



RESEARCH BRIEF

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2021-2022 Student Performance in the Cambridge Advanced International Certificate of Education Program

Results at a Glance

This Research Brief summarizes the performance of Miami-Dade County Public Schools (M-DCPS) students participating in the Cambridge Advanced International Certificate of Education (AICE) Program. Cambridge courses and assessments were offered at 18 M-DCPS high schools in 2021-2022. Over 13,700 assessments were completed by M-DCPS students in 34 subject areas in 2021-2022. The number of AICE assessments completed in M-DCPS increased by 1% from 2020-2021 to 2021-2022. Overall, the percentage of AICE assessments receiving passing scores decreased by eleven percentage points, from 84% in 2020-2021 to 73% in 2021-2022. From 2020-2021 to 2021-2022, the percentage of assessments receiving passing scores decreased by one percentage point for Hispanic and Black students, increased by two percentage points for White students, and remained stable for students classified as “Other”. At the conclusion of the 2021-2022 school year, 78% of eligible M-DCPS students received AICE diplomas, an eleven-percentage points decrease from 2020-2021.

The Cambridge Advanced International Certificate of Education (AICE) diploma program is an international curriculum and examination system that emphasizes the value of a broad and balanced program of study. Along with an in-depth understanding of a variety of subjects, students are also required to master a broad range of skills critical for success in university study and employment. The program emphasizes the development of higher-order thinking skills, oral skills, writing skills, problem-solving, real-world applications, independent investigative skills, teamwork, and international understanding.

The AICE program provides students with flexibility in class selection, allowing them to tailor their studies to their individual interests, abilities, and future plans. Students are required to complete courses from three different subject groups, plus the core compulsory subject Global Perspectives and Research. This skills-based course challenges students to think critically, analyze evidence, and compare perspectives. Learning is assessed through a written examination as well as a team

project and presentation. The program is made up of Advanced Subsidiary (AS) Level and Advanced (A) Level courses. Cambridge AS Level courses cover the first year of the two-year A Level curriculum and count as a single credit towards the AICE diploma. A Level courses cover approximately two years of college-level curriculum and count as double credit towards the AICE diploma. There are 55 Cambridge AS and A Level subjects to choose from across four subject groups: Group 1: Mathematics and Sciences; Group 2: Languages; Group 3: Arts and Humanities; and Group 4: Interdisciplinary Subjects (optional). Students must earn a minimum of seven credits to achieve the AICE diploma, with at least one credit from each of Groups 1, 2, and 3. A maximum of two credits from Group 4 can count toward the diploma credits.

Student Assessment in the 2020-2021 and 2021-2022 School Year as a Result of COVID-19

Students must earn a minimum of seven credits (including the Global Perspectives and Research course) from subject groups 1, 2, and 3 (and optionally Group 4) to be awarded the AICE diploma. Students must earn at least one credit from each of Groups 1, 2, and 3. The AICE program uses a point system to award diplomas at three levels - Distinction, Merit, and Pass - based on students' coursework performance and examination scores. Students are required to demonstrate knowledge, understanding, and application. They must also show that they have acquired the skills of analysis, synthesis, and evaluation. Examinations receive passing letter grades ranging from A to E, with A being the highest grade for A Level and A being the highest level for AS Level. Performance below a grade of E receives a grade of U, ungraded, which is not considered passing. Students must accumulate seven credits by earning a score of E or higher on their examinations in order to be awarded the AICE diploma.

As a result of the COVID-19 pandemic, for the 2020-2021 school year, in an effort to provide equity and access to all students during the continued pandemic, Cambridge International provided for a "school-assessed grades" option rather than traditional exams. The school-assessed grade route utilized student work that demonstrated his or her level of achievement in a particular subject. Miami-Dade County Public Schools (M-DCPS) utilized the school-assessed grades option for the 2020-2021 school year.

For the 2021-2022 school year, Cambridge International transitioned back to pre-pandemic assessments while adjusting its grading standards. Below, is a quote describing their grading policy:

We have recognized the impact of Covid disruption on students when grading our June 2022 exams. To reflect that we are in a pandemic recovery period, we will move gradually from the June 2021 standard of school-assessed grades back to the standard of exams in 2019. We will do that in two equal steps – first in 2022 and then in 2023.

