



RESEARCH BRIEF

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Miami-Dade County Public Schools: 2013-2014 Student Performance in International Baccalaureate and Cambridge Advanced International Certificate of Education Programs

Results at a Glance

This Research Brief summarizes the performance of M-DCPS students participating in the International Baccalaureate (IB) and Cambridge Advanced International Certificate of Education (AICE) programs. The IB program was offered at six M-DCPS high schools in 2013-2014. The Cambridge program was available at nine M-DCPS high schools, with three of the nine schools offering the program for the first time in 2013-2014. The number of IB examinations taken in M-DCPS increased by 6% from 2012-2013 to 2013-2014, and the number of Cambridge AICE examinations taken by M-DCPS students increased by 15%. Eighty percent of IB examinations and 61% of Cambridge AICE examinations received passing scores in 2013-2014. At the conclusion of the 2013-2014 school year, 73% of eligible students received IB diplomas and 77% of eligible Cambridge students received AICE diplomas.

The International Baccalaureate (IB) and Cambridge Advanced International Certificate of Education (AICE) programs are rigorous pre-university curriculum and examination programs that emphasize the development of higher order thinking skills, including problem solving and creativity. The IB program provides students with a broad general education, while offering specialization in accordance with students' interests and plans. The Cambridge AICE program also provides a broad education and emphasizes a flexible curriculum that can be tailored to students' abilities, interests, and career plans. The IB and AICE diplomas are recognized at colleges and universities throughout the United States and worldwide.

This Research Brief includes a description of the IB and Cambridge AICE programs and data on the 15 M-DCPS schools (six IB and nine Cambridge) that implement these programs and administer the examinations. The number of IB and AICE examinations taken, the percentage of examinations receiving passing scores, and the number and percentage of participating students earning diplomas are provided.

INTERNATIONAL BACCALAUREATE (IB) DIPLOMA PROGRAM

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. This report focuses on the IB Diploma Program that is offered at M-DCPS senior high schools. Six M-DCPS high schools offered the IB program and administered the corresponding IB examinations during the 2013-2014 school year: Coral Gables Senior, Coral Reef Senior, John A. Ferguson Senior, Miami Beach Senior, North Miami Senior, and South Dade Senior.

The IB Diploma Program is a two-year liberal arts curriculum designed to promote understanding of global citizenship. The program encourages students to become critical and compassionate thinkers and informed participants in local and world affairs. Students study six courses from six subject groups: language and literature; language acquisition; individuals and societies; sciences; mathematics; and the arts. Three additional core requirements are designed to broaden students' educational experience: the extended essay, which requires students to engage in independent research relating to one of the subjects they are studying; a Theory of Knowledge course that encourages students to reflect on the nature of learning and different kinds of knowledge; and a Creativity, Action, Service (CAS) component that requires students to complete 150 hours of a combination of arts, athletics, and community service projects.

Students in the IB Diploma Program take written examinations in each subject. 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. Students must earn a total of 24 points on their six IB examinations 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 for their combined results on Theory of Knowledge and the extended essay. Examinations are scored on a scale of 1 to 7 for each subject. A score of 4 is considered to be a passing score on an IB examination.

For examinations taken in foreign languages, IB course descriptions are as follows:

- Course Level A: Literature: Students have varied language profiles and may be multilingual. Courses develop an understanding of how language, culture, and content determine the ways in which meaning is constructed in texts.
- Course Level A: Language and Literature: Students have varied language profiles and may be multilingual. Courses help students develop an understanding of the techniques involved in literary criticism and the ability to form independent literary judgments.

- Course Level B: Students have previous coursework in the language. Courses focus on learning to communicate in the language in written and spoken forms.
- Course Level AB: Students have no previous background in the language. Courses focus on giving students basic knowledge of both the language in everyday use and the culture of the places where it is spoken.

Highlights of IB program outcomes follow. The reader should note that results are not reported if fewer than 10 examinations were taken.

