



RESEARCH BRIEF

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Vanessa Gonzalez Hernandez, PhD

Miami-Dade County Public Schools: 2021-2022 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 2021-2022. Over 3,000 assessments were completed by M-DCPS students in 30 subject areas in 2021-2022. The number of IB assessments completed in M-DCPS increased from 2020-2021 to 2021-2022. The District's Hispanic students took 70% of all IB assessments in 2021-2022. Overall, the percentage of IB assessments receiving passing scores decreased by two percentage points from 2020-2021 to 2021-2022. At the conclusion of the 2021-2022 school year, 93% of eligible M-DCPS students received IB diplomas, the same percentage as in 2020-2021.

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 an 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 1,600-word 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 2020-2021 vs. 2021-2022 School Year as a Result of COVID-19

In 2020-2021, as a result of the COVID-19 pandemic, IB made the decision to cancel in-person examinations to ensure student safety. IB created a model that used student coursework, school predicted grades, and school context for final grade award. The school context was not based on

the 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.

In 2021-2022, however, in-person written examinations were resumed as they were conducted pre-pandemic. These examinations assess the extent to which students have mastered advanced academic skills such as analyzing and presenting information; evaluating and constructing arguments; and solving problems creatively. Basic skills are also assessed, including retaining knowledge, understanding key concepts, and applying standard methods.

IB Assessments Scoring

In both school years, assessments were scored on a scale of 1 to 7 for each subject, with 7 being the 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 2021-2022 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 2020-2021 and 2021-2022 data on these six M-DCPS schools. The 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

- In 2021-2022, M-DCPS students completed 3,042 IB assessments. The number of assessments completed by M-DCPS students increased by 82 assessments from 2,960 completed in 2020-2021.
- M-DCPS students took IB assessments in 30 subject areas in 2021-2022. Overall, most IB assessments were taken in Biology, English A Language & Literature, History, Mathematics: Applications and Interpretations, and Spanish B in 2021-2022. Over half (59%) of IB assessments taken by M-DCPS students were taken in these five subject areas.
- The greatest number of IB assessments were completed at Coral Gables Senior in 2021-2022 (920 assessments).
- From 2020-2021 to 2021-2022, the number of IB assessments completed increased at four of the six M-DCPS IB schools: Coral Reef Senior, John A. Ferguson Senior, Miami

Beach Senior, and South Dade Senior. The number of IB assessments completed at the other two M-DCPS IB schools decreased.

- The District’s Hispanic students completed 70% of all IB assessments in 2021-2022. White students completed 20% of IB assessments, Black students took 5%, and students classified as “Other” (Alaskan Native, American Indian, Asian, Pacific Islander, and Multiracial categories) took 5%.
- From 2020-2021 to 2021-2022, the percentage of assessments completed by Hispanic students increased by 2 percentage points while that for the other ethnic groups decreased.

Assessment Results

- Overall, the percentage of IB assessments receiving passing scores in M-DCPS decreased by two percentage points from 92% in 2020-2021 to 90% in 2021-2022.
- The 2021-2022 subject areas in which the highest percentages of M-DCPS IB assessments received passing scores (99%+) were Social and Cultural Anthropology, World Religions, Dance, German B, Italian B, and English A Language and Literature. The subject areas in which the lowest percentages of IB assessments received passing scores were Theatre and Sports, Exercise, and Health Science (50% and 33% respectively).
- Coral Reef Senior and Miami Beach Senior had the highest percentages of IB assessments receiving passing scores (92% and 91%, respectively) in 2021-2022.
- From 2020-2021 to 2021-2022, the percentage of assessments receiving passing scores increased at two M-DCPS IB schools, North Miami Senior and South Dade Senior.
- In 2021-2022, 92% of IB assessments completed by M-DCPS White students, 89% of assessments taken by Hispanic students, 88% of assessments taken by Black students, and 92% of assessments taken by students classified as “Other” received passing scores.
- From 2020-2021 to 2021-2022, the percentage of assessments receiving passing scores decreased by at least two percentage points for White, Hispanic, and Other students, but increased by eight percentage points for Black students.

Diploma Results

- In order to award a Diploma or certificate following the cancellation of all external written components of IB examinations for the 2020-2021 school year, the IB implemented the same model for awarding diplomas as the previous 2019-2020 school year. 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, these grades were converted into points that contributed to the student’s overall Diploma Programme results.

- In 2021-2022, pre-pandemic diploma requirements were resumed. Grade 12 students who were enrolled in the IB program, met all program requirements, and took the required examinations were eligible to receive IB diplomas.
- A total of 454 M-DCPS students, or 93% of eligible students, received IB diplomas at the conclusion of the 2021-2022 school year. The percentage of the District’s eligible IB program students receiving an IB diploma stayed the same from 2020-2021 to 2021-2022.
- Of the six M-DCPS IB schools, John A. Ferguson Senior had the highest percentage of eligible students receiving IB diplomas (96%) in 2021-2022.
- From 2020-2021 to 2021-2022, the percentage of students receiving IB diplomas increased at half of all M-DCPS IB schools.

