



RESEARCH BRIEF

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Andrea Tirado

2022-2023 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 examinations were offered at 18 M-DCPS high schools in 2022-2023. For the 2022-2023 school year, Cambridge International returned to the non-adjusted, pre-pandemic grading standards for its exams. Over 16,700 examinations were completed by M-DCPS students in 35 subject areas in 2022-2023. The number of AICE exams completed in M-DCPS increased by 21% from 2021-2022 to 2022-2023. Overall, the percentage of AICE examinations receiving passing scores decreased by seven percentage points, from 73% in 2021-2022 to 66% in 2022-2023. From 2021-2022 to 2022-2023, the percentage of examinations receiving passing scores decreased for all groups of students, by 12 percentage points for White students, six percentage points for Hispanic students, nine percentage points for Black students, and by seven percentage points for students classified as "Other". At the conclusion of the 2022-2023 school year, 70% of eligible M-DCPS students received AICE diplomas, an eight percentage points decrease from 2021-2022.

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 course 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. 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 (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. Performance below a grade of E receives a grade of U, ungraded, which is not considered passing. Students must receive a score of E or higher on their examinations in order to receive an AICE diploma.

Student Examinations in the 2022-2023 School Year and the Return to Pre-pandemic Grading Standards

As a result of the COVID-19 pandemic, for the 2019-2020 school year, Cambridge International canceled in-person examinations worldwide to ensure the safety of students and teachers. Cambridge International developed a multi-step approach to provide students with fair grades using alternative assessment methods, so students would still receive a grade for their Cambridge exam(s) and point(s) towards the AICE Diploma. The alternative assessment method used the professional judgment of teachers who evaluated a variety of evidence from students to produce a predicted grade for each student in a specific syllabus.

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

We have recognised 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.

For the 2022-2023 school year, Cambridge International returned to the non-adjusted pre-pandemic grading standards for its exams.

2022-2023 Cambridge AICE Analyses

The following 18 Miami-Dade County Public Schools (M-DCPS) high schools offered Cambridge courses and examinations in 2022-2023:

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 examinations. Fourteen of the 18 M-DCPS high schools that offered Cambridge courses and examinations in 2022-2023 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 2021-2022 and 2022-2023 data on the 18 M-DCPS schools that offered Cambridge courses and examinations. The provided tables offer information on the

number of AICE exams taken and the percentage of students who achieved qualifying scores, broken down by subject area for all 15 traditional and three charter Cambridge schools in M-DCPS. The data is also presented by individual school across all subject areas and by school and ethnicity across all subject areas. Additionally, the number and percentage of M-DCPS students who received AICE diplomas district-wide and at each Cambridge school are included.

The reader should note that the tables in this report include only the subject area examinations completed by students at M-DCPS schools. Results are not reported if fewer than 10 examinations were completed. Similarly, diploma data are only reported when 10 or more students at a school were eligible for the AICE diploma. The data on students enrolled in Florida Virtual School (FLVS) who tested at M-DCPS locations were excluded from the analyses.

Participation in Cambridge AICE Examinations

- Fifteen traditional and three charter schools in M-DCPS offered Cambridge courses and examinations in 2022-2023.
- Across the 18 M-DCPS Cambridge schools, the number of AICE examinations taken by M-DCPS students in grades 9-12 increased by 21% (from 13,764 in 2021-2022 to 16,708 in 2022-2023).
- In 2022-2023, AICE examinations were taken in 35 different subject areas. The subject areas in which the largest numbers of M-DCPS students took examinations were English General Paper, History, English Language, and Global Perspectives & Research. 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 examinations in 2022-2023 were taken at Hialeah Gardens Senior (3,656 examinations), Don Soffer Aventura High (2,122 examinations), and G. Holmes Braddock Senior (2,110 examinations).
- The number of AICE examinations taken increased at 15 of the 18 M-DCPS schools that offered Cambridge courses in both 2021-2022 and 2022-2023. The largest increases in the number of examinations taken were at J.M. Bermudez Doral Senior High School (from 40 examinations taken in 2021-2022 to 205 taken in 2022-2023, over a 400% increase), iPrep Academy North (from 193 examinations taken in 2021-2022 to 586 in 2022-2023, over a 200% increase), and Everglades Prep Academy (from 30 examinations taken in 2021-2022 to 81 taken in 2022-2023, a 170% increase).
- The District's Hispanic students took 80% of all AICE examinations in 2022-2023. White students took 12% of examinations, Black students took 5% of examinations, and students classified as "Other" (Alaskan Native, American Indian, Asian, Pacific Islander, and Multiracial categories) took 2% of examinations.

