



RESEARCH BRIEF

Research Services

Vol. 2002
November 2020

Andrea Tirado

Miami-Dade County Public Schools: 2019-2020 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 15 M-DCPS high schools in 2019-2020. Over 13,100 assessments were completed by M-DCPS students in 31 subject areas in 2019-2020. The number of AICE assessments completed in M-DCPS increased by 11% from 2018-2019 to 2019-2020. Overall, the percentage of AICE assessments receiving passing scores increased by 13 percentage points, from 69% in 2018-2019 to 82% in 2019-2020. From 2018-2019 to 2019-2020, the percentage of AICE assessments receiving passing scores increased for all groups of students: by 11 percentage points for White and Hispanic students, by 32 percentage points for Black students, and by nine percentage points for students classified as "Other". At the conclusion of the 2019-2020 school year, 88% of eligible M-DCPS students received AICE diplomas, a 17-percentage point increase from 2018-2019.

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 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 toward 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 at least one credit from each of Groups 1, 2, and 3. A maximum of two credits can count from Group 4.

Student Assessment in the 2019-2020 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. 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 all of their examinations in order to receive an AICE diploma.

As a result of the COVID-19 pandemic, Cambridge International decided to cancel 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 and point(s) towards the AICE Diploma. The alternative assessment method used the professional judgement of teachers who evaluated a variety of evidence from students to produce a predicted grade for each student in a specific syllabus.

The following 15 Miami-Dade County Public Schools (M-DCPS) high schools offered Cambridge courses and assessments in 2019-2020:

- American Senior
- G. Holmes Braddock Senior
- Center for International Education: A Cambridge Associate School
- Cutler Bay Senior
- Don Soffer Aventura High School
- Hialeah Gardens Senior
- Keys Gate Charter High School
- 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

Some M-DCPS students are not on a Cambridge diploma track but are earning college credit by taking Cambridge courses and assessments. Thirteen of the 15 M-DCPS high schools that offered Cambridge courses and assessments in 2019-2020 offered a full diploma track program and had students who were eligible for AICE diplomas. Only Miami Edison Senior and Don Soffer Aventura High School, offering the Cambridge program for the first time in 2017-2018 and 2019-2020, did not offer a full diploma track program.

This research brief includes 2018-2019 and 2019-2020 data on the 15 M-DCPS schools that offered Cambridge courses and assessments. Tables included in this report provide data on the number of AICE assessments completed and the percentage receiving passing scores by subject area across all 15 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 (Previously Examinations)

- Fifteen M-DCPS schools offered Cambridge courses and assessments in 2019-2020.
- Across all M-DCPS Cambridge schools, the number of AICE assessments completed by M-DCPS students in grades 9-12 increased by 11% (from 11,807 in 2018-2019 to 13,151 in 2019-2020).
- In 2019-2020, AICE assessments were taken in 31 different subject areas. The subject areas in which the largest numbers of M-DCPS students completed assessments were General Paper, History, and Marine Science. (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 were completed at G. Holmes Braddock Senior in 2019-2020 (2,462 assessments).
- The number of AICE assessments completed increased at nine of the 14 M-DCPS schools that offered Cambridge courses in both 2018-2019 and 2019-2020 (Don Soffer High School did not offer examinations during 2018-2019). The largest increases in the number of assessments completed were at Miami Edison Senior (from 28 examinations taken in 2018-2019 to 84 assessments completed in 2019-2020, a 200% increase), Cutler Bay Senior (from 438 examinations taken in 2018-2019 to 653 assessments completed in

2019-2020, a 49% increase), and American Senior (from 421 examinations taken in 2018-2019 to 511 assessments completed in 2019-2020, a 21% increase).

- The District's Hispanic students completed 82% of all AICE assessments in 2019-2020. White students completed 10%, Black students completed 7% of AICE assessments, and students classified as "Other" (Alaskan Native, American Indian, Asian, Pacific Islander, and Multiracial categories) completed 2% of assessments.
- From 2018-2019 to 2019-2020, the percentage of AICE assessments completed by Hispanic and students classified as "Other" remained stable, the percentage of examinations taken by Black students decreased by one percentage point, and the percentage taken by White students increased by 2 percentage points.

Assessment Results

- Across all M-DCPS Cambridge schools, the percentage of AICE assessments receiving passing scores increased by 13 percentage points, from 69% in 2018-2019 to 82% in 2019-2020.
- The 2019-2020 subject areas in which the highest percentages of AICE assessments received passing scores were Portuguese, Spanish, Spanish Literature, Digital Media and Design, English Language and Literature, and French Language. The subject areas in which the lowest percentages of assessments received passing scores were Computer Science and Business.
- Miami Edison Senior and Cutler Bay Senior had the highest percentages of AICE examinations receiving passing scores (100% and 92% respectively) in 2019-2020.
- From 2018-2019 to 2019-2020, the percentage of AICE assessments receiving passing scores increased at fourteen M-DCPS Cambridge schools. The largest increases in the percentage of assessments receiving passing scores were at Miami Edison (with 89 percentage point increase) and American Senior (with 34 percentage point increase).
- In 2019-2020, 85% of AICE assessments completed by White students, 83% of assessments completed by Hispanic students, 72% of assessments completed by Black students, and 84% of assessments completed by students classified as "Other" received passing scores.
- From 2018-2019 to 2019-2020, the percentage of AICE assessments receiving passing scores increased for all groups of students: by 11 percentage points for White students and Hispanic students, by 32 percentage points for Black students, and by 9 percentage points for students classified as "Other,"

Diploma Results

- Grades 11 and 12 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 17% (from 650 students in 2018-2019 to 761 students in 2019-2020).