Participation in IB Examinations

- In 2013-2014, M-DCPS students took 3,310 IB examinations in 27 content areas. The number of IB examinations taken by M-DCPS students increased by 6% from 2012-2013 to 2013-2014.
- Of all IB examinations taken during the 2013-2014 school year, the largest number was taken by students at Coral Reef Senior. They participated in 29% of all IB examinations. The percentages of examinations taken at the other five M-DCPS IB schools were as follows:
 - Coral Gables Senior: 24%
 - John A. Ferguson Senior: 20%
 - South Dade Senior: 12%
 - Miami Beach Senior: 8%
 - North Miami Senior: 7%
- From 2012-2013 to 2013-2014, the largest increase in the number of IB examinations administered was seen at Miami Beach Senior (62% increase). The number of IB examinations administered also increased at South Dade Senior (57%), John A. Ferguson Senior (24%), and North Miami Senior (1%). The number of IB examinations taken decreased at Coral Gables Senior (14%) and Coral Reef Senior (7%).
- Overall, the most IB examinations were taken in English Literature, History, Mathematical Studies, and Spanish B in 2013-2014. Over one-half (57%) of IB examinations taken by M-DCPS students were taken in these four content areas.
- In 2013-2014, IB examinations were taken in more content areas (18) at Coral Gables Senior than at the other five M-DCPS IB schools.

IB Exam Results

- Overall, the percentage of IB examinations receiving passing scores remained stable at 80% from 2012-2013 to 2013-2014.
- During the 2013-2014 school year, Coral Reef Senior had the highest percentage of IB examinations receiving passing scores (93%), followed by Miami Beach Senior (80%), John A. Ferguson Senior (77%), North Miami Senior (77%), Coral Gables Senior (76%), and South Dade Senior (63%).

- From 2012-2013 to 2013-2014, the percentage of IB examinations receiving passing scores increased at four of the six IB schools: Coral Reef Senior, John A. Ferguson Senior, North Miami Senior, and South Dade Senior. The percentage of IB examinations receiving passing scores decreased at Coral Gables Senior and Miami Beach Senior.
- Overall, the 2013-2014 content areas in which the highest percentages of IB examinations received passing scores were German, Social and Cultural Anthropology, and Spanish. The content areas in which the lowest percentages of IB examinations received passing scores were Design Technology, Economics, and Physics.

IB Diploma Results

- Grade 12 students who were enrolled in the IB program and met all program requirements were eligible to receive IB diplomas. Overall, the number of students eligible to receive IB diplomas increased by 10% from 2012-2013 to 2013-2014 (from 511 students in 2012-2013 to 563 students in 2013-2014).
- A total of 413 M-DCPS students, or 73% of eligible students, received IB diplomas at the conclusion of the 2013-2014 school year.
- Overall, the percentage of eligible IB program students receiving an IB diploma remained stable at 73% from 2012-2013 to 2013-2014.
- Of the six IB high schools, Coral Reef Senior and Coral Gables Senior had the highest percentages of eligible students receiving IB diplomas (92% and 82%, respectively).
- Five of the six M-DCPS IB high schools posted increases in the percentages of eligible students receiving diplomas from 2012-2013 to 2013-2014. The percentages of students receiving IB diplomas decreased at Miami Beach Senior.

IB program outcomes are presented in the tables below. Data are provided first for the six M-DCPS IB senior high schools combined and then separately for each school.

Table 1. Number of Students Taking IB Examinations and Percent Passing
Examinations by Subject Area, 2012-2013 and 2013-2014
M-DCPS, All IB Schools Combined

Subject Area	# of Tests Taken		% of Tests Passed	
	2012-2013	2013-2014	2012-2013	2013-2014
Biology	280	287	62%	64%
Business and Management	19	16	53%	81%
Chemistry	208	196	56%	54%
Chinese B	1	3	n/a	n/a
Computer Science	3	1	n/a	n/a
Dance	8	8	n/a	n/a
Design Technology	14	20	29%	25%
Economics	19	18	37%	39%
English A Literature	506	560	95%	97%
Film	23	34	70%	97%
French B	89	106	83%	77%
German B	33	23	94%	100%
History	497	569	75%	76%
Information Technology in a Global Society	109	26	79%	96%
Italian B	20	15	90%	87%
Mathematical Studies	410	380	85%	81%
Mathematics	149	177	62%	75%
Music	1	9	n/a	n/a
Physics	25	46	52%	30%
Portuguese	0	2	n/a	n/a
Psychology	184	271	80%	74%
Social & Cultural Anthropology	51	71	100%	100%
Spanish A Language & Literature	23	15	100%	93%