- From 2021-2022 to 2022-2023, the percentage of AICE examinations taken by Hispanic students increased by one percentage point, the percentage of examinations taken by White students decreased by one percentage point, and the percentage taken by Black students and students classified as “Other” remained stable.

Examination Results

- Returning to pre-pandemic examination standards, the percentage of AICE examinations receiving passing scores decreased by seven percentage points, from 73% in 2021-2022 to 66% in 2022-2023.
- The 2022-2023 subject areas in which the highest percentages of AICE examinations received passing scores were Spanish, Spanish Language, Economics, and English General Paper. The subject area in which the lowest percentages of examinations received passing scores was Information Technology.
- Miami Lakes Educational Center had the highest percentages of AICE examinations receiving passing scores (80%) in 2022-2023, followed by MAST Academy and G. Holmes Braddock Senior, both with 79%.
- From 2021-2022 to 2022-2023, the percentage of AICE examinations receiving passing scores increased at one M-DCPS Cambridge school, G. Holmes Braddock Senior High School.
- In 2022-2023, 67% of AICE examinations taken by Hispanic students, 63% of examinations taken by White students, 52% of examinations taken by Black students, and 72% of examinations taken by students classified as “Other” received passing scores.
- From 2021-2022 to 2022-2023, the percentage of AICE examinations receiving passing scores decreased for all groups of students; by 12 percentage points for White students, by six percentage points for Hispanic students, by nine percentage points for Black students, and by seven percentage points 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 examinations were eligible to receive AICE diplomas. Districtwide, the number of students eligible to receive AICE diplomas increased by 10% (from 1,094 students in 2021-2022 to 1,206 students in 2022-2023).
- A total of 846 M-DCPS students, or 70% of the 1,206 eligible M-DCPS students, received AICE diplomas at the conclusion of the 2022-2023 school year. From 2021-2022 to 2022-2023, returning to pre-pandemic examination standards, the percentage of M-DCPS students receiving AICE diplomas decreased by eight percentage points (from 78% to 70%).

- Of the 14 M-DCPS schools offering the full diploma programs, the following schools had the highest percentages of eligible students receiving AICE diplomas: Ronald W. Reagan/Doral Senior (94%), Cutler Bay Senior (88%), and G. Holmes Braddock Senior (88%).
- 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 154 and 145 students earning AICE diplomas respectively.
- Among the 14 M-DCPS schools with full AICE diploma track programs in both 2021-2022 and 2022-2023, the percentage of students receiving diplomas increased at three schools, decreased at nine schools, and remained stable at one school. (A year-to-year comparison is not provided for Miami Norland Senior because fewer than 10 students at the school were eligible for the AICE diploma).

Table 1. Number of Cambridge AICE Examinations Completed and Percent of Examinations Passed, by Subject Area, 2021-2022 and 2022-2023, M-DCPS, All Cambridge AICE Schools Combined

Subject Area	# of Examinations Taken		% of Examinations Passed	
	2021-2022	2022-2023*	2021-2022	2022-2023*
Art and Design	9	68	N/A	27%
Biology	208	286	45%	41%
Business	68	298	25%	30%
Chemistry	85	71	77%	75%
Computer Science	13	3	15%	N/A
Digital Media & Design	16	23	75%	83%
Drama	6	9	N/A	N/A
Economics	27	12	59%	92%
English Language	1,369	1,632	80%	72%
English Language and Literature	100	84	54%	27%
English Literature	832	851	76%	71%
Environmental Management	909	1,368	77%	60%
French (A Level)	5	6	N/A	N/A
French Language (AS Level)	18	33	61%	67%
Further Mathematics	0	3	N/A	N/A
General Paper	2,158	2,633	87%	91%
Geography	68	43	37%	9%
German	4	0	N/A	N/A
Global Perspectives & Research	1,419	1,546	93%	82%
History	1,639	1,864	57%	49%
Information Technology	0	48	N/A	2%
Law	0	38	N/A	8%
Marine Science	1,303	1,218	62%	53%
Mathematics	281	274	29%	39%
Media Studies	403	455	86%	66%
Music	42	51	33%	24%
Physical Education	101	115	48%	20%
Physics	29	37	24%	38%
Portuguese (A Level)	2	0	N/A	N/A
Portuguese Language (AS Level)	6	1	N/A	N/A

Table 1 (continued).