- A total of 669 M-DCPS students, or 88% of the 761 eligible M-DCPS students, received AICE diplomas at the conclusion of the 2019-2020 school year. From 2018-2019 to 2019-2020, the percentage of M-DCPS students receiving AICE diplomas increased by ten percentage points (from 78% to 88%).
- Of the 13 M-DCPS schools offering full diploma track programs, the following two schools had the highest percentages of eligible students receiving AICE diplomas: Cutler Bay Senior (98%) and Ronald W. Reagan/Doral Senior (96%).
- Among the 13 M-DCPS schools with full AICE diploma track programs in both 2018-2019 and 2019-2020, the percentage of students receiving diplomas increased at ten schools and decreased at three schools. (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 Assessments Completed and Percent of Assessments Passed, by Subject Area, 2018-2019 and 2019-2020, M-DCPS, All Cambridge AICE Schools Combined

Subject Area	# of Assessments Taken		% of Assessments Passed	
	2018-2019	2019-2020*	2018-2019	2019-2020*
Biology	251	213	24%	74%
Business	140	38	11%	41%
Chemistry	92	72	53%	76%
Computer Science	26	107	39%	38%
Digital Media & Design	26	14	62%	100%
Economics	38	65	68%	83%
English Language	1451	1267	77%	83%
English Language and Literature	0	63	N/A	100%
English Literature	806	946	71%	81%
Environmental Management	727	776	68%	79%
French Language (AS Level)	26	36	65%	100%
Further Mathematics	2	6	N/A	N/A
General Paper	1331	1768	91%	95%
Geography	8	48	N/A	75
German Language	0	2	N/A	N/A
Global Perspectives & Research	992	1246	95%	95%
History	1619	1637	43%	69%
Marine Science	864	1314	69%	79%
Mathematics	189	212	80%	92%
Media Studies	100	300	76%	85%
Music	4	6	N/A	N/A
Physics	87	105	54%	76%
Portuguese (A Level)	2	10	N/A	100
Portuguese Language (AS Level)	18	33	100%	100%
Psychology	894	782	48%	70%
Sociology	155	251	47%	65%
Spanish (A Level)	219	224	100%	100%
Spanish Language (AS Level)	662	721	98%	99%
Spanish Literature	11	35	100%	100%
Thinking Skills	758	666	69%	75%
Travel/Tourism	240	188	66%	81%
Total, All Subjects	11,807	13,151	69%	82%

Note: In 2019-2020, in-person exams were canceled due to the COVID-19 pandemic. Assessments were conducted by teachers and Cambridge International based on predicted grades and a standardization process.

Table 2. Number of Cambridge AICE Assessments Completed and Percent of Assessments Passed, by School, 2018-2019 and 2019-2020

School	# of Assessments Taken		% of Assessments Passed	
	2018-2019	2019-2020*	2018-2019	2019-2020*
American Senior	421	511	49%	83%
Center for International Education	977	996	64%	68%
Cutler Bay Senior	438	653	76%	92%
Don Soffer Aventura High	0	559	N/A	89%
G. Holmes Braddock Senior	2287	2462	78%	80%
Hialeah Gardens Senior	2211	2201	62%	78%
Keys Gate Charter High School	337	263	69%	84%
MAST Academy	1598	1787	75%	91%
Miami Edison Senior	28	84	11%	100%
Miami Killian Senior	735	723	72%	84%
Miami Lakes Educational Center	288	290	72%	84%
Miami Norland Senior	354	223	18%	49%
Miami Springs Senior	334	328	53%	80%
Ronald W. Reagan/Doral Senior	1053	1215	83%	90%
South Miami Senior	746	856	79%	82%

Note: In 2019-2020, in-person exams were canceled due to the COVID-19 pandemic. Assessments were conducted by teachers and Cambridge International based on predicted grades and a standardization process.

