.2	95	91.3	93	89.4

Source: SIS Grades File, 2022

Note: Other combines American Indian, Pacific Islander, and Two or more races.

- Districtwide, 8 percent of eleventh and twelfth grade students enrolled in at least one IB course for 2021–2022.

- Hispanic and African American students are less likely to enroll in IB courses compared to their White and Asian peers. Only 6.4 percent of both African American and Hispanic students were enrolled in one or more IB courses in 2021–2022 compared to 16.7 percent and 15.6 percent of White and Asian students, respectively.
- IB Completion rates were highest for Asian and Other (American Indian, Pacific Islander, and Two or more races) students and lowest for at-risk students.
- The profile of a typical IB student is a White gifted and talented female.
- Approximately 89 percent of IB students **completed** one or more IB courses and 83 percent **completed and passed** at least one IB course.

Table 2 shows the number and percentage of eleventh and twelfth grade students who enrolled, completed, and passed at least one IB course by campus. For enrollment at a campus, a student was required to have at least one grade or conduct mark for each semester of a year-long course. Unduplicated counts are provided districtwide. For the unduplicated total, a student in grades 11–12 is counted only once if the student took and completed one or more IB courses. The campus attribution is based on the SIS Grades file for the 2021–2022 school year. Percentages are based on the IB courses taken by students in grades 11–12.

	Students Enrolled in Grades 11–12	Students Enrolled in 1+ IB Courses		Students Completed 1+ IB Courses		Students Completed and Passed 1+ IB Courses	
	N	N	%	N	%	N	%
Bellaire HS	1,527	183	12.0	154	84.2	154	84.2
Chavez HS	1,115	445	39.9	374	84.0	332	74.6
Heights HS	1,090	178	16.3	152	85.4	149	83.7
Lamar HS	1,343	1,130	84.1	1,039	91.9	974	86.2
Sharpstown Intl	328	23	7.0	21	91.3	21	91.3
Worthing HS	371	6	1.6	5	83.3	4	66.7
Yates HS	409	39	9.5	32	82.1	32	82.1

Source: Source: SIS Cycle Grades Files, 2022

Note: Students were required to receive a grade of 70 or higher to pass a course.

- Lamar High School has the highest percentage (84.1 percent) of students enrolled in at least one IB course and Worthing High School had the lowest percentage at 1.6 percent.
- In 2021–2022, the percentage of students enrolled in at least one IB course and in grades 11–12 who completed and passed at least one IB course ranged from 66.7 percent at Worthing High School to 91.3 percent at Sharpstown International High School.

In which IB examinations did HISD students participate, what were their scores, and how did district and school results compare to world results?

Overview

Table 3 summarizes the number of IB exams taken in the required six academic areas for 2021 and 2022. Due to the COVID-19 pandemic, students in HISD were assessed by the non-exam route in 2021.

Table 3. Number of IB Exams Taken by Academic Area, 2021 and 2022			
Academic Areas	2021	2022	Δ
Group 1: Language and Literature	552	568	16
Group 2: Language Acquisition	476	383	-93
Group 3: Individuals and Societies	873	828	-26
Group 4: Sciences	273	443	170
Group 5: Mathematics	431	453	22
Group 6: The Arts	113	77	-36
Interdisciplinary Subjects	267	190	-77
Total	2,985	2,942	-43

Source: IB Data files, 2021 and 2022

Note: Environmental Systems and Societies is an interdisciplinary subject (Group 3 and 4)

- For 2022, 1,097 IB students in HISD took a total of 2,942 IB examinations.
- IB Exams taken in the Individuals and Societies academic area represented the highest number of exams for both 2021 and 2022.
- For both 2021 and 2022, the lowest number of IB Exams were taken in The Arts.
- There was a decrease in the number of exams taken when comparing 2022 to the previous year by 1.4 percent.

Table 4 (p. 9) illustrates the average district and world-wide performance by subject and level. Out of the 2,942 IB examinations, 1,382 of the exams were at the Higher Level (HL) with the remaining 1,562 at the Standard Level (SL). Campus-level results can be found in **Appendices B–G** (pp. 27–32).

- Out of 40 IB Exams where 5 or more students tested, HISD exceeded world mean scores on four exams. These were Spanish B HL, Geography SL, Astronomy SL, and Music SL.
- Out of 40 IB Exams where 5 or more students tested, 11 IB Exams had an average score of 4 or higher on a seven-point scale (1 to 7).
- Out of 35 IB Exams for which five or more students tested in 2021 and 2022, there was an increase in the average score on 7 of the IB Exams in 2022. These included: English A Literature HL, Economics HL and SL, Geography HL, Chemistry SL, Film HL, and Environmental Systems and Societies SL.
- In 2022, on the Spanish B HL Exam where 73 IB Exams were given, the students in HISD had a mean score of 5.88 which exceeded the world average score of 5.55, reflecting the highest average score of all district exams.

Academic Areas	Subject	Test Level	Exams Taken		Mean Scores			
			HISD				Diff	World
			2021	2022	2021	2022		
Group 1: Language and Literature	ENGLISH A LAL	HL	455	495	4.12	3.97	▼	5.03
Group 1: Language and Literature	ENGLISH A LIT	HL	96	73	4.04	4.10	▼	4.73
Group 1: Language and Literature	VIETNAM A LIT	SL	1	--	*	--		--
Group 2: Language Acquisition	ARABIC B	HL	--	2	--	*		5.88
Group 2: Language Acquisition	ARABIC B	SL	10	4	3.60	*		5.69
Group 2: Language Acquisition	CHINESE B	HL	2	2	*	*		6.29
Group 2: Language Acquisition	CHINESE B	SL	25	18	4.06	3.50	▼	5.81
Group 2: Language Acquisition	FRENCH AB.	SL	8	7	4.50	2.86	▼	5.00
Group 2: Language Acquisition	FRENCH B	HL	5	5	5.80	5.00	▼	5.38
Group 2: Language Acquisition	FRENCH B	SL	66	53	3.76	3.49	▼	5.13
Group 2: Language Acquisition	GERMAN AB.	SL	3	--	*	--		--
Group 2: Language Acquisition	GERMAN B	HL	1	6	*	4.33	▼	5.81
Group 2: Language Acquisition	GERMAN B	SL	3	1	*	*		5.32
Group 2: Language Acquisition	HEBREW B	SL	1	--	*	--		--
Group 2: Language Acquisition	HINDI B	SL	1	--	*	--		--
Group 2: Language Acquisition	ITALIAN AB.	SL	--	1	--	*		5.03
Group 2: Language Acquisition	ITALIAN B	HL	2	1	*	*		--
Group 2: Language Acquisition	ITALIAN B	SL	2	--	*	--		5.90
Group 2: Language Acquisition	LATIN	SL	1	--	*	--		--
Group 2: Language Acquisition	SPANISH AB.	SL	32	28	5.03	2.57	▼	5.06
Group 2: Language Acquisition	SPANISH B	HL	73	49	6.59	5.88	▲	5.55
Group 2: Language Acquisition	SPANISH B	SL	241	206	5.20	4.92	▼	5.04
Group 3: Individuals and Societies	ART HISTORY	SL	19	69	3.63	3.01	▼	4.48
Group 3: Individuals and Societies	BUS MAN	HL	4	93	*	3.44	▼	5.25
Group 3: Individuals and Societies	ECONOMICS	HL	302	88	3.54	3.67	▼	5.40
Group 3: Individuals and Societies	ECONOMICS	SL	10	19	2.90	3.16	▼	5.02
Group 3: Individuals and Societies	GEOGRAPHY	HL	19	16	4.47	4.56	▼	5.52
Group 3: Individuals and Societies	GEOGRAPHY	SL	7	8	5.14	5.13	▲	5.06
Group 3: Individuals and Societies	GLOB. POL	SL	--	20	--	4.75	▼	5.09
Group 3: Individuals and Societies	HISTORY	HL	325	245	3.78	3.65	▼	4.65
Group 3: Individuals and Societies	PSYCHOLOGY	SL	117	232	3.67	2.90	▼	4.80
Group 3: Individuals and Societies	WORLD RELIG.	SL	70	38	4.89	4.42	▼	5.03
Group 4: Sciences	ASTRONOMY	SL	11	8	5.27	4.25	▲	4.14
Group 4: Sciences	BIOLOGY	HL	43	79	4.26	3.56	▼	4.73
Group 4: Sciences	BIOLOGY	SL	126	114	3.59	3.16	▼	4.56
Group 4: Sciences	CHEMISTRY	HL	6	10	4.50	2.40	▼	4.99
Group 4: Sciences	CHEMISTRY	SL	33	9	3.36	3.56	▼	4.54
Group 4: Sciences	COMPUTER SC.	HL	1	19	*	3.84	▼	5.26
Group 4: Sciences	COMPUTER SC.	SL	6	6	4.17	2.50	▼	5.10
Group 4: Sciences	PHYSICS	HL	9	25	3.78	3.72	▼	5.09
Group 4: Sciences	PHYSICS	SL	38	74	4.82	3.62	▼	4.64
Group 4: Sciences	SPORTS EX SCI	SL	--	99	--	2.67	▼	4.18
Group 5: Mathematics	MATH ANALYSIS	HL	51	69	4.41	3.55	▼	5.21
Group 5: Mathematics	MATH ANALYSIS	SL	67	109	4.46	3.19	▼	4.99
Group 5: Mathematics	MATH APPS	HL	40	48	3.43	2.69	▼	4.79
Group 5: Mathematics	MATH APPS	SL	273	227	3.67	3.25	▼	4.39
Group 6: The Arts	DANCE	HL	5	1	5.80	*		4.89
Group 6: The Arts	DANCE	SL	4	--	*	--		--
Group 6: The Arts	FILM	HL	38	17	3.58	3.59	▼	4.56
Group 6: The Arts	FILM	SL	8	2	4.25	*		4.36
Group 6: The Arts	MUSIC	SL	6	7	5.33	5.14	▲	4.71
Group 6: The Arts	THEATRE	HL	11	17	4.45	2.35	▼	4.97
Group 6: The Arts	THEATRE	SL	10	1	5.00	*		4.66
Group 6: The Arts	VISUAL ARTS	HL	15	23	3.73	3.13	▼	4.45
Group 6: The Arts	VISUAL ARTS	SL	16	9	4.00	3.33	▼	4.10
Interdisciplinary Subject	ENV. AND SOC.‡	SL	267	190	3.26	3.40	▼	4.47
District IB Total			2,985	2,942	4.05	3.62	▼	4.97