Psychology	744	967	50%	40%
Sociology	182	338	47%	52%
Spanish (A Level)	178	202	100%	100%
Spanish Language (AS Level)	522	847	99%	97%
Spanish Literature	64	72	72%	76%
Thinking Skills	607	740	74%	69%
Travel/Tourism	347	472	65%	52%
Total, All Subjects	13,764	16,708	73%	66%

Note: In 2022-2023 Cambridge International returned to the pre-pandemic grading standards for its examinations.

Table 2. Number of Cambridge AICE Examinations Completed and Percent of Examinations Passed, by School, 2021-2022 and 2022-2023

School	# of Examinations Taken		% of Examinations Passed	
	2021-2022	2022-2023*	2021-2022	2022-2023*
American Senior	587	568	57%	54%
Center for International Education	880	999	65%	60%
Cutler Bay Senior	706	806	79%	78%
Don Soffer Aventura High	1,603	2,122	72%	56%
Everglades Prep Academy	30	81	83%	38%
G. Holmes Braddock Senior	1,828	2,110	78%	79%
Hialeah Gardens Senior	2,752	3,656	68%	65%
iPrep Academy North	193	586	65%	55%
J.C. Bermudez Doral Sr HS	40	205	0.8	71%
Keys Gate Charter High School	436	567	74%	45%
MAST Academy	1,662	1,816	88%	79%
Miami Edison Senior	37	45	32%	22%
Miami Killian Senior	618	550	66%	54%
Miami Lakes Educational Center	299	331	86%	80%
Miami Norland Senior	127	225	76%	53%
Miami Springs Senior	263	217	70%	52%
Ronald W. Reagan/Doral Senior	1,020	1,031	76%	75%
South Miami Senior	683	793	65%	64%

Note: In 2022-2023 Cambridge International returned to the pre-pandemic grading standards for its examinations.

Table 3. Number of Cambridge AICE Examinations Completed and Percent of Examinations Passed, By Ethnicity, 2021-2022 and 2022-2023

		White		Black		Hispanic		Other	
		# Taken	% Passed	# Taken	% Passed	# Taken	% Passed	# Taken	% Passed
American Senior	2023*	5	N/A	187	52	354	55	22	64
	2022	20	40	200	56	338	58	29	62
Center for International Education	2023*	62	61	64	48	842	60	31	77
	2022	72	65	83	54	699	66	26	81
Cutler Bay Senior	2023*	122	84	28	82	623	76	33	91
	2022	120	89	32	72	522	77	32	84
Don Soffer Aventura High	2023*	952	53	22	59	1089	59	59	47
	2022	755	71	19	68	795	73	34	71
Everglades Prep Academy	2023*	2	N/A	7	N/A	69	35	3	N/A
	2022	0	N/A	0	N/A	30	83	0	N/A
G. Holmes Braddock Senior	2023*	48	77	4	N/A	2028	79	30	73
	2022	69	81	5	N/A	1721	78	33	79
Hialeah Gardens Senior	2023*	68	68	14	50	3550	65	24	67
	2022	53	72	4	N/A	2684	68	11	64
iPrep Academy North	2023*	149	58	55	47	366	54	16	63
	2022	42	62	24	38	119	70	8	N/A
J.C. Bermudez Doral Sr HS	2023*	7	N/A	0	N/A	195	71	3	N/A
	2022	1	N/A	0	N/A	39	79	0	N/A
Keys Gate Charter High School	2023*	66	59	58	29	429	45	14	43
	2022	61	82	35	60	330	74	10	80
MAST Academy	2023*	389	80	33	73	1364	79	30	93
	2022	381	88	39	82	1214	88	28	89
Miami Edison Senior	2023*	0	N/A	23	9	20	40	2	N/A
	2022	1	N/A	25	20	10	70	1	N/A
Miami Killian Senior	2023*	60	45	55	45	416	55	19	68
	2022	60	63	70	53	475	67	13	92
Miami Lakes Educational Center	2023*	18	100	78	68	224	83	11	91
	2022	13	92	60	77	217	88	9	N/A
Miami Norland Senior	2023*	4	N/A	210	52	3	N/A	8	N/A
	2022	0	N/A	115	75	9	N/A	3	N/A