For June 2022, the standard of exams will be at a midpoint between 2019 and 2021. From June 2019 to June 2021, grade inflation was between half and two-thirds of a grade. Setting the standard at the midpoint between 2019 and 2021 means the grades we award in June 2022 will be more generous than those awarded in June 2019, and less generous than those awarded in June 2021.

It is important to note that we are talking about global averages – standards for Cambridge centres as a group. Grades at an individual centre could be the same as, or better than,

in 2021 if the cohort at that centre is significantly stronger; or the same as, or lower than, in 2019 if the cohort at that centre is significantly weaker. For most centres the percentage of candidates awarded a grade A or higher will not be exactly halfway between the centre's 2019 and 2021 percentages and, in some cases, it may be significantly different. (<https://www.cambridgeinternational.org/exam-administration/cambridge-exams-officers-guide/phase-6-results-and-certificates/standards-and-grading-in-june-2022/>)

The following 18 high schools in Miami-Dade County Public Schools (M-DCPS) offered Cambridge courses and assessments in 2021-2022:

15 traditional public schools:

- American Senior
- Center for International Education: A Cambridge Associate School
- Cutler Bay Senior
- G. Holmes Braddock Senior
- Hialeah Gardens Senior
- iPrep Academy North
- J.C. Bermudez Doral Senior
- Maritime & Science Technology (MAST) Academy
- Miami Edison Senior
- Miami Killian Senior
- Miami Lakes Educational Center
- Miami Norland Senior
- Miami Springs Senior
- Ronald W. Reagan/Doral Senior
- South Miami Senior

3 charter schools:

- Don Soffer Aventura High School
- Everglades Prep Academy
- Keys Gate Charter High School

Some M-DCPS students do not participate in the Cambridge diploma option but are earning college credit by taking Cambridge courses and assessments. Fourteen of the 18 M-DCPS high schools that offered Cambridge courses and assessments in 2021-2022 offered a full diploma program and had students who were eligible for AICE diplomas. Only Miami Edison Senior, iPrep Academy North, Everglades Prep Academy, and J.C. Bermudez Doral Senior did not offer a full diploma program.

This Research Brief includes 2020-2021 and 2021-2022 data on the 18 M-DCPS schools that offered Cambridge courses and assessments. The tables included in this report provide data on the number of AICE assessments completed and the percentage receiving qualifying scores by subject area across all 18 M-DCPS Cambridge schools, by school across all subject areas, and by school and ethnicity across all subject areas. The number and percentage of M-DCPS students receiving AICE diplomas in the District and at each Cambridge school are also provided.

The reader should note that the tables in this report include only the subject area assessments completed by students at M-DCPS schools. Results are not reported if fewer than 10 assessments were completed. Similarly, diploma data are only reported when 10 or more students at a school were eligible for the AICE diploma.

Participation in Cambridge AICE Assessments

- Eighteen M-DCPS schools offered Cambridge courses and assessments in 2021-2022.
- Across all M-DCPS Cambridge schools, the number of AICE assessments completed by M-DCPS students in grades 9-12 increased by 1% (from 13,641 in 2020-2021 to 13,764 in 2021-2022).
- In 2021-2022, AICE assessments were taken in 34 different subject areas. The subject areas in which the largest numbers of M-DCPS students completed assessments were English General Paper, History, Global Perspectives & Research, and Marine Science. (English General Paper is a multi-disciplinary subject matter drawn from across the curriculum. The syllabus encourages candidates to make cross-curricular links; develop a maturity of thought; and achieve an understanding and usage of the English language that enables them to express arguments, ideas, and opinions in a reflective and academic manner).
- The greatest number of AICE assessments in 2021-2022 were completed at Hialeah Gardens Senior (2,752 assessments), G. Holmes Braddock Senior (1,828 assessments), and MAST Academy (1,662 assessments).
- The number of AICE assessments completed increased at eight of the 16 M-DCPS schools that offered Cambridge courses in both 2020-2021 and 2021-2022 (Everglades Prep Academy and J.C. Bermudez Doral Senior did not offer examinations during 2020-2021). The largest increases in the number of assessments completed were at iPrep Academy North (from 33 examinations taken in 2020-2021 to 193 assessments completed in 2021-2022, over a four-fold increase), Don Soffer Aventura High (from 1009 examinations taken in 2020-2021 to 1603 assessments completed in 2021-2022, a 59% increase), and Miami Lakes Educational Center (from 241 examinations taken in 2020-2021 to 299 assessments completed in 2021-2022, a 24% increase).
- The District's Hispanic students completed 79% of all AICE assessments in 2021-2022. White students completed 13%, Black students completed 5% of AICE assessments, and students classified as "Other" (Alaskan Native, American Indian, Asian, Pacific Islander, and Multiracial categories) completed 2% of assessments.
- From 2020-2021 to 2021-2022, the percentage of AICE assessments completed by Hispanic and Black students decreased by one percentage point, the percentage of examinations taken by White students increased by two percentage points, and the percentage taken by students classified as "Other" remained stable.