Sources: IB data file 2022 and *The IB Diploma Programme and Career-Related Programme Final Statistical Bulletin, May 2022 Assessment Session*

‡ Environmental Systems and Societies is an Interdisciplinary Subject (Group 3 and 4). A "—" denotes no students were tested.

*Masked for number tested less than 5 students.

Note: The cell is blue for the highest average score and red for the lowest average score. Bolded and outlined cells reflect HISD mean scores > world scores.

- In 2022, in Theatre HL where 11 IB Exams were given, the world average score of 4.97 exceeded the district's score of 2.35, reflecting the lowest average score of all district exams.

- Economics HL reflected the IB Exam for which the greatest gains in the average score occurred when comparing 2021 to 2022 (0.26).
- The mean score of Spanish AB SL decreased by 2.46 points from 5.03 in 2021 to 2.57 in 2022, reflecting the largest negative differential.
- The world scores exceeded the district by at least 2 points (on a scale of 1 to 7), on the following seven IB Examinations: Chinese B SL, French AB. SL, Spanish AB. SL, Chemistry HL, Computer Science SL, Math APPS HL, and Theatre HL.
- Of the six schools, Bellaire High School was the only school with a mean score for all subjects that exceeded the world mean score (5.00 vs. 4.97) (**Appendices B–G**).
- Bellaire High School's mean score on the following eight exams exceeded the world mean score: English A Language and Literature HL, Spanish B SL, Economics HL, Geography SL, Astronomy SL, Biology HL, Music SL, and Environmental Systems and Societies SL (**Appendix B**, p 27).
- Chavez High School's mean score on the Spanish B HL and SL exams exceeded the world mean scores (**Appendix C**, p. 28).
- Heights High School's mean score on the History HL and Film HL exams exceeded the world mean score (**Appendix D**, p. 29).
- Lamar High School's mean score on the Spanish B HL exam exceeded the world mean score (**Appendix E**, p. 30).

Table 5 shows the participation and performance of HISD students in the IB Diploma program or those students taking courses for a certificate. Students earning a score of 4 or higher may qualify to receive college credit. At some universities, recipients of an IB Diploma can earn up to 32 credits (one full year).

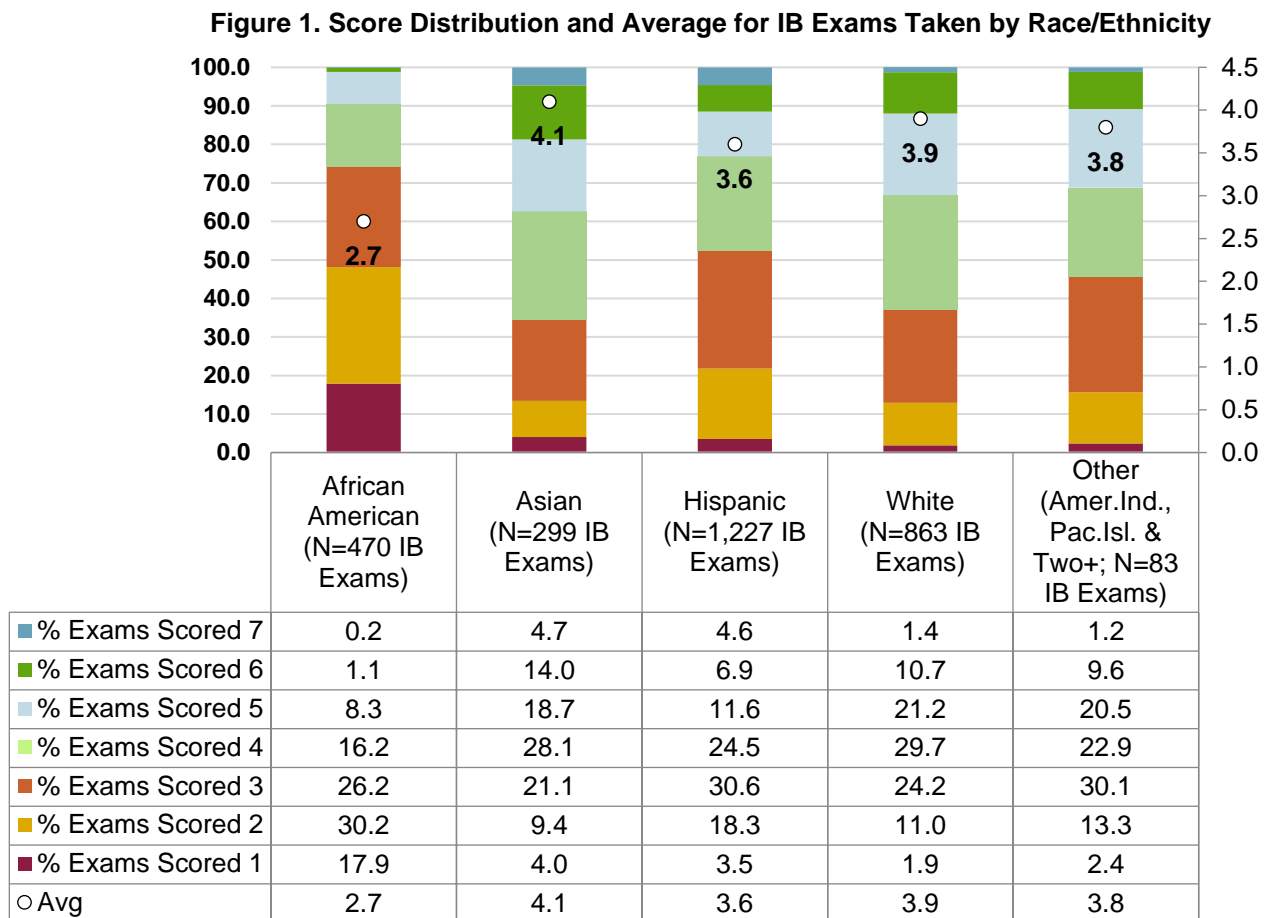
Table 5. District Student Performance on Spring 2022 IB Examinations						
Campus Name	Grade 11 & 12 Enrollment	N Tested	% Tested	Exams Taken	N Exams 4-7	% of Exams 4-7
Bellaire HS	1,408	89	6.3	234	212	90.6
Chavez HS	940	148	15.7	376	149	39.6
Heights HS	1,047	137	13.1	320	252	78.8
Lamar HS	1,299	684	52.7	1,878	842	44.8
Sharpstown International	323	20	6.2	39	33	84.6
Yates	364	19	5.2	95	1	1.1
IB Schools Only	5,381	1,097	20.4	2,942	1,489	50.6
District (Grades 11 and 12) Total	23,342	1,097	4.7			