Spanish AB	8	18	n/a	72%
Spanish B	358	365	94%	98%
Theatre	66	28	89%	82%
Visual Arts	30	46	83%	76%
Total, All Subjects	3,134	3,310	80%	80%

Table 2. Number of Students Taking IB Examinations and Percent Passing Examinations by Subject Area, 2012-2013 and 2013-2014
Coral Gables Senior

Subject Area	# of Tests Taken		% of Tests Passed	
	2012-2013	2013-2014	2012-2013	2013-2014
Biology	129	65	60%	65%
Business and Management	15	7	53%	n/a
Chemistry	27	57	15%	25%
Chinese B	1	3	n/a	n/a
Computer Science	3	1	n/a	n/a
English A Literature	154	125	96%	99%
Film	7	0	n/a	n/a
French B	36	23	97%	74%
German B	10	9	100%	n/a
History	145	137	85%	77%
Italian B	7	5	n/a	n/a
Mathematical Studies	102	90	94%	91%
Mathematics	52	31	44%	61%
Music	1	0	n/a	n/a
Physics	18	44	50%	27%
Psychology	102	105	85%	73%

Spanish A Language & Literature	23	15	100%	93%
Spanish B	82	72	96%	99%
Theatre	11	7	100%	n/a
Visual Arts	2	2	n/a	n/a
Total, All Subjects	927	798	81%	76%

Table 3. Number of Students Taking IB Examinations and Percent Passing Examinations by Subject Area, 2012-2013 and 2013-2014
Coral Reef Senior

Subject Area	# Tests Taken		% of Tests Passed	
	2012-2013	2013-2014	2012-2013	2013-2014
Biology	0	78	n/a	83%
Chemistry	103	97	78%	84%
English A Literature	175	159	98%	98%
French B	32	40	97%	93%
German B	23	14	91%	100%
History	175	159	73%	96%
Information Technology in a Global Society	109	26	79%	96%
Mathematical Studies	146	113	96%	89%
Mathematics	34	49	100%	94%
Psychology	0	32	n/a	100%
Social & Cultural Anthropology	51	71	100%	100%
Spanish B	132	99	99%	100%
Theatre	47	21	92%	81%
Total, All Subjects	1,027	958	89%	93%

Table 4. Number of Students Taking IB Examinations and Percent Passing Examinations by Subject Area, 2012-2013 and 2013-2014
John A. Ferguson Senior

Subject Area	# of Tests Taken		% of Tests Passed	
	2012-2013	2013-2014	2012-2013	2013-2014
Biology	72	21	81%	43%
Business and Management	4	9	n/a	n/a
Chemistry	52	10	46%	50%
Dance	8	8	n/a	n/a
Design Technology	14	20	29%	25%
English A Literature	74	127	91%	97%
Film	16	34	63%	97%
French B	14	21	29%	62%
History	75	127	73%	59%
Italian B	12	10	83%	80%
Mathematical Studies	61	63	80%	78%
Mathematics	50	74	52%	65%
Physics	7	2	n/a	n/a
Psychology	5	22	n/a	91%
Spanish B	56	87	91%	97%
Visual Arts	20	34	90%	68%
Total, All Subjects	540	669	73%	77%

Table 5. Number of Students Taking IB Examinations and Percent Passing
Examinations by Subject Area, 2012-2013 and 2013-2014
Miami Beach Senior

Subject Area	# of Tests Taken		% of Tests Passed	
	2012-2013	2013-2014	2012-2013	2013-2014
Biology	1	22	n/a	55%
Chemistry	26	23	35%	22%
English A Literature	27	44	100%	100%
French B	0	2	n/a	n/a
History	27	43	96%	88%
Italian B	1	0	n/a	n/a
Mathematical Studies	26	29	100%	93%
Mathematics	0	15	n/a	93%
Music	0	9	n/a	n/a
Portuguese B	0	2	n/a	n/a
Psychology	28	33	96%	79%
Spanish AB	4	12	n/a	58%
Spanish B	22	29	100%	100%
Total, All Subjects	162	263	87%	80%

