



# RESEARCH BRIEF

## Research Services

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Andrea Tirado

### **2020-2021 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 16 M-DCPS high schools in 2020-2021. Over 13,600 assessments were completed by M-DCPS students in 34 subject areas in 2020-2021. The number of AICE assessments completed in M-DCPS increased by 4% from 2019-2020 to 2020-2021. The District's Hispanic students completed 80% of all AICE assessments in 2020-2021. Overall, the percentage of AICE assessments receiving passing scores increased by two percentage points, from 82% in 2019-2020 to 84% in 2020-2021. From 2019-2020 to 2020-2021, the percentage of AICE assessments receiving passing scores increased by one percentage point for White and Hispanic students and by four percentage points for Black students. At the conclusion of the 2020-2021 school year, 90% of eligible M-DCPS students received AICE diplomas, an increase of two percentage points from 2019-2020.

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 and 2020-2021 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, for the 2019-2020 school year, 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 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 2020-2021 school year, in an effort to promote equity and access for all students during the continued pandemic, Cambridge International provided for a “school-assessed grades” option rather than traditional exams. The school-assessed grade route is an approach that utilizes student work that demonstrates his or her level of achievement in a particular syllabus. Miami-Dade County Public Schools (M-DCPS) utilized the school-assessed grades option for the 2020-2021 school year.

The following 16 high schools in Miami-Dade County Public Schools (M-DCPS) offered Cambridge courses and assessments in 2020-2021:

- American Senior
- Center for International Education: A Cambridge Associate School
- Cutler Bay Senior
- Don Soffer Aventura High School
- G. Holmes Braddock Senior
- Hialeah Gardens Senior
- iPrep Academy North
- 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 do not participate in the Cambridge diploma option but are earning college credit by taking Cambridge courses and assessments. Fourteen of the 16 M-DCPS high schools that offered Cambridge courses and assessments in 2020-2021 offered a full diploma program and had students who were eligible for AICE diplomas. Only Miami Edison Senior and iPrep Academy North, offering the Cambridge program for the first time in 2017-2018 and 2020-2021, did not offer a full diploma program.

This brief includes 2019-2020 and 2020-2021 data on the 16 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 16 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)**

- Sixteen M-DCPS schools offered Cambridge courses and assessments in 2020-2021.
- Across all M-DCPS Cambridge schools, the number of AICE assessments completed by M-DCPS students in grades 9-12 increased by 4% (from 13,151 in 2019-2020 to 13,641 in 2020-2021).
- In 2020-2021, 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, 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 was completed at Hialeah Gardens Senior in 2020-2021 (2,433 assessments).
- The number of AICE assessments completed increased at eight of the 15 M-DCPS schools that offered Cambridge courses in both 2019-2020 and 2020-2021 (iPrep

Academy North did not offer examinations during 2019-2020). The largest increases in the number of assessments completed were at Don Soffer Aventura High (from 559 examinations taken in 2019-2020 to 1009 assessments completed in 2020-2021, an 81% increase), Keys Gate Charter High School (from 263 examinations taken in 2019-2020 to 463 assessments completed in 2020-2021, a 76% increase), and Miami Springs Senior (from 328 examinations taken in 2019-2020 to 420 assessments completed in 2020-2021, a 28% increase).

- The District's Hispanic students completed 80% of all AICE assessments in 2020-2021. White students completed 11%, Black students completed 6% of AICE assessments, and students classified as "Other" (Alaskan Native, American Indian, Asian, Pacific Islander, and Multiracial categories) completed 2% of assessments.
- From 2019-2020 to 2020-2021, 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 2 percentage points, and the percentage taken by students classified as "Other" remained stable.

### **Assessment Results**

- Across all M-DCPS Cambridge schools, the percentage of AICE assessments receiving passing scores increased by two percentage points, from 82% in 2019-2020 to 84% in 2020-2021.
- The 2020-2021 subject areas in which the highest percentages of AICE assessments received passing scores were Art and Design, Spanish Literature, Spanish, Spanish Language, and English Language and Literature. The subject area in which the lowest percentage of assessments received passing scores was Computer Science.
- iPrep Academy North and Cutler Bay Senior had the highest percentages of AICE examinations receiving passing scores (100% and 92%, respectively) in 2020-2021.
- From 2019-2020 to 2020-2021, the percentage of AICE assessments receiving passing scores increased at six M-DCPS Cambridge schools. The largest increases in the percentage of assessments receiving passing scores were at Miami Norland Senior (with an increase of 26 percentage points) and Hialeah Gardens Senior (with an increase of 9 percentage points).
- In 2020-2021, 87% of AICE assessments completed by White students, 84% of assessments completed by Hispanic students, 76% of assessments completed by Black students, and 83% of assessments completed by students classified as "Other" received passing scores.
- From 2019-2020 to 2020-2021, the percentage of AICE assessments receiving passing scores decreased by one percentage point for students classified as "Other" and

increased for all other groups: by one percentage point for White and Hispanic students, and by four percentage points for Black students.