Source: IB Data file, 2022

- For 2022, 1,097 IB students in HISD took a total of 2,942 IB examinations and 1,489 scored 4 or higher, on a scale of 1 to 7.

- Of the six schools offering an IB Diploma Program, Lamar High School had the highest participation rates (52.7 percent) and Yates High School had the lowest (5.2 percent). Overall, 20.4 percent of students attending a school where the IB program was offered were tested.
- Out of the six participating schools, Bellaire High School had the highest percentage of exams scoring four or higher at 90.6 percent and Yates High School had the lowest levels of performance at 1.1 percent.

Figure 1 shows the score distribution for IB exams taken and the average score for all subjects by race/ethnicity.



Source: IB Data file, 2022

- Asian and Hispanic students had the highest percentage of exams scoring a 7 (4.7 percent and 4.6 percent, respectively), while African American students had the highest percentage of exams scoring a 1 (17.9 percent).
- The highest percentage of IB exams for African American students was a score of 2 (30.2 percent), a score of 4 (28.1 percent) for Asian students, a score of 3 (30.6 percent) for Hispanic students, the highest percentage of IB exams for White students was a 4 (29.7 percent), and a score of 3 at 30.1 percent for students grouped as Other.

- The highest average score for all subjects in decreasing order of race/ethnicity: Asian, White, Other, Hispanic, and African American.

Table 6 shows the ratings given by international raters to the Theory of Knowledge (TOK) coursework, the Extended Essay (EE), and the Reflective Project (RP).

Table 6. District Performance on the Theory of Knowledge (TOK), the Extended Essay (EE), and the Reflective Project (RP)						
	2021			2022		
	TOK	EE	RP	TOK	EE	RP
A (Excellent)	16	13	0	6	3	0
B (Good)	40	26	0	47	21	0
C (Satisfactory)	208	164	41	146	106	17
D (Mediocre)	120	145	28	83	126	122
E (Elementary)	1	11	34	2	26	25
Total	385	359	103	284	282	164

Source: IB Data files, 2021 and 2022

Note: No Shows were not included in the total.

- In 2022, the highest number of students were rated as *Satisfactory* while the lowest number of students were rated as *Elementary* on the Theory of Knowledge (TOK).
- For the Extended Essay (EE), the highest number of students were rated as *Mediocre* while the lowest number of students were rated as *Excellent*.
- Participation in the TOK and EE declined from 2021 to 2022 for the TOK and EE by 26.2 percent and 21.4 percent, respectively.
- For the Reflective Project (RP), the highest number of students were rated as Mediocre while the lowest number of students were rated as Satisfactory.
- Participation in the Reflective Project increased from 2021 to 2022 by 59.2 percent.

How many HISD students achieved the IB diploma and CP certificate and how did this compare with previous district and world results?

IB program participants have the opportunity to seek the IB diploma. For 2022, 85.11 percent of IB world candidates achieved the IB diploma with the average total diploma points being 32.00 (IBO, 2020h). For HISD in 2022, 46.29 percent (131) of diploma candidates achieved the IB diploma with the average total diploma points being 23.76. For 2022, 81.39 percent of IB world CP candidates achieved the CP certificate with a mean grade of 4.10 (IBO, 2020h). Districtwide, 32.02 (73) percent of students in the Career-Related Program earned a CP Certificate with a mean grade of 2.98 (**Table 7**, p. 13).

- Although the number of students earning an IB Career-Related Program (CP) Certificate has increased from 49 in 2021 to 73 in 2022, the number of students earning an IB diploma has decreased from 197 in 2021 to 131 in 2022.

- Lamar and Chavez high schools increased the number of students earning a CP certificate.

Table 7. Number of Districtwide IB Candidates, Diplomates, and Career-Related Program (CP) Certificates								
Campus Name	DP Candidates		Diplomates		CP Candidates		CP Certificates	
	2021	2022	2021	2022	2021	2022	2021	2022
Bellaire HS	37	33	34	32	N/A	N/A	N/A	N/A
Chavez HS	32	21	17	3	22	9	2	4
Heights HS	63	36	39	30	46	39	29	28
Lamar HS	274	177	107	66	77	180	18	41
Sharpstown Intl±	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Yates HS‡	N/A	16	N/A	0	N/A	N/A	N/A	N/A
District IB School Total	406	283	197	131	145	228	49	73

Sources: IB data files, 2022 and 11/4/2021

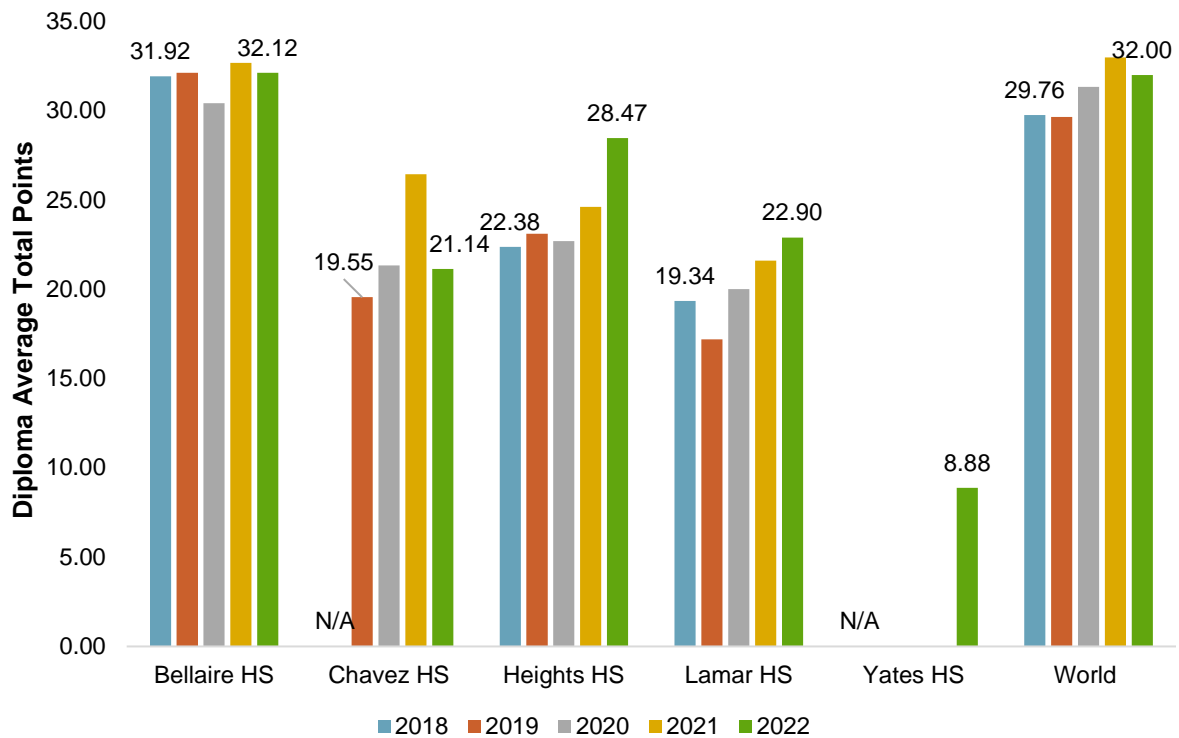
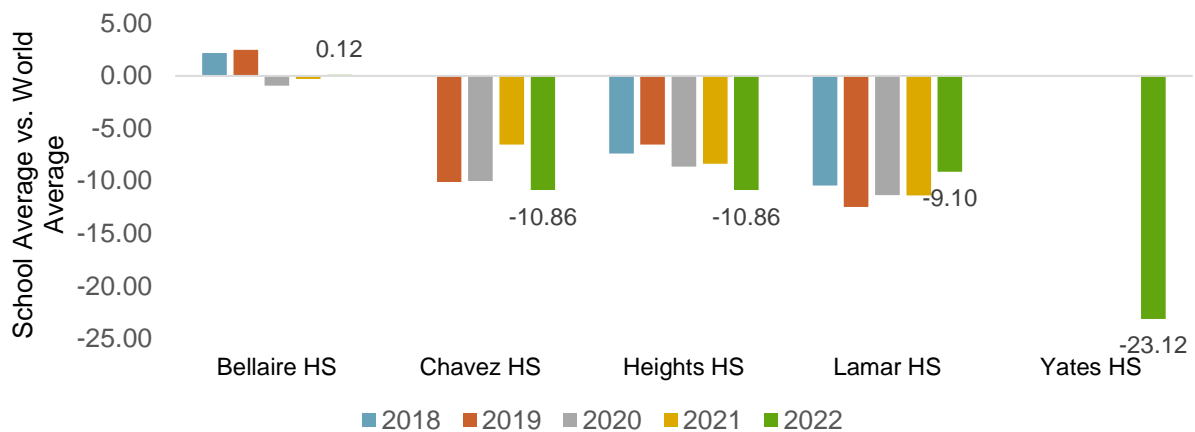
Note: Chavez, Heights, Lamar and Yates offer a Career-Related Program (CP). Results pending and Candidate withdrawn were not included.

