

RESEARCH BRIEF

Research Services

Vol. 2001 October 2020 Vanessa Gonzalez Hernandez, PhD

Miami-Dade County Public Schools: 2019-2020 Student Performance in the International Baccalaureate Program

Results at a Glance

This Research Brief summarizes the performance of Miami-Dade County Public Schools (M-DCPS) students participating in the International Baccalaureate (IB) program. The IB program was offered at six M-DCPS high schools in 2019-2020. Over 2,900 assessments were completed by M-DCPS students in 28 subject areas in 2019-2020. The number of IB assessments completed in M-DCPS decreased by six percent from 2018-2019 to 2019-2020. Overall, the percentage of IB assessments receiving passing scores increased by 11 percentage points from 2018-2019 to 2019-2020. At the conclusion of the 2019-2020 school year, 88% of eligible M-DCPS students received IB diplomas, an increase of 14 percentage points from 2018-2019.

The International Baccalaureate (IB) program is a rigorous pre-university curriculum and examination program that emphasizes the development of students' intellectual, personal, emotional, and social skills. The IB program provides students with a broad general education while offering specialization based on students' interests and plans. The IB program is recognized at colleges and universities throughout the United States and worldwide.

Three IB programs span the years from kindergarten to pre-university. The programs can be offered individually (the Primary Years Program for students aged 3-12, the Middle Years Program for students aged 11-16, and the IB Diploma Program for students aged 16-19) or as a continuum. A fourth program, the Career-Related Program, is designed to address the needs of students aged 16-19 who are engaged in career-related education. This report focuses on the IB Diploma Program that is offered at M-DCPS senior high schools.

The IB Diploma Program (DP) is a two-year liberal arts curriculum designed to promote understanding of global citizenship. The program encourages students to become critical and compassionate thinkers and informed participants in local and world affairs. The DP curriculum is made up of three core elements and six subject groups. The three core elements are:

- The Theory of Knowledge course, assessed through an oral presentation and a 1,600word essay, encourages students to reflect on the nature of learning and different kinds of knowledge;
- The extended essay, an independent, self-directed research project, culminates in a 4,000-word paper; and

 A Creativity, Action, Service (CAS) component requires students to take part in a range of experiences and at least one project.

The six subject groups are:

- Studies in language and literature;
- Language acquisition;
- Individuals and societies;
- Sciences;
- Mathematics: and
- The arts.

Students may study an additional course in science, individuals and societies, or languages, instead of a course in the arts. Each student takes three to four subjects at the *Higher Level (HL)* and the remaining subjects at *Standard Level (SL)*. Students taking courses at HL are expected to demonstrate a greater body of knowledge, understanding, and skills.

Descriptions of courses in the first two subject groups are provided below.

- Studies in language and literature courses are as follows:
 - Language A: Literature These courses introduce students to the analysis of literary texts. Courses are available in 55 languages.
 - Language A: Language and Literature These courses introduce the critical study and interpretation of written and spoken texts from a wide range of literary and non-literary genres. Courses are available in 17 languages.
 - Literature and Performance These courses explore the relationship between literature and theatre. Courses are automatically available in English, and by special request in Spanish and French.
- Language acquisition courses are as follows:
 - Language Ab Initio These courses are for beginners (students who have little or no previous experience of learning the language they have chosen).
 - Language B These courses are intended for students who have some previous experience of learning the language.
 - Classical Languages (Latin or Classical Greek) These courses provide opportunities for students to study the language, literature, and culture of ancient Rome or Greece.

Student Assessment in the 2019-2020 School Year as a Result of COVID-19

Students in the IB Diploma Program normally take written examinations in each subject, as was executed for the 2018-2019 school year. However, as a result of the COVID-19 pandemic, IB made the deicison to cancel in person examinations to ensure student safety. IB created a model

to award grades that used student coursework, school predicted grades, and school context for final grade award. The school context was not based on previous cohorts' performance, but instead on the relationship between predicted grade accuracy and performance in coursework versus examination components and final outcomes. IB assessment specialists and Chief Examiners applied standards during grading to promote fairness. IB examiners evaluated all student work, instead of only a sample as is normal practice.

IB Assessments in the 2019-2020 School Year

As usual, assessments were scored on a scale of 1 to 7 for each subject, with 7 being highest. A score of 4 is considered a passing score on an IB assessment. Students must earn a total of 24 points on their six IB assessments in order to receive the IB diploma, subject to certain minimum levels of performance across all components of the program and satisfactory completion of the CAS requirement. Students can also be awarded up to three additional points toward the overall diploma score for their combined results on the Theory of Knowledge course and the extended essay.

Six M-DCPS high schools offered the IB program during the 2019-2020 school year: Coral Gables Senior, Coral Reef Senior, John A. Ferguson Senior, Miami Beach Senior, North Miami Senior, and South Dade Senior. This Research Brief includes 2018-2019 and 2019-2020 data on these six M-DCPS schools. Tables included in this report provide data on the number of IB assessments completed and the percentage of assessments receiving passing scores by subject area across all six M-DCPS IB schools, by school across all subject areas, and by school and ethnicity across all subject areas. The number and percentage of participating students earning diplomas in the District and at each IB school are also provided. The reader should note that results are not reported if fewer than 10 assessments were taken.