### **Diploma Results**

- Students in grades 11 and 12 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 25% (from 761 students in 2019-2020 to 954 students in 2020-2021).
- A total of 854 M-DCPS students, or 90% of the 954 eligible M-DCPS students, received AICE diplomas at the conclusion of the 2020-2021 school year. From 2019-2020 to 2020-2021, the percentage of eligible M-DCPS students receiving AICE diplomas increased by two percentage points (from 88% to 90%).
- Of the 14 M-DCPS schools offering full diploma track programs, the following two schools had the highest percentages of eligible students receiving AICE diplomas: Ronald W. Reagan/Doral Senior (100%) and Center for International Education (98%).
- Among the 13 M-DCPS schools with full AICE diploma track programs in both 2019-2020 and 2020-2021, the percentage of students receiving diplomas increased at four schools and decreased at seven 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, 2019-2020 and 2020-2021, M-DCPS, All Cambridge AICE Schools Combined

Subject Area	# of Assessments Taken		% of Assessments Passed	
	2019-2020*	2020-2021*	2019-2020*	2020-2021*
Art and Design	0	10	N/A	100%
Biology	213	211	74%	76%
Business	38	28	42%	68%
Chemistry	72	57	76%	67%
Computer Science	107	20	38%	40%
Digital Media & Design	14	27	100%	96%
Economics	65	41	83%	56%
English Language	1267	1330	83%	86%
English Language and Literature	63	103	100%	98%
English Literature	946	921	81%	84%
Environmental Management	776	1099	79%	83%
French (A Level)	0	8	N/A	N/A
French Language (AS Level)	36	22	100%	91%
Further Mathematics	6	0	N/A	N/A
English General Paper	1768	1913	95%	91%
Geography	48	18	75%	78%
German	0	1	N/A	N/A
German Language	2	6	N/A	N/A
Global Perspectives & Research	1246	1236	95%	91%
History	1637	1633	69%	76%
Marine Science	1314	1411	79%	82%
Mathematics	212	240	92%	80%
Media Studies	300	210	85%	86%
Music	6	16	N/A	94%
Physical Education	0	22	N/A	95%
Physics	105	58	76%	59%
Portuguese (A Level)	10	5	100%	N/A
Portuguese Language (AS Level)	33	13	100%	92%
Psychology	782	879	70%	74%
Sociology	251	267	65%	84%

Table 1 (continued).

Spanish (A Level)	224	206	100%	99%
Spanish Language (AS Level)	721	656	99%	98%
Spanish Literature	35	47	100%	100%
Thinking Skills	666	678	75%	69%
Travel/Tourism	188	249	81%	90%
<b>Total, All Subjects</b>	<b>13,151</b>	<b>13,641</b>	<b>82%</b>	<b>84%</b>

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. 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, 2019-2020 and 2020-2021

School	# of Assessments Taken		% of Assessments Passed	
	2019-2020*	2020-2021*	2019-2020*	2020-2021*
American Senior	511	528	83%	81%
Center for International Education	996	921	68%	75%
Cutler Bay Senior	653	684	92%	92%
Don Soffer Aventura High	559	1009	89%	87%
G. Holmes Braddock Senior	2462	2219	80%	82%
Hialeah Gardens Senior	2201	2433	78%	87%
iPrep Academy North	0	33	N/A	100%
Keys Gate Charter High School	263	463	84%	70%
MAST Academy	1787	1419	91%	89%
Miami Edison Senior	84	104	100%	85%
Miami Killian Senior	723	725	84%	81%
Miami Lakes Educational Center	290	241	84%	87%
Miami Norland Senior	223	121	49%	75%
Miami Springs Senior	328	420	80%	83%
Ronald W. Reagan/Doral Senior	1215	1189	90%	89%
South Miami Senior	856	720	82%	71%

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. 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, 2019-2020 and 2020-2021