±Sharpstown International High School started implementation of their program in 2021.

‡ Yates High School started implementation of their program in 2020.

Figure 2 (p. 14) shows the diploma average total points by campus compared to the world from 2018–2022 and **Figure 3** (p. 14) shows the diploma point difference for HISD and World average scores.

- Regarding diploma average total points, Bellaire High School diplomates consistently outperformed all other district IB campuses (Figures 2 & 3, p. 14).
- Regarding diploma average total points, Bellaire High School diplomates outperformed the world in 2018, 2019, and 2022 (Figures 2 & 3, p. 14).
- From a longitudinal perspective, Chavez, Heights, and Lamar high schools had lower diploma average total points compared to the world (Figures 2 & 3, p. 14).
- Yates High School had the highest diploma average point differential compared to the world (23.12) (Figure 3).
- From a longitudinal perspective, all HISD IB campuses improved the diploma average total points from 2018 to 2022 (Figure 2).

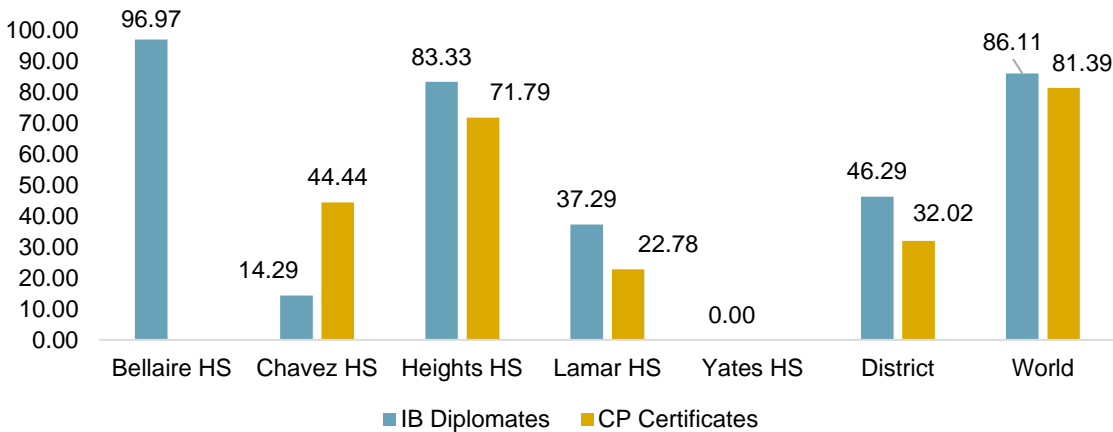
Figure 2. Diploma Average Total Points, Campus and World, 2018–2022**Figure 3. School Average Compared to World Average: Total Diploma Point Difference**

Source: IB data files, various years; *The IB Diploma Programme and Career-Related Programme Final Statistical Bulletin, May 2022 Assessment Session*

Note: Sharpstown International High School started implementation of their program in 2021; therefore, the first year for students to achieve the diploma would be 2023. Chavez High School implemented their program in 2017, so the first year for students to achieve the diploma would be 2019. Yates High School started implementation of their program in 2020, so 2022 marked the first year with IB diplomates.

Figure 4 shows the passing rate of diploma and career-related programme candidates by campus, district, and world for 2022. World Career-Related Programme results were reported for the first time in 2022.

Figure 4. Diploma and CP Certificate Passing Rate, Campus, District, World, 2022



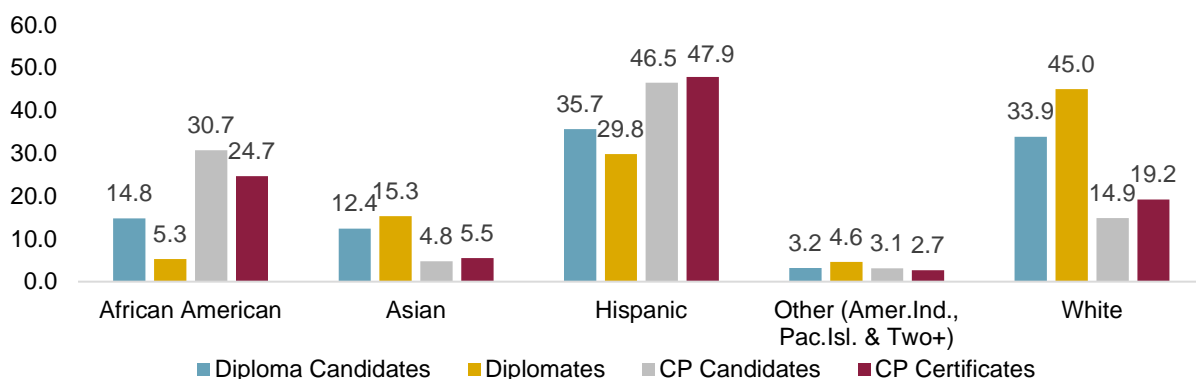
Source: IB data files, 2022; *The IB Diploma Programme and Career-Related Programme Final Statistical Bulletin, May 2022 Assessment Session*

Note: World Career-Related Programme results were reported for the first time in 2022.

- Bellaire's diploma passing rate exceeded all IB campuses, the district, and the world in 2022.
- None of the diploma candidates from Yates achieved the IB diploma.
- Career-related program (CP) candidates attending Chavez, Heights, and Lamar high schools passed at a lower rate than world CP candidates.
- Heights CP passing rate exceeded all IB campuses and the overall district's passing rate.

Figure 5 shows the percentage of IB diploma and CP candidates, diplomates and certificates earned by race/ethnicity for the 2021–2022 school year.

Figure 5. Percentage of IB Diploma Candidates, Diplomates, CP Candidates, and CP Certificates Earned by Race/Ethnicity



Source: IB data files, 2022

Note: Due to small numbers, American Indian, Pacific Islander, and Two or more races were combined.