Participation in Assessments (Previously Examinations)

- In 2019-2020, M-DCPS students completed 2,949 IB assessments. The number of assessments completed by M-DCPS students decreased by six percent from 3,133 completed in 2018-2019. The decrease in assessments is a result of an overall decrease in enrollment in the IB DP Program from 1,442 in 2018-2019 to 1,370 in 2019-2020.
- M-DCPS students took IB assessments in 28 subject areas in 2019-2020. Overall, most IB assessments were taken in Biology, English A Literature, History, and Spanish B in 2019-2020. Half (50%) of IB assessments taken by M-DCPS students were taken in these four subject areas.
- The greatest number of IB assessments were completed at Coral Gables Senior in 2019-2020 (1,002 assessments).
- From 2018-2019 to 2019-2020, the number of IB assessments completed increased at three of the six M-DCPS IB schools: Coral Gables Senior, John A. Ferguson Senior, and North Miami Senior. The number of IB assessments completed at the other three M-DCPS IB schools decreased.

- The District's Hispanic students completed 68% of all IB assessments in 2019-2020. White students completed 21% of IB assessments, Black students took 6%, and students classified as "Other" (Alaskan Native, American Indian, Asian, Pacific Islander, and Multiracial categories) took 5%.
- From 2018-2019 to 2019-2020, the percentage of assessments completed by all ethnic groups remained the same.

Assessment Results

- Overall, the percentage of IB assessments receiving passing scores in M-DCPS increased by 11 percentage points from 79% in 2018-2019 to 90% in 2019-2020.
- The 2019-2020 subject areas in which the highest percentages of M-DCPS IB
 assessments received passing scores were English A Language & Literature, German B,
 Social and Cultural Anthropology, Spanish A Language & Literature, and World Religions.
 The subject areas in which the lowest percentages of IB assessments received passing
 scores were Biology, Spanish AB, and Visual Arts.
- Coral Reef Senior and Miami Beach Senior had the highest percentages of IB assessments receiving passing scores (98% and 93%, respectively) in 2019-2020.
- From 2018-2019 to 2019-2020, the percentage of assessments receiving passing scores increased at all M-DCPS IB schools. The largest increase in the percentage of assessments receiving passing scores was at Miami Beach Senior (a 17 percentage point increase).
- In 2019-2020, 93% of IB assessments completed by M-DCPS White students, 89% of assessments taken by Hispanic students, 85% of assessments taken by Black students, and 92% of assessments taken by students classified as "Other" received passing scores.
- From 2018-2019 to 2019-2020, the percentage of assessments receiving passing scores increased by 16 percentage points for White students, by ten percentage points for Hispanic students, by 13 percentage points for Black students, and by four percentage points for students classified as "Other."

Diploma Results

• In order to award a Diploma or certificate following the cancellation of all external written components of IB examinations for the May 2020 session, the IB implemented a new model for awarding diplomas. In addition to the submitted student coursework and predicted grades from teachers, the IB used school context to arrive at the subject grades for each student. The school context was based on the relationship between predicted grade accuracy, performance in coursework versus examination components and final outcomes. Then as usual, these grades were converted into points that contributed to the student's overall Diploma Programme results.

- A total of 417 M-DCPS students, or 88% of eligible students, received IB diplomas at the conclusion of the 2019-2020 school year. The percentage of the District's eligible IB program students receiving an IB diploma increased by 14 percentage points from 2018-2019 to 2019-2020.
- Of the six M-DCPS IB schools, Coral Reef Senior had the highest percentage of eligible students receiving IB diplomas (96%) in 2019-2020.
- From 2018-2019 to 2019-2020, the percentage of students receiving IB diplomas increased at all six M-DCPS IB schools.

Table 1. Numbers of IB Assessments Completed and Percentages of IB Assessments Passed by Subject Area, 2018-2019 and 2019-2020, M-DCPS, All IB Schools Combined

	# of Assessme	nts Completed	% of Assessments Passed		
Subject Area	2018-2019	2019-2020*	2018-2019	2019-2020*	
Biology	363	312	55	64	
Business Management	11	11	82	91	
Chemistry	169	174	62	80	
Computer Science	1	7	N/A	N/A	
Dance	9	23	N/A	96	
English A Language & Literature	N/A	116	N/A	100	
English A Literature	502	372	95	100	
Film	13	22	92	100	
French AB	8	1	N/A	N/A	
French B	81	102	93	91	
Geography	107	2	68	N/A	
German B	24	20	88	100	
History	484	474	89	92	
Italian AB	N/A	1	N/A	N/A	
Italian B	10	14	90	86	
Mathematical Studies	275	251	79	94	
Mathematics	254	232	48	86	
Philosophy	34	7	59	N/A	
Physics	31	16	68	69	
Portuguese B	11	8	100	N/A	
Psychology	227	250	81	95	
Social and Cultural Anthropology	42	86	100	100	
Spanish A Language & Literature	23	15	17	100	
Spanish AB	9	15	N/A	67	
Spanish B	354	330	97	96	
Theatre	27	24	67	83	
Visual Arts	18	37	44	51	
World Religions	46	27	89	100	
Total, All Subjects	3133	2949	79	90	

^{*}Note: In 2019-2020, in-person paper exams were cancelled due to the COVID-19 pandemic. Assessments were conducted by IB based on student work and other evidence.