		White		Black		Hispanic		Other	
		# Taken	% Passed	# Taken	% Passed	# Taken	% Passed	# Taken	% Passed
American Senior	2021*	18	67	192	76	291	85	27	89
	2020*	9	N/A	183	81	297	83	22	77
Center for International Education	2021*	90	74	95	63	690	76	46	96
	2020*	80	61	101	62	777	69	38	79
Cutler Bay Senior	2021*	121	93	32	88	517	92	14	100
	2020*	97	95	57	82	481	92	18	94
Don Soffer Aventura High	2021*	436	86	12	100	543	89	18	67
	2020*	213	92	11	91	330	87	5	N/A
G. Holmes Braddock Senior	2021*	107	88	15	93	2066	81	31	68
	2020*	138	80	22	59	2285	80	17	82
Hialeah Gardens Senior	2021*	32	88	12	83	2374	87	15	87
	2020*	26	73	13	77	2148	78	14	100
iPrep Academy North	2021*	8	N/A	7	N/A	16	100	2	N/A
	2020*	0	N/A	0	N/A	0	N/A	0	N/A
Keys Gate Charter High School	2021*	70	84	48	56	334	70	11	45
	2020*	56	84	23	74	173	86	11	64
MAST Academy	2021*	412	91	49	80	1330	89	40	93
	2020*	403	90	49	82	1302	92	33	94
Miami Edison Senior	2021*	0	N/A	80	85	17	94	7	N/A
	2020*	1	N/A	62	100	19	100	2	N/A
Miami Killian Senior	2021*	60	87	59	75	596	82	10	50
	2020*	62	79	88	83	564	84	9	N/A
Miami Lakes Educational Center	2021*	8	N/A	56	80	173	90	4	N/A
	2020*	10	90	44	84	231	84	5	N/A
Miami Norland Senior	2021*	0	N/A	121	75	0	N/A	0	N/A
	2020*	0	N/A	214	48	8	N/A	1	N/A
Miami Springs Senior	2021*	16	94	38	84	360	82	6	N/A
	2020*	22	86	21	67	281	80	4	N/A
Ronald W. Reagan/Doral Senior	2021*	121	89	10	90	1011	89	47	96
	2020*	115	85	15	93	1037	91	48	81
South Miami Senior	2021*	43	74	12	58	655	71	10	50
	2020*	43	81	16	50	790	83	7	N/A
<b>Total, All Schools</b>	<b>2021*</b>	<b>1542</b>	<b>87</b>	<b>838</b>	<b>76</b>	<b>10973</b>	<b>84</b>	<b>288</b>	<b>83</b>
	<b>2020*</b>	<b>1275</b>	<b>86</b>	<b>919</b>	<b>72</b>	<b>10723</b>	<b>83</b>	<b>234</b>	<b>84</b>

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. 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, 2019-2020 and 2020-2021

School	Number of Students Eligible for AICE Diplomas		Number of Students Receiving AICE Diplomas		Percent of Students Receiving AICE Diplomas	
	2019-2020*	2020-2021*	2019-2020*	2020-2021*	2019-2020*	2020-2021*
American Senior	23	38	21	30	91%	79%
Center for International Education	61	64	51	63	84%	98%
Cutler Bay Senior	49	46	48	42	98%	91%
Don Soffer Aventura High School	0	50	0	46	N/A	92%
G. Holmes Braddock Senior	169	168	156	160	92%	95%
Hialeah Gardens	112	204	83	177	74%	87%
Keys Gate Charter	14	8	13	N/A	93%	N/A
MAST Academy	109	115	101	105	93%	91%
Miami Killian Senior	33	47	29	34	88%	72%
Miami Lakes Educational Center	41	19	32	14	78%	74%
Miami Norland Senior	5	16	N/A	14	N/A	88%
Miami Springs Senior	15	38	14	35	93%	92%
Ronald W. Reagan/Doral Senior	71	90	68	90	96%	100%
South Miami Senior	59	51	49	36	83%	71%
<b>Total, All Cambridge AICE Schools</b>	<b>761</b>	<b>954</b>	<b>669</b>	<b>854</b>	<b>88%</b>	<b>90%</b>

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. 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 16 M-DCPS schools in 2020-2021. Over 13,600 AICE examinations were taken by M-DCPS students in 34 subject areas in 2020-2021.

The number of AICE assessments completed in M-DCPS increased by 4% from 2019-2020 to 2020-2021. The greatest number of AICE assessments was completed at Hialeah Gardens Senior in 2020-2021. The District's Hispanic students completed 80% of all AICE assessments in 2020-2021; White students completed 11%; Black students completed 6% of AICE assessments, and students classified as "Other" completed 2% of assessments.

The percentage of M-DCPS AICE assessments receiving passing scores increased by two percentage points, from 82% in 2019-2020 to 84% in 2020-2021. iPrep Academy North 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 2020-2021, followed by Hispanic students, students classified as “Other”, and Black students. From 2019-2020 to 2020-2021, the percentage of assessments receiving passing scores increased by one percentage point for White and Hispanic students and by four percentage points for Black students.

Overall, 90% of eligible M-DCPS students received an AICE diploma at the conclusion of the 2020-2021 school year. The percentage of eligible students earning an AICE diploma increased by two percentage points from 2019-2020 to 2020-2021. Of the 14 M-DCPS schools offering full AICE diploma track programs, Ronald W. Reagan/Doral Senior and Center for International Education had the highest percentages of eligible students receiving AICE diplomas in 2020-2021.