- Asian, White, and IB students grouped as Other had higher percentages of diplomates compared to candidates, while African American and Hispanic students had a higher percentage of candidates compared to diplomates.
- White IB students had the highest percentage of diplomates (45.0 percent), followed by Hispanic students (29.8 percent).
- Asian, Hispanic, and White IB students had a higher percentage of CP candidates than students that earned the CP certificate.
- Hispanic IB students had the highest percentage of students who earned the CP certificate (47.9).

What recommendations for support and improvement were made that would enhance the learning opportunities for students in the program?

In March 2022, 116 invitations were distributed through SurveyMonkey® to teachers working with IB students. Of those, 72 were returned for a 62 percent response rate. The list of teachers was provided by program personnel. The results of the IB Teacher Survey can be found in **Appendix A** (pp. 20–26).

Recommendations for Support

There were 54 out of 72 respondents (75.0 percent) who provided information centering around additional supports needed to be a successful IB teacher (**Appendix A, Question 18**, p. 25). The top three categories were:

- *More quality and meaningful professional development opportunities* (25.8 percent)
- *Increased funding and resources* (25.8 percent)
- *More time (plan and grade)* (12.9 percent)

Surveyed teachers indicated that campuses needed to provide quality and meaningful professional development opportunities to support program implementation. More specifically, on the survey respondents were asked what professional development opportunities were most useful. The number one category was professional development offered through the International Baccalaureate Organization (IBO). Another example centers on specific content that is meaningful to teachers. Teachers asked for support on how to grade Internal Assessments and for technical support for using IBIS, IB, and Kognity.

Surveyed teachers asked to increase funding and resources. There are budgetary decisions made at the district and campus levels that impact program implementation. Respondents indicated the need for the following: update books and teaching and learning materials. Increase funding for stipends, Internal Assessment work, equipment for labs, and training.

Written responses from teachers requested more time to plan and grade. Teachers indicated it is challenging to complete planning, grading, and IB requirements. More time is needed to give better and detailed feedback. Combining AP and IB classes together presents another challenge for which teachers asked to separate AP from IB. Planning time included meeting with teachers in grades 9 and 10 to ensure a seamless flow into the Diploma Programme as well as IB training for teachers in grades 9 and 10 so they could equip students with the content foundation and soft skills.

Recommendations for Improvement

There were 55 out of 72 respondents (76.4 percent) who provide recommendations for improvement (**Appendix A, Question 19**, p. 26). The top three categories were:

- *Better planning and teamwork* (37.3 percent)
- *Campus framework for success* (35.8 percent)
- *Curriculum* (20.9 percent)

Better **planning** and **teamwork** was the top emergent category for improving the program. Campuses need to create a holistic plan that includes the requisite IB training, scheduling of IB students (class composition and study hall for IB students), planning time for teachers, counseling, and recruitment strategies for students. Teachers wanted to meet with other IB teachers to discuss vertical alignment, IB timelines, scheduling, and recruiting strategies to increase diversity. One thought was to create an additional planning period for IB teachers and students as a designated study hall. Another idea was to reduce the teaching load not only for the IB teachers, but also the coordinator since in most cases, the coordinator also provides instruction. Since the IB program places high demand on the students, respondents indicated incorporating more SEL strategies as well as student supports would be helpful.

The campus framework incorporates support from the school administrators and teachers. Respondents indicated the IB program needs both administrator and teacher buy-in for the program and consequently the students to be successful. Teachers indicated better recruitment strategies were needed. This includes increasing the level of awareness of IB philosophy and providing supports for underrepresented student groups so they are successful. Students should be aware of the expectations of the program.

The third emergent category centered on curriculum. All of the campuses offer an Advanced Placement (AP) program and an IB program. Teachers indicated that separating IB and AP classes would improve the implementation of the IB program since not all curricular goals overlap. Developing a strong foundation by implementing a Pre-IB program for students in grades 9 and 10 by using the Middle Years Program (MYP) model were additional suggestions by respondents. Specific skills that students needed to improve upon were writing, researching, and reporting skills according to respondents.

Discussion

Through the International Baccalaureate program, HISD offers students the opportunity to achieve a world-class education, satisfying established international standards of educational achievement, and documented with a diploma recognized all over the world. The fact that HISD offers students the opportunity for an education of this caliber is fitting for an international city. Houston's international corporations draw employees from Europe and around the world; an important drawing card for these employees is the opportunity to provide their children an internationally recognized diploma in Houston's school. The continuation of a program of this rigor confirms HISD's commitment to the highest aspirations of its students.

Participation and performance in the IB Diploma Programme has varied markedly at the different campuses. To level the playing field, the district needs to **develop** and **fund a plan** to support all IB schools. From teacher surveys, the following elements have been identified:

- Ensure buy-in for both teachers and administrators. Administrators should receive IB training so they are aware of the IB philosophy and are better trained for student recruitment. If buy-in has not occurred, the campus framework for student success is in jeopardy.

- Administrators and counselors should be aware of the classroom composition and the academic and socioemotional supports needed to make students successful. Teachers suggested providing a study hall for IB students. The classroom size and composition (too many levels) are a consideration along with the physical location of the IB teachers in the building. A dedicated counselor for IB students would ensure consistency and aid in ensuring IB students are scheduled for study halls together. The counselor could also help with recruitment efforts.
- Provide incentives to recruit and retain IB teachers due to the high cost of training.
- Increase the campus or district budget for IB training. Ensure all IB teachers have the requisite training to teach the IB courses they have been assigned before or concurrently for the new school year. Expand IB training to include ninth and tenth grade teachers using the Middle Years Program Model so that vertical alignment is seamless.
- Effective student recruitment strategies are a key element, but to expand the program equitably, academic and socio-emotional supports are integral for success. Increasing the level of awareness about the program and its benefits, as well as clearly articulating student expectations should be a primary component. As it stands from an ethnic/race perspective, White and Asian students are overrepresented and African American and Hispanic students are underrepresented.
- Create an IB network of coordinators. Regular contact among the IB coordinators can provide opportunities to confirm IB timeline dates, exchange tips on preparing students for IB exams, sharing effective and viable topics for the extended essay, and sharing information and ideas about CAS projects.
- Prior to the new school year, ensure that all IB teachers can navigate IBIS as well as any additional educational software provided as a resource. If teachers are unable to navigate, monitor student performance, use the data to inform instruction, and download resources, it severely places limits on their effectiveness and how they can ensure student success.
- Supporting teachers by providing smaller classes and hiring more IB teachers that are trained would alleviate the teaching load and allow teachers to individualize instruction. Providing more up-to-date books, teaching materials, and lab equipment were also mentioned. On the written responses, teachers indicated that a streamlined course on the HUB (or Canvas) with important deadlines, details of assessments, and lessons organized by subject would help with organization.
- Provide adequate time for planning, grading, and vertical alignment. This goes hand-in-hand with hiring more teachers to even out the teaching load.

Since 2017, the IB program has expanded to include Chavez, Sharpstown International, Worthing, and Yates high schools. Worthing High School received authorization for the Career-Related Program in 2021, so students will sit for their first IB exams in May 2023. The district is making strides toward creating educational opportunities for all students. To ensure success for all students, appropriate educational supports are needed.