Assessment Results

- While moving from the school-assessed grade option to the traditional AICE assessments, the percentage of AICE assessments receiving qualifying scores decreased by eleven percentage points, from 84% in 2020-2021 to 73% in 2021-2022.
- The 2021-2022 subject areas in which the highest percentages of AICE assessments received qualifying scores were Spanish, Spanish Language, Global Perspectives & Research, and English General Paper. The subject area in which the lowest percentages of assessments received qualifying scores was Computer Science.
- MAST Academy and Miami Lakes Educational Center had the highest percentages of AICE assessments receiving qualifying scores (88% and 86% respectively) in 2021-2022.
- From 2020-2021 to 2021-2022, the percentage of AICE assessments receiving qualifying scores increased at two M-DCPS Cambridge schools. The largest increases in the percentage of assessments receiving passing scores were at Keys Gate Charter High School (with a 4 percentage point increase) and North Miami Senior High School (with a 1 percentage point increase).
- In 2021-2022, qualifying scores of AICE assessments were earned by 75% of White students, 73% of Hispanic students, 61% of Black students, and 79% of students classified as “Other”.
- From 2020-2021 to 2021-2022, the percentage of AICE assessments receiving qualifying scores decreased by one percentage point for Hispanic and Black Students, increased by two percentage points for White students, and remained stable for students classified as “Other”.

Diploma Results

- Students who were enrolled in the Cambridge full diploma track program, met all program requirements, and completed the required assessments were eligible to receive AICE diplomas. Districtwide, the number of students eligible to receive AICE diplomas increased by 15% (from 954 students in 2020-2021 to 1094 students in 2021-2022).
- A total of 857 M-DCPS students, or 78% of the 1094 eligible M-DCPS students, received AICE diplomas at the conclusion of the 2021-2022 school year. From 2020-2021 to 2021-2022, while moving from the school-assessed grade option to the traditional AICE assessments, the percentage of M-DCPS students receiving AICE diplomas decreased by eleven percentage points (from 90% to 78%).
- Of the 14 M-DCPS schools offering the full diploma programs, the following two schools had the highest percentages of eligible students receiving AICE diplomas: Keys Gate Charter (100%) and Ronald W. Reagan/Doral Senior (94%).

- Of the 14 M-DCPS schools offering the full diploma programs, G. Holmes Braddock Senior and Hialeah Gardens Senior had the highest number of AICE diploma recipients with 152 and 133 students earning AICE diplomas respectively.
- Among the 14 M-DCPS schools with full AICE diploma track programs in both 2020-2021 and 2021-2022, the percentage of students receiving diplomas increased at two schools and decreased at ten schools. (A year-to-year comparison is not provided for Miami Norland Senior and Keys Gate Charter because fewer than 10 students at the school were eligible for the AICE diploma).

Table 1. Number of Cambridge AICE Assessments Completed and Percent of Assessments Passed, by Subject Area, 2020-2021 and 2021-2022, M-DCPS, All Cambridge AICE Schools Combined