Table 6. Number of Students Taking IB Examinations and Percent Passing Examinations by Subject Area, 2012-2013 and 2013-2014
North Miami Senior

Subject Area	# of Tests Taken		% of Tests Passed	
	2012-2013	2013-2014	2012-2013	2013-2014
Biology	36	43	69%	72%
Economics	19	18	37%	39%
English A Literature	34	38	100%	100%
French B	6	11	n/a	82%
History	34	38	68%	63%
Mathematical Studies	33	30	67%	80%
Mathematics	13	2	69%	n/a
Psychology	15	22	73%	77%
Spanish AB	4	0	n/a	n/a
Spanish B	25	27	64%	93%
Theatre	8	0	n/a	n/a
Total, All Subjects	227	229	70%	77%

Table 7. Number of Students Taking IB Examinations and Percent Passing Examinations by Subject Area, 2012-2013 and 2013-2014
South Dade Senior

Subject Area	# of Tests Taken		% of Tests Passed	
	2012-2013	2013-2014	2012-2013	2013-2014
Biology	42	58	33%	41%
Chemistry	0	9	n/a	n/a
English A Literature	42	67	83%	90%
French B	1	9	n/a	n/a

History	41	65	46%	57%
Mathematical Studies	42	55	36%	44%
Mathematics	0	6	n/a	n/a
Psychology	34	57	53%	49%
Spanish AB	0	6	n/a	n/a
Spanish B	41	51	90%	98%
Visual Arts	8	10	n/a	100%
Total, All Subjects	251	393	57%	63%

Table 8. Number and Percent of Students Receiving IB Diplomas, by School and M-DCPS Overall, 2012-2013 and 2013-2014

School	Number of Students Eligible for IB Diplomas		Number of Students Receiving IB Diplomas		Percent of Students Receiving IB Diplomas	
	2012-2013	2013-2014	2012-2013	2013-2014	2012-2013	2013-2014
Coral Gables Senior	155	125	120	103	77%	82%
Coral Reef Senior	175	159	148	146	85%	92%
John A. Ferguson Senior	77	128	48	82	62%	64%
Miami Beach Senior	27	44	24	27	89%	61%
North Miami Senior	35	40	19	23	54%	58%
South Dade Senior	42	67	16	32	38%	48%
Total, All IB Schools	511	563	375	413	73%	73%

CAMBRIDGE ADVANCED INTERNATIONAL CERTIFICATE OF EDUCATION (AICE)

The AICE program is based on Britain's A Level examinations and is administered and assessed by the University of Cambridge International Examinations, a department of the University of Cambridge in the United Kingdom. The four-year curriculum progresses from two years of preparatory classes in grades 9 and 10 to participation in the AICE diploma program in grades 11 and 12. The program emphasizes the development of higher order thinking skills, oral skills, writing skills, problem solving, real word applications, independent skills, teamwork, and international understanding. AICE courses are the equivalent of those offered at the U.S. university freshman level or beyond.

The Cambridge program was available at a total of nine M-DCPS high schools in 2013-2014. As in prior years, the following six high schools offered the program: American Senior, G. Holmes Braddock Senior, Hialeah Gardens Senior, Keys Gate Charter High School, Miami Lakes Educational Center, and Ronald W. Reagan/Doral Senior. In 2013-2014, the Cambridge program was added at three additional M-DCPS high schools: Cutler Bay Academy of Advanced Studies Centennial Senior, Maritime & Science Technology Academy, and Miami Springs Senior.

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 six full-credit AICE courses and pass the corresponding examinations for each course. Within the AICE program, there are over 50 subjects from three curriculum areas: mathematics and science; languages; and arts and humanities. At least one course and examination must be from each of the three subject areas. A maximum of two credits may come from an optional fourth subject, Global Perspectives.

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. The lowest passing grade of E (or a score of 3) is equivalent to a U.S. grade of C or a 3 on an Advanced Placement examination. Performance below a grade of E receives a grade of U, ungraded, which is not considered as passing. Students must receive a score of E or higher on all of their examinations in order to receive an AICE diploma. Upon successful completion of the AICE program and admission to a college or university, high school students may be awarded up to 45 hours of credit from universities throughout the U.S. and from all public universities and colleges in Florida, based on each subject and examination grade earned.