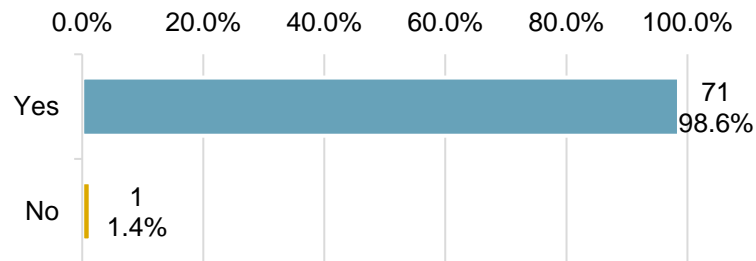
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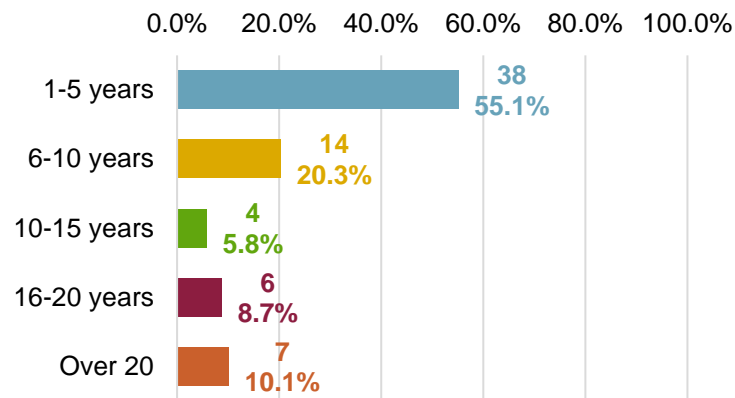
Appendix A

In March 2022, 116 invitations were distributed through SurveyMonkey® to teachers working with IB students. Of those, 72 were returned for a 62 percent response rate.

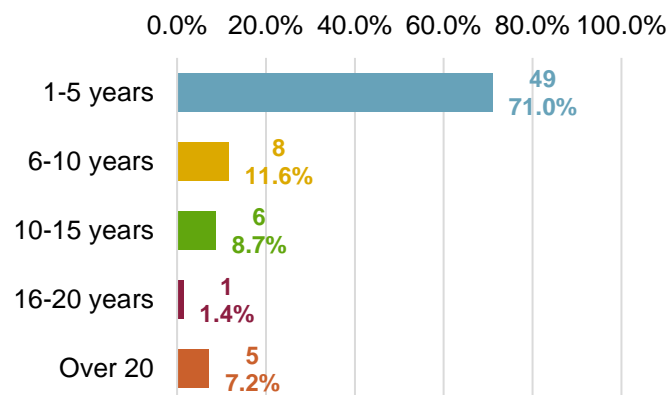
1. For 2021-2022, have you provided instruction to students in the International Baccalaureate Program?



2. How many years have been at your current school? Include the current year in your response.

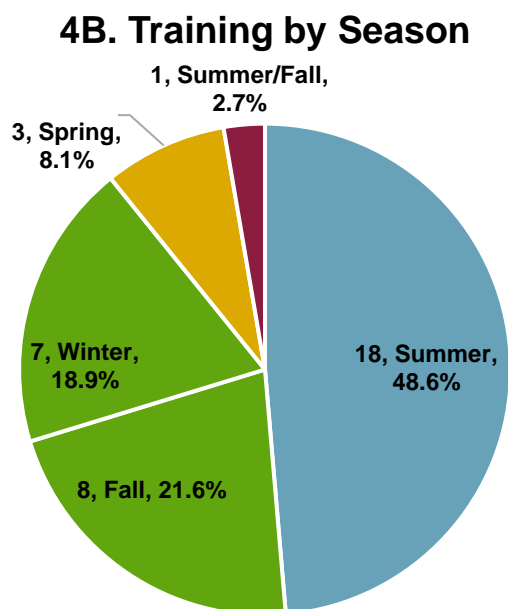
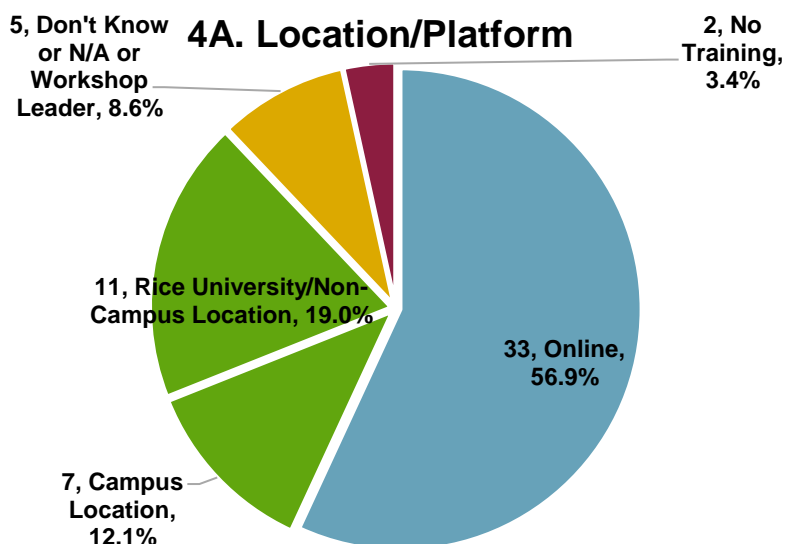


3. How many years have you worked with Pre-IB or IB students?



Appendix A (Continued)

4. Where and when did you receive your most recent IB training?



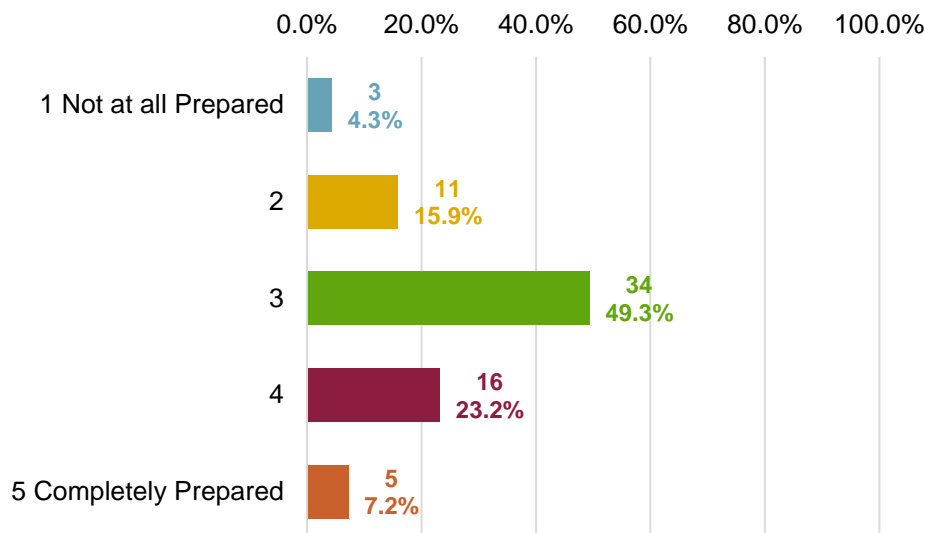
4C. Training by Year					
Training by Year	N	%	Training by Year	N	%
2022	10	17.2%	2015	1	1.7%
2021	11	19.0%	2013	2	3.4%
2020	21	36.2%	2012	2	3.4%
2019	2	3.4%	2000	1	1.7%
2018	3	5.2%	1999	1	1.7%
2017	2	3.4%	1995	1	1.7%
2016	1	1.7%			

Appendix A (Continued)

5. Which professional development opportunities have you found most useful in preparing you for your IB course?

Category	N	%
PDs offered through International Baccalaureate Organization (IBO)	24	28.6%
Course Specific PD's - courses are below the gray line	14	16.7%
District International Baccalaureate PLCs	10	11.9%
N/A or No Useful Training	8	9.5%
InThinking, Gilder Lerhma, Kognity, Catalyst Learning, LIBE, CASIE	7	8.3%
Online	6	7.1%
In Person	6	7.1%
Rice University	5	6.0%
No Training	3	3.6%
Workshop Leader	1	1.2%
Total Responses	84	100.0%
Course Specific PD's, Content area not specified	N	%
Content area not specified	2	2.4%
Course Specific IB PD's		
English A: Language and Literature Category 2	2	2.4%
Theory of Knowledge (TOK)	2	2.4%
Physics	2	2.4%
Dance	1	1.2%
Spanish B, Category 2	1	1.2%
IB Foundations	1	1.2%
Category 1 Course	1	1.2%
Course Specific CASIE PD's		
History of Americas	1	1.2%
Course Specific LIBE PD's		
Russian	1	1.2%

6. On a scale of 1 (not at all prepared) to 5 (completely prepared), please rate how prepared your students are for the required coursework. The average score is **3.1**.