Subject Area	# of Assessments Taken		% of Assessments Passed	
	2020-2021*	2021-2022	2020-2021*	2021-2022
Art and Design	10	9	100%	N/A
Biology	211	208	76%	45%
Business	28	68	68%	25%
Chemistry	57	85	67%	77%
Computer Science	20	13	40%	15%
Digital Media & Design	27	16	96%	75%
Drama	0	6	N/A	N/A
Economics	41	27	56%	59%
English Language	1330	1369	86%	80%
English Language and Literature	103	100	98%	54%
English Literature	921	832	84%	76%
Environmental Management	1099	909	83%	77%
French (A Level)	8	5	N/A	N/A
French Language (AS Level)	22	18	91%	61%
General Paper	1913	2158	91%	87%
Geography	18	68	78%	37%
German	1	4	N/A	N/A
German Language	6	0	N/A	N/A
Global Perspectives & Research	1236	1419	91%	93%
History	1633	1639	76%	57%
Marine Science	1411	1303	82%	62%
Mathematics	240	281	80%	29%
Media Studies	210	403	86%	86%
Music	16	42	94%	33%
Physical Education	22	101	95%	48%
Physics	58	29	59%	24%

Portuguese (A Level)	5	2	N/A	N/A
Portuguese Language (AS Level)	13	6	92%	N/A
Psychology	879	744	74%	50%
Sociology	267	182	84%	47%
Spanish (A Level)	206	178	99%	100%
Spanish Language (AS Level)	656	522	98%	99%
Spanish Literature	47	64	100%	72%
Thinking Skills	678	607	69%	74%
Travel/Tourism	249	347	90%	65%
Total, All Subjects	13,641	13,764	84%	73%

Note: In 2020-2021 M-DCPS opted for the school-assessed grades approach instead of examinations.

Table 2. Number of Cambridge AICE Assessments Completed and Percent of Assessments Passed, by School, 2020-2021 and 2021-2022

School	# of Assessments Taken		% of Assessments Passed	
	2020-2021*	2021-2022	2020-2021*	2021-2022
American Senior	528	587	81%	57%
Center for International Education	921	880	75%	65%
Cutler Bay Senior	684	706	92%	79%
Don Soffer Aventura High	1009	1603	87%	72%
Everglades Prep Academy	0	30	N/A	83%
G. Holmes Braddock Senior	2219	1828	82%	78%
Hialeah Gardens Senior	2433	2752	87%	68%
iPrep Academy North	33	193	100%	65%
J.C. Bermudez Doral Sr HS	0	40	N/A	80%
Keys Gate Charter High School	463	436	70%	74%
MAST Academy	1419	1662	89%	88%
Miami Edison Senior	104	37	85%	32%
Miami Killian Senior	725	618	81%	66%
Miami Lakes Educational Center	241	299	87%	86%
Miami Norland Senior	121	127	75%	76%
Miami Springs Senior	420	263	83%	70%
Ronald W. Reagan/Doral Senior	1189	1020	89%	76%
South Miami Senior	720	683	71%	65%

Note: In 2020-2021 M-DCPS opted for the school-assessed grades approach instead of examinations.

Table 3. Number of Cambridge AICE Assessments Completed and Percent of Assessments Passed, By Ethnicity, 2020-2021 and 2021-2022

		White		Black		Hispanic		Other	
		# Taken	% Passed	# Taken	% Passed	# Taken	% Passed	# Taken	% Passed
American Senior	2022	20	40	200	56	338	58	29	62
	2021*	18	67	192	76	291	85	27	89
Center for International Education	2022	72	65	83	54	699	66	26	81
	2021*	90	74	95	63	690	76	46	96
Cutler Bay Senior	2022	120	89	32	72	522	77	32	84
	2021*	121	93	32	88	517	92	14	100
Don Soffer Aventura High	2022	755	71	19	68	795	73	34	71
	2021*	436	86	12	100	543	89	18	67
Everglades Prep Academy	2022	0	N/A	0	N/A	30	83	0	N/A
	2021*	0	N/A	0	N/A	0	N/A	0	N/A
G. Holmes Braddock Senior	2022	69	81	5	N/A	1721	78	33	79
	2021*	107	88	15	93	2066	81	31	68
Hialeah Gardens Senior	2022	53	72	4	N/A	2684	68	11	64
	2021*	32	88	12	83	2374	87	15	87
iPrep Academy North	2022	42	62	24	38	119	70	8	N/A
	2021*	8	N/A	7	N/A	16	100	2	N/A
J.C. Bermudez Doral Sr HS	2022	1	N/A	0	N/A	39	79	0	N/A
	2021*	0	N/A	0	N/A	0	N/A	0	N/A
Keys Gate Charter High School	2022	61	82	35	60	330	74	10	80
	2021*	70	84	48	56	334	70	11	45
MAST Academy	2022	381	88	39	82	1214	88	28	89
	2021*	412	91	49	80	1330	89	40	93
Miami Edison Senior	2022	1	N/A	25	20	10	70	1	N/A
	2021*	0	N/A	80	85	17	94	7	N/A
Miami Killian Senior	2022	60	63	70	53	475	67	13	92
	2021*	60	87	59	75	596	82	10	50
Miami Lakes Educational Center	2022	13	92	60	77	217	88	9	89
	2021*	8	N/A	56	80	173	90	4	75
Miami Norland Senior	2022	0	N/A	115	75	9	N/A	3	100
	2021*	0	N/A	121	75	0	N/A	0	N/A