The reader should note that the tables below include only the subject area examinations taken by students at M-DCPS schools, although the Cambridge program offers courses and examinations in over 50 subjects. General Paper is 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.

Data on students receiving AICE diplomas are only provided for the four schools that offered a full diploma track program and had students who were eligible for AICE diplomas in 2012-2013 and 2013-2014: G. Holmes Braddock Senior, Hialeah Gardens Senior, Miami Lakes Educational Center, and Ronald W. Reagan/Doral Senior.

Highlights of Cambridge AICE program outcomes are provided below. Results are not reported if fewer than 10 examinations were taken.

Participation in Cambridge AICE Examinations

- In 2013-2014, AICE examinations were taken in 23 content areas. The number of AICE examinations taken by M-DCPS students increased by 15% (from 3,349 examinations in 2012-2013 to 3,844 examinations in 2013-2014).
- Of all AICE examinations taken during the 2013-2014 school year, the largest number was taken by students at Hialeah Gardens Senior. They participated in 33% of all AICE examinations. The percentages of examinations taken at the other eight M-DCPS Cambridge schools were as follows:
 - Ronald W. Reagan/Doral Senior: 27%
 - G. Holmes Braddock Senior: 15%
 - American Senior: 8%
 - Keys Gate Charter High School: 8%
 - Miami Lakes Educational Center: 6%
 - Cutler Bay Academy of Advanced Studies Centennial Senior: 1%
 - Maritime & Science Technology Academy: 1%
 - Miami Springs Senior: 1%
- Overall, the most AICE examinations were taken in English Language, General Paper (multi-disciplinary subject matter drawn from across the curriculum), History, and Thinking Skills in 2013-2014.
- In 2013-2014, AICE examinations were taken in more content areas at Hialeah Gardens Senior (16), Ronald W. Reagan/Doral Senior (16), and G. Holmes Braddock Senior (15) than at the other six M-DCPS Cambridge schools.
- The number of AICE examinations taken increased from 2012-2013 to 2013-2014 at five of the six M-DCPS high schools that administered the examinations both years (G. Holmes Braddock Senior, Hialeah Gardens Senior, Keys Gate Charter High School, Miami Lakes Educational Center, and Ronald W. Reagan/Doral Senior). The number of AICE examinations taken at American Senior decreased slightly (by 2%).

Cambridge AICE Examination Results

- Overall, the percentage of AICE examinations receiving passing scores increased by 4 percentage points, from 57% in 2012-2013 to 61% in 2013-2014.

- From 2012-2013 to 2013-2014, the percentage of AICE examinations receiving passing scores increased at five of the six M-DCPS Cambridge high schools that administered AICE examinations both years (American Senior, G. Holmes Braddock Senior, Hialeah Gardens Senior, Miami Lakes Educational Center, and Ronald W. Reagan/Doral Senior). The percentage of passing examinations decreased at Keys Gate Charter High School.
- During the 2013-2014 school year, Maritime & Science Technology Academy had the highest percentage of AICE examinations receiving passing scores (95%), followed by Miami Lakes Educational Center (92%), Cutler Bay Academy of Advanced Studies Centennial Senior (89%), Ronald W. Reagan/Doral Senior (80%), G. Holmes Braddock Senior (73%), Miami Springs Senior (61%), Hialeah Gardens Senior (48%), Keys Gate Charter High School (48%), and American Senior (13%).
- Overall, the 2013-2014 content areas in which the highest percentages of AICE examinations received passing scores were French Language, Portuguese Language, and Spanish Language. The content areas in which the lowest percentages of examinations received passing scores were Business Studies and Geography.