Table 2. Numbers of IB Asssessments Completed and Percentages of Assessments Passed, by School, 2018-2019 and 2019-2020

	# of Assessme	nts Completed	% of Assessments Passed		
School	2018-2019	2019-2020*	2018-2019	2019-2020*	
Coral Gables Senior	882	1002	74	87	
Coral Reef Senior	849	820	94	98	
John A. Ferguson Senior	545	583	76	87	
Miami Beach Senior	537	296	76	93	
North Miami Senior	101	124	73	86	
South Dade Senior	219	124	54	65	
Total, All IB Schools	3133	2949	79	90	

^{*}Note: In 2019-2020, in-person paper exams were cancelled due to the COVID-19 pandemic. Assessments were conducted by IB based on student work and other evidence.

Table 3. Numbers of IB Assessments Completed and Percentages of Assessments Passed, By Ethnicity, 2018-2019 and 2019-2020

		Wh	ite	Bla	ıck	Hispanic		Other	
School		Number	Percent	Number	Percent	Number	Percent	Number	Percent
		Taken	Passed	Taken	Passed	Taken	Passed	Taken	Passed
Coral Gables Sr	2020*	220	87	22	82	747	87	13	77
	2019	129	71	29	69	701	75	23	78
Coral Reef Sr	2020*	235	98	22	95	494	98	69	99
	2019	220	93	41	93	519	94	69	100
John A. Ferguson Sr	2020*	18	100	12	75	515	87	38	87
	2019	29	76	18	56	456	76	42	81
Miami Beach Sr	2020*	160	93	11	100	119	93	6	100
	2019	239	74	2	50	277	78	19	68
North Miami Sr	2020*	1	100	98	83	20	100	5	100
	2019	0	N/A	82	68	18	94	1	100
South Dade Sr	2020*	6	67	4	75	105	64	9	78
	2019	44	41	2	50	161	55	6	100
Total, All Schools	2020*	640	93	169	85	2000	89	140	92
	2019	661	77	174	72	2132	79	160	88

^{*}Note: In 2019-2020, in-person paper exams were cancelled due to the COVID-19 pandemic. Assessments were conducted by IB based on student work and other evidence.

Table 4. Numbers and Percentages of Students Receiving IB Diplomas, by School and M-DCPS Overall, 2018-2019 and 2019-2020

	Number of Students Eligible for IB Diplomas		Number of Students Receiving IB Diplomas		Percent of Students Receiving IB Diplomas	
School	2018-2019	2019-2020*	2018-2019	2019-2020*	2018-2019	2019-2020*
Coral Gables Senior	141	156	96	128	68	82
Coral Reef Senior	144	134	131	129	91	96
John A. Ferguson Senior	88	93	69	86	78	92
Miami Beach Senior	75	51	50	47	67	92
North Miami Senior	17	21	10	14	59	67
South Dade Senior	34	19	12	13	35	68
Total, All IB Schools	499	474	368	417	74	88

^{*}Note: In 2019-2020, diploma designation was conducted by IB based on student work and other evidence.

Summary

This Research Brief summarized the performance of M-DCPS students participating in the IB program. Six M-DCPS high schools offered the IB program during the 2019-2020 school year: Coral Gables Senior, Coral Reef Senior, John A. Ferguson Senior, Miami Beach Senior, North Miami Senior, and South Dade Senior.

Over 2,900 assessments were completed by M-DCPS students in 28 subject areas in 2018-2019; the number of IB assessments completed in M-DCPS decreased by six percent from 2018-2019 to 2019-2020, as a result of decreased enrollment in the program. The greatest number of IB assessments were completed at Coral Gables Senior. Districtwide, 68% of IB assessments were completed by Hispanic students, 21% were completed by White students, 6% were completed by Black students, and 5% were completed by students classified as "Other."

The percentage of M-DCPS IB assessments receiving passing scores increased by 11 percentage points to 90% from 2018-2019 to 2019-2020. Coral Reef Senior and Miami Beach Senior had the highest percentages of IB assessments receiving passing scores. White students had the highest percentage of IB assessments receiving passing scores in 2018-2019, followed by "Other" students, Hispanic students, and Black students. From 2018-2019 to 2019-2020, the percentage of assessments receiving passing scores increased by 16 percentage points for White students, by ten percentage points for Hispanic students, by 13 percentage points for Black students, and by four percentage points for students classified as "Other."

Overall, 88% of M-DCPS' eligible students received an IB diploma at the conclusion of the 2019-2020 school year. The percentage of eligible students earning an IB diploma increased by 14 percentage points from 2018-2019 to 2019-2020. Of the six M-DCPS IB schools, Coral Reef Senior had the highest percentage of eligible students receiving IB diplomas in 2019-2020.