Table 3 (continued).

Miami Springs Senior	2022	15	60	20	70	224	71	4	N/A
	2021*	16	94	38	84	360	82	6	N/A
Ronald W. Reagan/Doral Senior	2022	95	66	2	N/A	890	77	33	88
	2021*	121	89	10	90	1011	89	47	96
South Miami Senior	2022	38	50	18	39	614	67	13	54
	2021*	43	74	12	58	655	71	10	50
Total, All Schools	2022	1796	75	751	61	10930	73	287	79
	2021*	1542	87	838	76	10973	84	288	83

Note: In 2020-2021 M-DCPS opted for the school-assessed grades instead of examinations.

Table 4. Number and Percent of Students Receiving Cambridge AICE Diplomas, by School and M-DCPS Overall, 2020-2021 and 2021-2022

School	Number of Students Eligible for AICE Diplomas		Number of Students Receiving AICE Diplomas		Percent of Students Receiving AICE Diplomas	
	2020-2021*	2021-2022	2020-2021*	2021-2022	2020-2021*	2021-2022
American Senior	38	41	30	36	79%	88%
Center for International Education	64	64	63	55	98%	86%
Cutler Bay Senior	46	69	42	57	91%	83%
Don Soffer Aventura High School	50	136	46	87	92%	64%
G. Holmes Braddock Senior	168	177	160	152	95%	86%
Hialeah Gardens	204	206	177	133	87%	65%
Keys Gate Charter	8	17	N/A	17	N/A	100%
MAST Academy	115	135	105	119	91%	88%
Miami Killian Senior	47	40	34	30	72%	75%
Miami Lakes Educational Center	19	48	14	35	74%	73%
Miami Norland Senior	16	5	14	4	88%	N/A
Miami Springs Senior	38	25	35	21	92%	84%
Ronald W. Reagan/Doral Senior	90	82	90	77	100%	94%
South Miami Senior	51	49	36	34	71%	69%
Total, All Cambridge AICE Schools	954	1094	854	857	90%	78%

Note: In 2020-2021 M-DCPS opted for the school-assessed grades approach instead of examinations.

Summary

This Research Brief summarized the performance of M-DCPS students participating in the Cambridge AICE program. Cambridge courses and assessments were available at a total of 18 M-DCPS schools in 2021-2022. Over 13,700 AICE assessments were taken by M-DCPS students in 34 subject areas in 2021-2022.

The number of AICE assessments completed in M-DCPS increased by 1% from 2020-2021 to 2021-2022. The greatest number of AICE assessments was completed at Hialeah Gardens Senior in 2021-2022. The District's Hispanic students completed 79% of all AICE assessments in 2021-2022; White students completed 13%; Black students completed 5% of AICE assessments, and students classified as "Other" completed 2% of assessments.

While moving from the school-assessed grade option to the traditional AICE assessments, the percentage of M-DCPS AICE assessments receiving qualifying scores decreased by eleven percentage points, from 84% in 2020-2021 to 73% in 2021-2022. MAST Academy and Miami Lakes Educational Center had the highest percentages of AICE assessments receiving qualifying scores. Students classified as "Other" had the highest percentage of AICE assessments receiving qualifying scores in 2021-2022, followed by White students, Hispanic students, and Black students.

Overall, 78% of M-DCPS eligible students received an AICE diploma at the conclusion of the 2021-2022 school year. While moving from the school-assessed grade option to the traditional AICE assessment, the percentage of eligible students earning an AICE diploma decreased by eleven percentage points from 2020-2021 to 2021-2022.