Appendix A (Continued)

7. Does your current class size and bell schedule allow enough time to work with all students during the class period?

	N	%
Yes	42	60.9
No	26	37.7
N/A	1	1.4

8. What changes would you like to see to allow for more time with your students?

Category	N	%
Smaller classes	17	60.7%
Scheduling (block, two years rather than one year, qualified students)	3	10.7%
N/A or Not Sure	2	7.1%
Less rigor	1	3.6%
Miscellaneous	1	3.6%
More rigor about admitting students into the IB program	1	3.6%
Less overall testing	1	3.6%
Fewer course interruptions for district/campus initiatives	1	3.6%
Remove underperforming students	1	3.6%
Total Responses	28	100.0%

9. Do you spend more than two hours a week outside our workday working on your Pre-IB and/or IB course?

	N	%
Yes	53	77.9
No	13	19.1
N/A	2	2.9

10. Are IB courses on your campus open access to all qualified students?

	N	%
Yes	57	83.8
No	8	11.8
N/A	3	4.4

11. Is the IB Coordinator accessible?

	N	%
Yes	62	91.2
No	3	4.4
N/A	3	4.4

Appendix A (Continued)

12. Do you receive important and needed information from the IB Coordinator in a timely manner?

	N	%
Yes	63	92.6
No	3	4.4
N/A	2	2.9

13. What is the most common way your IB Coordinator communicates information?

Category	N	%
Email	60	54.1%
In-person (Face-to-Face, Word-of-Mouth, Conversation)	12	10.8%
Meetings	6	5.4%
TEAMS	11	9.9%
Multiple Methods	22	19.8%
Total Responses	111	100.0%

14. Is the school administration knowledgeable and supportive of the IB program at your school?

	N	%
Yes	42	62.7
No	19	28.4
N/A	6	9.0

15. Do you have adequate class time to meet the internal deadlines set up by your IB program?

	N	%
Yes	45	67.2
No	17	25.4
N/A	5	7.5

16. Which skill is most needed as a prerequisite for the IB students you teach to be successful?

Category	N	%
Strong Foundation (core subjects, foreign language, dance, research)	19	24.7%
Soft Skills (motivation, communication, listening, independence, goal setting, creative, emotional regulation, mindfulness training, comfortable failing)	19	24.7%
Writing and Writing Research Papers (researching & citing sources)	20	26.0%
Study Skills	12	15.6%
Critical Thinking	6	7.8%
N/A	1	1.3%
Total Responses	77	100.0%

17. What do you enjoy most about teaching IB?

Category	N	%
IB format		
Ask big questions, open-minded, multiple perspectives, diverse, high-level content, empathy, holistic, global mindset, individualized, PBL/Hands-on)	32	42.7%
Student Engagement (creativity, student interest in learning)	17	22.7%
Rigor	14	18.7%
Freedom (choose materials and instructional delivery)	8	10.7%
Testing components (speaking test, quality of assessments)	3	4.0%
Nothing when you have a large class	1	1.3%
Total Responses	75	100.0%

18. What additional supports would help you be a successful IB teacher?

Category	N	%
More quality and meaningful professional development opportunities	16	25.8%
Increase funding and resources		
More up-date resources (books, teaching, & learning materials)	11	17.7%
More funding (stipends, IA work, equipment, labs,& training)	5	8.1%
More time (plan & grade)	8	12.9%
More Meeting times with other IB teachers	3	4.8%
N/A or None	3	4.8%
Specific Items for Additional Support		
Support on how to grade Internal Assessments	3	4.8%
Technical Support (IB, IBIS, & Kognity)	2	3.2%
Access to released tests	1	1.6%
Dedicated support for IB teachers on each campus	1	1.6%
Post resources on the HUB or Canvas (deadlines, details of assessments, and lessons by subject)	1	1.6%
Better leadership	1	1.6%
Students/Classroom Composition		
Classroom composition (fewer instructional levels)	2	3.2%
Better foundation to prepare for program rigor	1	1.6%
Smaller classes	1	1.6%
Increase the level of awareness of student expectations	1	1.6%
Dedicated junior and senior classes	1	1.6%
Recruiting more students focused on earning the diploma	1	1.6%
Total Responses	62	100.0%

19. How would you improve the IB program at your school?

Category	N	%
Better Planning and teamwork Meeting with other IB teachers to discuss vertical alignment Scheduling Allow students to take more IB classes More diversity Incorporate guest teachers and speakers Allow for paid curriculum development before school begins	25	37.3%
Campus framework for success More teacher and admin buy-in The IB program needs an administrator to support campuses Better-trained admin for recruitment and enrollment Individual rooms for IB teachers Partner with colleges and universities Hire more IB teachers Reduced teaching load/smaller classes Increase funding/resources Increase the level of awareness of IB Philosophy/IB program Institute another planning period for IB teachers	24	35.8%
Curriculum Separating IB and AP courses Develop a strong foundation More rigorous/Less rigorous Teach it in one year instead of two Implement a Pre-IB program Students in 9th & 10th grade should use the MYP model Continued development of research and reporting skills Increase writing skills	14	20.9%
Close the program	2	3.0%
N/A	2	3.0%
Total	67	62.7%

Source: SurveyMonkey data file, 6/16/2022

Appendix B

Bellaire HS Results		2022					
						Mean Scores	
Subject	Level	Exams Taken	# Exams 4+	% Exams 4+	HISD		World
Group 1: Language and Literature							
ENGLISH A LAL	HL	38	38	100	5.50	▲	5.02
Group 2: Language Acquisition							
ARABIC B	SL	1	*	*	*		5.68
CHINESE B	SL	4	*	*	*		5.80
FRENCH AB.	SL	1	*	*	*		5.00
FRENCH B	HL	2	*	*	*		5.38
FRENCH B	SL	7	4	57.1	3.86	▼	5.12
GERMAN B	HL	1	*	*	*		5.80
GERMAN B	SL	1	*	*	*		5.31
ITALIAN AB.	SL	1	*	*	*		5.02
ITALIAN B	HL	1	*	*	*		5.89
SPANISH AB.	SL	1	*	*	*		5.05
SPANISH B	HL	1	*	*	*		5.55
SPANISH B	SL	12	12	100.0	5.50	▲	5.04
Group 3: Individuals and Societies							
ECONOMICS	HL	22	22	100.0	5.41	▲	5.39
ECONOMICS	SL	2	*	*	*		5.01
GEOGRAPHY	HL	16	12	75.0	4.56	▼	5.50
GEOGRAPHY	SL	8	7	87.5	5.13	▲	5.05
Group 4: Sciences							
ASTRONOMY	SL	8	5	62.5	4.25	▲	4.14
BIOLOGY	HL	16	16	100.0	4.94	▲	4.72
PHYSICS	SL	20	16	80.0	4.60	▼	4.64
Group 5: Mathematics							
MATH ANALYSIS	HL	17	17	100.0	5.18	▼	5.21
MATH ANALYSIS	SL	16	15	93.8	4.75	▼	4.99
Group 6: The Arts							
MUSIC	SL	7	6	85.7	5.14	▲	4.71
THEATRE	HL	6	2	33.3	3.33	▼	4.96
VISUAL ARTS	HL	1	*	*	*		4.44
VISUAL ARTS	SL	2	*	*	*		4.11
Interdisciplinary Subjects							
ENV. AND SOC.	SL	22	21	95.5	5.09	▲	4.46
Total Bellaire HS		234	212	90.6	5.00	▲	4.96

Source: IB Data file, 2022

Note: If the HISD mean score is greater than or equal to the world mean score the arrow is green; If the HISD mean score is less than the world mean score, the arrow is red.