Cambridge AICE Diploma Results

- Grades 11 and 12 students who were enrolled in the AICE program and met all program requirements were eligible to receive AICE diplomas. Districtwide, the number of students eligible to receive AICE diplomas increased by 29% (from 154 students in 2012-2013 to 199 students in 2013-2014).
- A total of 153 M-DCPS students, or 77% of the 199 M-DCPS students enrolled in Cambridge full diploma track programs, received AICE diplomas at the conclusion of the 2013-2014 school year.
- Overall, the percentage of AICE program students receiving diplomas increased by 16 percentage points (from 61% in 2012-2013 to 77% in 2013-2014).
- Of the four M-DCPS schools with students eligible for AICE diplomas, Ronald W. Reagan/Doral Senior had the highest percentage of Cambridge students receiving AICE diplomas (92%), followed by G. Holmes Braddock Senior (85%), Hialeah Gardens Senior (63%), and Miami Lakes Educational Center (63%).
- The percentage of students receiving diplomas increased by 42 percentage points at Hialeah Gardens Senior, 33 percentage points at G. Holmes Braddock Senior, and 16 percentage points at Ronald W. Reagan/Doral Senior, but decreased by 4 percentage points at Miami Lakes Educational Center.

Cambridge AICE program outcomes are presented in the following tables. Data are provided for the nine M-DCPS Cambridge senior high schools combined and then separately for each school.

Table 9. Number of Students Taking Cambridge AICE Examinations and Percent Passing Examinations by Subject Area, 2012-2013 and 2013-2014
M-DCPS, All Cambridge AICE Schools Combined

Subject Area	# of Tests Taken		% of Tests Passed	
	2012-2013	2013-2014	2012-2013	2013-2014
Art and Design	136	138	45%	38%
Biology	87	139	39%	35%
Biology 2	3	0	n/a	n/a
Business Studies	0	34	n/a	6%
Chemistry	91	52	22%	56%
Chemistry 2	4	0	n/a	n/a
Economics	86	0	52%	n/a
English Language	355	459	83%	82%
English Literature	206	293	48%	65%
Environmental Management	97	129	87%	94%
French Language	34	34	100%	100%
French Literature	4	0	n/a	n/a
General Paper	434	487	88%	90%
Geography	28	12	4%	0%
Global Perspectives & Research	29	91	90%	78%
History	448	535	38%	45%
Marine Science	172	241	37%	39%
Mathematics	303	298	31%	31%
Music	3	11	n/a	73%
Physics	34	76	32%	57%
Physics 2	28	0	29%	n/a
Portuguese Language	0	14	n/a	100%
Psychology	77	120	61%	68%

Sociology	79	66	60%	52%
Spanish Language	74	138	100%	99%
Spanish Literature	34	9	100%	n/a
Thinking Skills	483	416	53%	48%
Travel/Tourism	20	52	0%	56%
Total, All Subjects	3,349	3,844	57%	61%

Table 10. Number of Students Taking Cambridge AICE Examinations and Percent Passing by Subject Area, 2012-2013 and 2013-2014
American Senior High

Subject Area	# of Tests Taken		% of Tests Passed	
	2012-2013	2013-2014	2012-2013	2013-2014
Chemistry	26	0	0%	n/a
English Language	28	46	25%	46%
English Literature	26	25	8%	4%
Geography	28	12	4%	0%
History	84	102	6%	17%
Thinking Skills	142	141	17%	3%
Total, All Subjects	334	326	12%	13%

Table 11. Number of Students Taking Cambridge AICE Examinations and Percent Passing Examinations by Subject Area, 2012-2013 and 2013-2014

G. Holmes Braddock Senior

Subject Area	# of Tests Taken		% of Tests Passed	
	2012-2013	2013-2014	2012-2013	2013-2014
Biology	27	53	22%	23%
Chemistry	13	11	77%	91%
Economics	18	0	11%	n/a
English Language	95	63	84%	98%
English Literature	86	85	28%	53%
Environmental Management	0	25	n/a	88%
General Paper	81	66	90%	100%
History	41	49	32%	65%
Mathematics	11	21	82%	33%
Physics	7	1	n/a	n/a
Psychology	46	54	54%	61%
Sociology	47	17	70%	82%
Spanish Language	21	59	100%	98%
Spanish Literature	3	9	n/a	n/a
Thinking Skills	55	35	78%	89%
Travel/Tourism	0	31	n/a	84%
Total, All Subjects	551	579	63%	73%