Table 3. Number of Cambridge AICE Assessments Completed and Percent of Assessments Passed, By Ethnicity, 2018-2019 and 2019-2020

		White		Black		Hispanic		Other	
		# Taken	% Passed	# Taken	% Passed	# Taken	% Passed	# Taken	% Passed
American Senior	2020*	9	N/A	183	81	297	83	22	77
	2019	11	73	133	37	262	55	15	47
G. Holmes Braddock Senior	2020*	138	80	22	59	2285	80	17	82
	2019	128	73	19	63	2118	79	22	82
Center for International Education	2020*	80	61	101	62	777	69	38	79
	2019	67	60	112	53	773	66	25	60
Cutler Bay Senior	2020*	97	95	57	82	481	92	18	94
	2019	61	80	33	55	331	76	12	100
Don Soffer Aventura High	2020*	213	92	11	91	330	87	5	N/A
	2019	0	N/A	0	N/A	0	N/A	0	N/A
Hialeah Gardens Senior	2020*	26	73	13	77	2148	78	14	100
	2019	32	63	20	75	2138	62	19	58
Keys Gate Charter High School	2020*	56	84	23	74	173	86	11	64
	2019	54	83	60	48	210	71	13	69
MAST Academy	2020*	403	90	49	82	1302	92	33	94
	2019	395	75	27	78	1127	75	49	73
Miami Edison Senior	2020*	1	N/A	62	100	19	100	2	N/A
	2019	0	N/A	24	13	4	N/A	0	N/A
Miami Killian Senior	2020*	62	79	88	83	564	84	9	N/A
	2019	110	71	71	65	529	74	25	68
Miami Lakes Educational Center	2020*	10	90	44	84	231	84	5	N/A
	2019	9	N/A	57	68	215	73	7	N/A
Miami Norland Senior	2020*	0	N/A	214	48	8	N/A	1	N/A
	2019	2	N/A	333	17	16	38	3	N/A
Miami Springs Senior	2020*	22	86	21	67	281	80	4	N/A
	2019	25	72	8	N/A	296	51	5	N/A
Ronald W. Reagan/Doral Senior	2020*	115	85	15	93	1037	91	48	81
	2019	82	78	3	N/A	908	83	60	92
South Miami Senior	2020*	43	81	16	50	790	83	7	N/A
	2019	26	77	13	77	702	79	5	40
Total, All Schools	2020*	1062	85	908	72	10393	83	229	84
	2019	1002	74	913	40	9629	72	260	75

Note: Three students did not report ethnicity for 2019-2018. The total in this table adds to 11,804. In 2019-2020, in-person exams were canceled due to the COVID-19 pandemic. Assessments were conducted by teachers and Cambridge International based on predicted grades and a standardized process.

Table 4. Number and Percent of Students Receiving Cambridge AICE Diplomas, by School and M-DCPS Overall, 2018-2019 and 2019-2020

School	Number of Students Eligible for AICE Diplomas		Number of Students Receiving AICE Diplomas		Percent of Students Receiving AICE Diplomas	
	2018-2019	2019-2020*	2018-2019	2019-2020*	2018-2019	2019-2020*
American Senior	7	23	N/A	21	57%	91%
Cutler Bay Senior	27	49	20	48	74%	98%
Center for International Education	61	61	49	51	80%	84%
Miami Springs Senior	11	15	11	14	100%	93%
South Miami Senior	39	59	28	49	72%	83%
Keys Gate Charter	24	14	11	13	46%	93%
Ronald W. Reagan/Doral Senior	82	71	81	68	99%	96%
Miami Killian Senior	45	33	36	29	80%	88%
G. Holmes Braddock Senior	121	169	113	156	93%	92%
MAST Academy	91	109	71	101	78%	93%
Miami Lakes Educational Center	30	41	18	32	60%	78%
Hialeah Gardens	103	112	58	83	56%	74%
Miami Norland Senior	9	5	N/A	N/A	67%	80%
Total, All Cambridge AICE Schools	650	761	506	669	78%	88%

Note: The number of students receiving AICE diplomas does not add up to the total because results are not reported when fewer than 10 students were eligible for the diploma. In 2019-2020 course credits toward diplomas were awarded through assessments which included predicted grades and a standardization process conducted by Cambridge international.

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 15 M-DCPS schools in 2019-2020. Over 13,100 AICE examinations were taken by M-DCPS students in 31 subject areas in 2019-2020.

The number of AICE assessment completed in M-DCPS increased by 11% from 2018-2019 to 2019-2020. The greatest number of AICE assessments was completed at G. Holmes Braddock Senior in 2019-2020. The District's Hispanic students completed 82% of all AICE assessments in 2019-2020; White students completed 10%; Black students completed 7% of AICE assessments, and students classified as "Other" completed 2% of assessments.

The percentage of M-DCPS AICE assessments receiving passing scores increased by 13 percentage points, from 69% in 2018-2019 to 82% in 2019-2020. Miami Edison Senior and Cutler Bay Senior had the highest percentages of AICE assessments receiving passing scores. White students had the highest percentage of AICE assessments receiving passing scores in 2019-2020, followed by students classified as "Other", Hispanic students, and Black students. From

2018-2019 to 2019-2020, the percentage of assessments receiving passing scores increased by 11 percentage points for White and Hispanic students, by 32 percentage points for Black students, and by nine percentage points for students classified as “Other”.

Overall, 88% of M-DCPS’ eligible students received an AICE diploma at the conclusion of the 2019-2020 school year. The percentage of eligible students earning an AICE diploma increased by ten percentage points from 2018-2019 to 2019-2020. Of the 13 M-DCPS schools offering full AICE diploma track programs, Cutler Bay Senior and Ronald W. Reagan/Doral Senior had the highest percentages of eligible students receiving AICE diplomas in 2019-2020.