Table 1. Numbers of IB Assessments Completed and Percentages of IB Assessments Passed by Subject Area, 2020-2021 and 2021-2022, M-DCPS, All IB Schools Combined

Subject Area	# of Assessments Completed		% of Assessments Passed	
	2020-2021*	2021-2022	2020-2021*	2021-2022
Biology	340	295	69	78
Business Management	5	4	N/A	N/A
Chemistry	154	159	86	76
Computer Science	7	5	N/A	N/A
Dance	13	20	92	100
Economics	N/A	29	N/A	86
English A Language & Literature	273	269	97	99
English A Literature	216	228	97	96
Environmental Systems and Societies	39	35	74	74
Film	12	21	100	95
French AB	N/A	1	N/A	N/A
French B	84	108	94	93
Geography	15	6	80	N/A
German B	14	15	100	100
History	478	506	95	94
Italian AB	1	N/A	N/A	N/A
Italian B	14	10	100	100
Mathematics: Applications and Interpretations	328	360	92	82
Mathematics: Analysis and Approaches	161	171	98	91
Music	1	N/A	N/A	N/A
Philosophy	63	66	95	88
Physics	22	4	77	N/A
Portuguese B	8	2	N/A	N/A
Psychology	180	212	95	91

Social and Cultural Anthropology	91	60	100	100
Spanish A Language & Literature	12	8	92	N/A
Spanish AB	5	5	N/A	N/A
Spanish B	330	360	98	97
Sports, Exercise and Health Science	N/A	12	N/A	33
Theatre	27	10	93	50
Visual Arts	19	18	68	56
World Religions	48	43	98	100
Total, All Subjects	2960	3042	92	90

*Note: In 2020-2021, 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 Assessments Completed and Percentages of Assessments Passed, by School, 2020-2021 and 2021-2022

School	# of Assessments Completed		% of Assessments Passed	
	2020-2021*	2021-2022	2020-2021*	2021-2022
Coral Gables Senior	929	920	91	88
Coral Reef Senior	854	899	96	92
John A. Ferguson Senior	595	606	92	90
Miami Beach Senior	381	400	93	91
North Miami Senior	128	87	78	90
South Dade Senior	73	130	70	79
Total, All IB Schools	2960	3042	92	90

*Note: In 2020-2021, 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, 2020-2021 and 2021-2022

School		White		Black		Hispanic		Other	
		Number Taken	Percent Passed						
Coral Gables Sr	2022	182	91	10	90	694	87	34	91
	2021*	214	93	10	90	697	90	8	100
Coral Reef Sr	2022	173	96	38	87	600	91	88	97
	2021*	170	95	30	93	574	96	80	98
John A. Ferguson Sr	2022	8	88	12	100	566	91	20	70
	2021*	35	100	23	74	524	92	13	92
Miami Beach Sr	2022	237	90	12	92	140	90	11	100
	2021*	212	96	8	88	143	90	18	83
North Miami Sr	2022	6	100	66	91	15	80	.	.
	2021*	5	80	90	77	33	82	.	.
South Dade Sr	2022	1	.	23	70	102	81	4	100
	2021*	4	100	6	67	52	65	11	82
Total, All Schools	2022	607	92	161	88	2117	89	157	92

	2021*	640	95	167	80	2023	91	130	94
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*Note: In 2020-2021, 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, 2020-2021 and 2021-2022

School	Number of Students Eligible for IB Diplomas		Number of Students Receiving IB Diplomas		Percent of Students Receiving IB Diplomas	
	2020-2021*	2021-2022	2020-2021*	2021-2022	2020-2021*	2021-2022
Coral Gables Senior	159	147	144	137	91	93
Coral Reef Senior	139	148	135	140	97	95
John A. Ferguson Senior	94	98	89	94	95	96
Miami Beach Senior	55	66	55	59	100	89
North Miami Senior	23	14	16	12	70	86
South Dade Senior	10	17	8	12	80	71
Total, All IB Schools	480	490	447	454	93	93

*Note: In 2020-2021, 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 2021-2022 school year: Coral Gables Senior, Coral Reef Senior, John A. Ferguson Senior, Miami Beach Senior, North Miami Senior, and South Dade Senior.

Over 3,000 assessments were completed by M-DCPS students in 30 subject areas in 2021-2022; the number of IB assessments completed in M-DCPS increased by 82 assessments from 2020-2021 to 2021-2022. The greatest number of IB assessments were completed at Coral Gables Senior. Districtwide, 70% of IB assessments were completed by Hispanic students, 20% were completed by White students, 5% were completed by Black students, and 5% were completed by students classified as “Other.”

The percentage of M-DCPS IB assessments receiving passing scores decreased by 2 percentage points to 90% from 2020-2021 to 2021-2022. Coral Reef Senior and Miami Beach Senior had the highest percentages of IB assessments receiving passing scores. White and “Other” students had the highest percentage of IB assessments receiving passing scores in 2021-2022, followed by Hispanic students, and Black students.

Overall, 93% of M-DCPS’ eligible students received an IB diploma at the conclusion of the 2021-2022 school year. The percentage of eligible students earning an IB diploma remained the same from 2020-2021 to 2021-2022. Of the six M-DCPS IB schools, John A. Ferguson Senior had the highest percentage of eligible students receiving IB diplomas in 2021-2022: 96%.