Table 12. Number of Students Taking Cambridge AICE Examinations and Percent Passing Examinations by Subject Area, 2012-2013 and 2013-2014
Cutler Bay Academy of Advanced Studies Centennial Senior

Subject Area	# of Tests Taken		% of Tests Passed	
	2012-2013	2013-2014	2012-2013	2013-2014
General Paper	0	25	n/a	100%
Thinking Skills	0	13	n/a	69%
Total, All Subjects	0	38	n/a	89%

Table 13. Number of Students Taking Cambridge AICE Examinations and Percent Passing Examinations by Subject Area, 2012-2013 and 2013-2014
Hialeah Gardens Senior

Subject Area	# of Tests Taken		% of Tests Passed	
	2012-2013	2013-2014	2012-2013	2013-2014
Art and Design	136	138	45%	38%
Biology	20	11	20%	55%
Business Studies	0	34	n/a	6%
Chemistry	27	10	22%	20%
English Language	125	140	85%	88%
English Literature	2	83	n/a	83%
Environmental Management	12	0	67%	n/a
General Paper	207	208	87%	84%
History	173	164	20%	15%
Marine Science	144	192	35%	33%
Mathematics	206	146	14%	19%

Music	3	11	n/a	73%
Physics	0	6	n/a	n/a
Sociology	32	49	44%	41%
Spanish Language	22	24	100%	100%
Thinking Skills	73	26	36%	31%
Travel Tourism	20	21	0%	14%
Total, All Subjects	1,202	1,263	45%	48%

Table 14. Number of Students Taking Cambridge AICE Examinations and Percent Passing by Subject Area, 2012-2013 and 2013-2014
Keys Gate Charter High School

Subject Area	# of Tests Taken		% of Tests Passed	
	2012-2013	2013-2014	2012-2013	2013-2014
Biology	0	28	n/a	4%
English Language	0	51	n/a	55%
General Paper	66	66	84%	76%
Global Perspectives	0	35	n/a	43%
History	0	60	n/a	60%
Mathematics	0	25	n/a	4%
Thinking Skills	61	61	33%	39%
Total, All Subjects	127	326	59%	48%

Table 15. Number of Students Taking Cambridge AICE Examinations and Percent Passing by Subject Area, 2012-2013 and 2013-2014
Maritime & Science Technology Academy

Subject Area	# of Tests Taken		% of Tests Passed	
	2012-2013	2013-2014	2012-2013	2013-2014
Environmental Management	0	21	n/a	95%
Total, All Subjects	0	21	n/a	95%

Table 16. Number of Students Taking Cambridge AICE Examinations and Percent Passing by Subject Area, 2012-2013 and 2013-2014
Miami Lakes Educational Center

Subject Area	# of Tests Taken		% of Tests Passed	
	2012-2013	2013-2014	2012-2013	2013-2014
English Language	40	34	100%	100%
English Literature	39	39	97%	100%
General Paper	0	38	n/a	100%
History	39	48	82%	85%
Mathematics	35	29	69%	69%
Thinking Skills	43	25	91%	96%
Total, All Subjects	196	213	88%	92%

Table 17. Number of Students Taking Cambridge AICE Examinations and Percent Passing by Subject Area, 2012-2013 and 2013-2014
Miami Springs Senior

Subject Area	# of Tests Taken		% of Tests Passed	
	2012-2013	2013-2014	2012-2013	2013-2014
English Language	0	43	n/a	61%
Total, All Subjects	0	43	n/a	61%

Table 18. Number of Students Taking Cambridge AICE Examinations and Percent Passing Examinations by Subject Area, 2012-2013 and 2013-2014
Ronald W. Reagan/Doral Senior

Subject Area	# of Tests Taken		% of Tests Passed	
	2012-2013	2013-2014	2012-2013	2013-2014
Biology	40	47	60%	64%
Biology 2	3	0	n/a	n/a
Chemistry	25	31	16%	55%
Chemistry 2	4	0	n/a	n/a
Economics	68	0	63%	n/a
English Language	67	82	93%	98%
English Literature	53	61	66%	59%
Environmental Management	85	83	89%	95%
French Language	34	34	100%	100%
French Literature	4	0	n/a	n/a
General Paper	80	84	91%	99%
Global Perspectives & Research	29	56	90%	100%
History	111	112	76%	80%