Appendix C

Chavez HS Results	2022						
					Mean Scores		
Subject	Level	Exams Taken	# Exams 4+	% Exams 4+	HISD		World
Group 1: Language and Literature							
ENGLISH A LAL	HL	104	47	45.2	3.49	▼	5.02
Group 2: Language Acquisition							
FRENCH AB.	SL	6	0	0.0	2.67	▼	5
SPANISH AB.	SL	4	*	*			5.05
SPANISH B	HL	16	16	100.0	6.38	▲	5.55
SPANISH B	SL	22	22	100.0	6.41	▲	5.04
Group 3: Individuals and Societies							
HISTORY	HL	73	28	38.4	3.30	▼	4.64
Group 4: Sciences							
BIOLOGY	HL	7	2	28.6	3.00	▼	4.72
BIOLOGY	SL	7	2	28.6	3.14	▼	4.56
PHYSICS	HL	7	0	0.0	2.71	▼	5.09
PHYSICS	SL	26	4	15.4	2.77	▼	4.64
Group 5: Mathematics							
MATH ANALYSIS	HL	3	*	*	*		5.21
MATH ANALYSIS	SL	40	13	32.5	2.95	▼	4.99
MATH APPS	SL	10	2	20.0	2.90	▼	4.39
Group 6: The Arts							
DANCE	HL	1	*	*	*		4.89
VISUAL ARTS	HL	1	*	*	*		4.44
VISUAL ARTS	SL	7	1	14.3	3.00	▼	4.11
Interdisciplinary Subjects							
ENV. AND SOC.	SL	42	7	16.7	3.00	▼	4.46
Total Chavez HS		376	149	39.6	3.53	▼	4.96

Source: IB Data file, 2022

Note: If the HISD mean score is greater than or equal to the world mean score the arrow is green; If the HISD mean score is less than the world mean score, the arrow is red.

Appendix D

Heights HS	2022						
					Mean Scores		
Subject	Level	Exams Taken	# Exams 4+	% Exams 4+	HISD		World
Group 1: Language and Literature							
ENGLISH A LIT	HL	73	56	76.7	4.10	▼	4.73
Group 2: Language Acquisition							
GERMAN B	HL	5	4	80.0	4.20	▼	5.80
SPANISH AB.	SL	4	D	*	*		5.05
SPANISH B	HL	20	19	95.0	5.45	▼	5.55
SPANISH B	SL	7	6	85.7	4.43	▼	5.04
Group 3: Individuals and Societies							
HISTORY	HL	50	47	94.0	4.70	▲	4.64
PSYCHOLOGY	SL	25	18	72.0	4.00	▼	4.79
Group 4: Sciences							
BIOLOGY	SL	30	22	73.3	4.13	▼	4.56
Group 5: Mathematics							
MATH APPS	SL	61	44	72.1	4.26	▼	4.39
Group 6: The Arts							
FILM	HL	8	7	87.5	4.75	▲	4.55
FILM	SL	2	*	*			4.35
THEATRE	HL	2	*	*			4.96
THEATRE	SL	1	*	*			4.64
VISUAL ARTS	HL	2	*	*			4.44
Interdisciplinary Subjects							
ENV. AND SOC.	SL	30	22	73.3	4.40	▼	4.46
Total Heights HS		320	252	78.8	4.35	▼	4.96

Source: IB Data file, 2022

Note: If the HISD mean score is greater than or equal to the world mean score the arrow is green; If the HISD mean score is less than the world mean score, the arrow is red.

Appendix E

Lamar HS Results	2022						
					Mean Scores		
Subject	Level	Exams Taken	# Exams 4+	% Exams 4+	HISD		World
Group 1: Language and Literature							
ENGLISH A LAL	HL	337	222	65.9	4.02	▼	5.02
Group 2: Language Acquisition							
ARABIC B	HL	2	*	*	*		5.86
ARABIC B	SL	3	*	*	*		5.68
CHINESE B	HL	2	*	*	*		6.29
CHINESE B	SL	14	4	28.6	2.93	▼	5.8
FRENCH B	HL	3	*	*	*		5.38
FRENCH B	SL	46	23	50.0	3.43	▼	5.12
SPANISH AB.	SL	1	*	*	*		5.05
SPANISH B	HL	12	12	100.0	5.92	▲	5.55
SPANISH B	SL	165	134	81.2	4.70	▼	5.04
Group 3: Individuals and Societies							
ART HISTORY	SL	69	21	30.4	3.01	▼	4.47
BUS MAN	HL	93	41	44.1	3.44	▼	5.24
ECONOMICS	HL	66	26	39.4	3.09	▼	5.39
ECONOMICS	SL	17	3	17.6	3.00	▼	5.01
HISTORY	HL	105	55	52.4	3.62	▼	4.64
PSYCHOLOGY	SL	207	58	28.0	2.76	▼	4.79
WORLD RELIG.	SL	38	29	76.3	4.42	▼	5.03
Group 4: Sciences							
BIOLOGY	HL	56	22	39.3	3.23	▼	4.72
BIOLOGY	SL	63	21	33.3	3.06	▼	4.56
CHEMISTRY	HL	10		0.0	2.40	▼	4.98
CHEMISTRY	SL	9	4	44.4	3.56	▼	4.54
COMPUTER SC.	HL	19	13	68.4	3.84	▼	5.25
COMPUTER SC.	SL	6	0	0.0	2.50	▼	5.1
PHYSICS	HL	18	13	72.2	4.11	▼	5.09
PHYSICS	SL	28	12	42.9	3.71	▼	4.64
SPORTS EX SCI	SL	99	16	16.2	2.67	▼	4.18
Group 5: Mathematics							
MATH ANALYSIS	HL	49	18	36.7	3.00	▼	5.21
MATH ANALYSIS	SL	53	13	24.5	2.91	▼	4.99
MATH APPS	HL	48	9	18.8	2.69	▼	4.78
MATH APPS	SL	141	47	33.3	3.01	▼	4.39
Group 6: The Arts							
FILM	HL	9	1	11.1	2.56	▼	4.55
THEATRE	HL	1	*	*	4.00	▼	4.96
VISUAL ARTS	HL	12	7	58.3	3.67	▼	4.44
Interdisciplinary Subjects							
ENV. AND SOC.	SL	77	13	16.9	2.55	▼	4.46
Total Lamar HS		1,878	842	44.8	3.42	▼	4.96

Source: IB Data file, 2022

Note: If the HISD mean score is greater than or equal to the world mean score the arrow is green; If the HISD mean score is less than the world mean score, the arrow is red.

Appendix F

Sharpstown International HS Results		2022					
					Mean Scores		
Subject	Level	Exams Taken	# Exams 4+	% Exams 4+	HISD		World
Group 3: Individuals and Societies							
GLOB. POL	SL	20	18	90.0	4.75	▼	5.09
Interdisciplinary Subjects							
ENV. AND SOC.	SL	19	15	78.9	4.21	▼	4.47
Total Sharpstown International HS		39	33	84.6	4.49	▼	4.97

Source: IB Data file, 2022

Note: If the HISD mean score is greater than or equal to the world mean score the arrow is green; If the HISD mean score is less than the world mean score, the arrow is red.

Appendix G

Yates HS Results	2022						
					Mean Scores		
Subject	Level	Exams Taken	# Exams 4+	% Exams 4+	HISD		World
Group 1: Language and Literature							
ENGLISH A LAL	HL	16	0	0.0	2.25	▼	5.02
Group 2: Language Acquisition							
SPANISH AB.	SL	18	1	5.6	1.44	▼	5.05
Group 3: Individuals and Societies							
HISTORY	HL	17	0	0.0	2.24	▼	4.64
Group 4: Sciences							
BIOLOGY	SL	14	0	0.0	1.50	▼	4.56
Group 5: Mathematics							
MATH APPS	SL	15	0	0.0	1.60	▼	4.39
Group 6: The Arts							
THEATRE	HL	8	0	0.0	1.00	▼	4.96
VISUAL ARTS	HL	7	0	0.0	1.86	▼	4.44
Total Yates HS		95	1	1.1	1.75	▼	4.96

Source: IB Data file, 2022

Note: If the HISD mean score is greater than or equal to the world mean score the arrow is green; If the HISD mean score is less than the world mean score, the arrow is red.