Table 3 (continued).

Miami Springs Senior	2023*	16	44	18	67	182	51	1	N/A
	2022	15	60	20	70	224	71	4	N/A
Ronald W. Reagan/Doral Senior	2023*	46	76	2	N/A	939	75	44	86
	2022	95	66	2	N/A	890	77	33	88
South Miami Senior	2023*	45	56	22	27	707	65	19	74
	2022	38	50	18	39	614	67	13	54
Total, All Schools	2023*	2059	63	880	52	13400	67	369	72
	2022	1796	75	751	61	10930	73	287	79

Note: In 2022-2023 Cambridge International returned to the pre-pandemic grading standards for its examinations.

Table 4. Number and Percent of Students Receiving Cambridge AICE Diplomas, by School and M-DCPS Overall, 2021-2022 and 2022-2023

School	Number of Students Eligible for AICE Diplomas		Number of Students Receiving AICE Diplomas		Percent of Students Receiving AICE Diplomas	
	2021-2022	2022-2023*	2021-2022	2022-2023*	2021-2022	2022-2023
American Senior	41	39	36	23	88%	59%
Center for International Education	64	63	55	49	86%	78%
Cutler Bay Senior	69	60	57	53	83%	88%
Don Soffer Aventura High School	136	208	87	118	64%	57%
G. Holmes Braddock Senior	177	175	152	154	86%	88%
Hialeah Gardens	206	253	133	145	65%	57%
Keys Gate Charter	17	38	17	18	100%	47%
MAST Academy	135	145	119	123	88%	85%
Miami Killian Senior	40	41	30	20	75%	49%
Miami Lakes Educational Center	48	29	35	21	73%	72%
Miami Norland Senior	5	18	4	9	N/A	N/A
Miami Springs Senior	25	23	21	20	84%	87%
Ronald W. Reagan/Doral Senior	82	70	77	66	94%	94%
South Miami Senior	49	44	34	27	69%	61%
Total, All Cambridge AICE Schools	1094	1206	857	846	78%	70%

Note: In 2022-2023 Cambridge International returned to the pre-pandemic grading standards for its examinations.

Summary

This Research Brief summarized the performance of M-DCPS students participating in the Cambridge AICE program. Cambridge courses and examinations were available at a total of 18 M-DCPS schools in 2022-2023. Over 16,700 AICE examinations were taken by M-DCPS students in 35 subject areas in 2022-2023.

The number of AICE examinations taken in M-DCPS increased by 21% from 2021-2022 to 2022-2023. The greatest number of AICE examinations were taken at Hialeah Gardens Senior in 2022-2023. The District's Hispanic students took 80% of all AICE examinations in 2022-2022; White students took 12%; Black students took 5% of AICE examinations, and students classified as "Other" took 2% of examinations.

Cambridge International returned to its pre-pandemic grading standards in 2022-2023 and that change was associated with a decrease in percentages of students earning passing scores. Specifically, the percentage of M-DCPS AICE examinations receiving passing scores decreased by seven percentage points, from 73% in 2021-2022 to 66% in 2022-2023. Miami Lakes Educational Center had the highest percentages of AICE examinations receiving passing scores. Students classified as "Other" had the highest percentage of AICE examinations receiving passing scores in 2022-2023, followed by Hispanic students, White students, and Black students.

Overall, 70% of M-DCPS eligible students received an AICE diploma at the conclusion of the 2022-2023 school year. Returning to pre-pandemic standards was associated with the percentage of eligible students earning an AICE diploma decreasing by eight percentage points from 2021-2022 to 2022-2023.