Marine Science	28	49	46%	63%
Mathematics	51	77	67%	48%
Physics	27	69	26%	59%
Physics 2	28	0	29%	n/a
Portuguese Language	0	14	n/a	100%
Psychology	31	66	71%	73%
Spanish Language	31	55	100%	100%
Spanish Literature	31	0	100%	n/a
Thinking Skills	109	115	94%	87%
Total, All Subjects	939	1,035	77%	80%

Table 19. Number and Percent of Students Receiving Cambridge AICE Diplomas, by School and M-DCPS Overall, 2012-2013 and 2013-2014*

School	Number of Students Eligible for AICE Diplomas		Number of Students Receiving AICE Diplomas		Percent of Students Receiving AICE Diplomas	
	2012-2013	2013-2014	2012-2013	2013-2014	2012-2013	2013-2014
G. Holmes Braddock Senior	50	41	26	35	52%	85%
Hialeah Gardens	14	65	3	41	21%	63%
Miami Lakes Educational Center**	39	30	26	19	67%	63%
Ronald W. Reagan/ Doral Senior	51	63	39	58	76%	92%
Total, All Cambridge AICE Schools	154	199	94	153	61%	77%

Notes:

* Data on students receiving AICE diplomas are only provided for the four schools that offered a full diploma track program and had students who were eligible for AICE diplomas in 2012-2013 and 2013-2014.

** This table includes corrected 2012-2013 data for Miami Lakes Educational Center.

CONCLUSION

This Research Brief summarized the performance of M-DCPS students participating in the IB and Cambridge AICE programs. The IB and Cambridge AICE programs are rigorous pre-university curriculum and examination programs that emphasize the value of broad and balanced study. Both programs promote the development of higher order thinking skills, intercultural understanding, and independent learning.

Six M-DCPS high schools offered the IB program and administered the corresponding IB examinations during the 2013-2014 school year: Coral Gables Senior, Coral Reef Senior, John A. Ferguson Senior, Miami Beach Senior, North Miami Senior, and South Dade Senior. Nine M-DCPS schools offered the Cambridge AICE program and administered the corresponding examinations during 2013-2014: American Senior, G. Holmes Braddock Senior, Cutler Bay Academy of Advanced Studies Centennial Senior, Hialeah Gardens Senior, Keys Gate Charter High School, Maritime & Science Technology Academy, Miami Lakes Educational Center, Miami Springs Senior, and Ronald W. Reagan/Doral Senior.

Participation in the IB program continued to grow, with the number of IB examinations taken increasing by 6% from 2012-2013 to 2013-2014. Over 3,300 IB examinations were taken by M-DCPS students in 27 content areas in 2013-2014. Passing rates ranged from 63% to 93% at each of the schools, with an overall passing rate of 80% across the six schools. Coral Reef Senior and Miami Beach Senior had the highest percentages of IB examinations receiving passing scores. Overall, 73% of eligible students received an IB diploma at the conclusion of the 2013-2014 school year.

The Cambridge program was available at a total of nine M-DCPS high schools, with three of the nine schools offering the program for the first time in 2013-2014. The six schools that continued to offer the Cambridge program were American Senior, G. Holmes Braddock Senior, Hialeah Gardens Senior, Keys Gate Charter High School, Miami Lakes Educational Center, and Ronald W. Reagan/Doral Senior. The three schools that began offering the Cambridge program in 2013-2014 were Cutler Bay Academy of Advanced Studies Centennial Senior, Maritime & Science Technology Academy, and Miami Springs Senior.

The number of Cambridge AICE examinations taken by M-DCPS students increased by 15% from 2012-2013 to 2013-2014. M-DCPS students took 3,844 AICE examinations in 23 content areas in 2013-2014. Passing rates on AICE examinations ranged from 13% to 95% at each of the schools, with an overall passing rate of 61% across the nine Cambridge schools. Maritime & Science Technology Academy had the highest percentage of AICE examinations receiving passing scores. Overall, 77% of eligible students received a Cambridge AICE diploma at the conclusion of the 2013-2014 school year.