

RESEARCH BRIEF

Research Services

Vol. 1303 December 2013 Christie Blazer, Supervisor

Miami-Dade County Public Schools: 2012-2013 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. Outcome data are provided for the 12 M-DCPS schools offering the two programs and corresponding examinations. The number of IB examinations taken in M-DCPS increased by 7% from 2011-2012 to 2012-2013. The Cambridge program saw substantial growth in 2012-2013, with the number of AICE examinations taken by M-DCPS students increasing by 78%. Eighty percent of IB examinations received passing scores and 57% of Cambridge AICE examinations received passing scores. At the conclusion of the 2012-2013 school year, 73% of eligible students received IB diplomas and 48% of eligible Cambridge students received AICE diplomas.

Beginning in the 2009-10 school year, Florida Senate Bill 1908 amended the School Performance Grade criteria for Florida's senior high schools. Half of each senior high school's performance grade is now based on FCAT scores and the other half is based on non-FCAT factors. Non-FCAT factors include the performance and participation of students in international studies programs, such as the International Baccalaureate (IB) and Cambridge Advanced International Certificate of Education (AICE) programs.

The IB and Cambridge 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 AICE programs and data on the 12 M-DCPS schools (six IB and six AICE) 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 2012-2013 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; experimental sciences; mathematics and computer science; 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. Bonus points may be awarded for excellent extended essays and for excellent Theory of Knowledge work. 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.

- o 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 2012-2013, M-DCPS students took 3,134 IB examinations in 26 content areas. The number of IB examinations taken by M-DCPS students increased by 7% from 2011-2012 to 2012-2013.
- Of all IB examinations taken during the 2012-2013 school year, the largest number was taken by students at Coral Reef Senior. They participated in 33% of all IB examinations. The percentages of examinations taken at the other five M-DCPS IB schools were as follows:

Coral Gables Senior: 30%John A. Ferguson Senior: 17%

South Dade Senior: 8%North Miami Senior: 7%Miami Beach Senior: 5%

- From 2011-2012 to 2012-2013, the largest increase in the number of IB examinations administered was seen at Coral Gables Senior (28% increase). The number of IB examinations administered also increased at Coral Reef Senior (10%), South Dade Senior (7%), and Miami Beach Senior (4%). The number of IB examinations taken decreased at John A. Ferguson Senior (15%) and North Miami Senior (5%).
- Overall, the most IB examinations were taken in English Literature, History, and Mathematical Studies in 2012-2013.
- In 2012-2013, IB examinations were taken in more content areas (20) at Coral Gables Senior than at the other five M-DCPS IB schools (16 content areas at John A. Ferguson Senior, 11 content areas at Coral Reef Senior and North Miami Senior, 9 content areas at Miami Beach Senior, and 8 content areas at South Dade Senior).

IB Exam Results

- Overall, the percentage of IB examinations receiving passing scores increased from 76% in 2011-2012 to 80% in 2012-2013.
- During the 2012-2013 school year, Coral Reef Senior and Miami Beach Senior had the highest percentages of IB examinations receiving passing scores (89% and 87%,

- respectively), followed by Coral Gables Senior (81%), John A. Ferguson Senior (73%), North Miami Senior (70%), and South Dade Senior (57%).
- From 2011-2012 to 2012-2013, the percentage of IB examinations receiving passing scores increased at Coral Gables Senior, John A. Ferguson Senior, and Coral Reef Senior. The percentage of IB examinations receiving passing scores remained stable at North Miami Senior and decreased at Miami Beach Senior and South Dade Senior.
- Overall, the 2012-2013 content areas in which the highest percentages of IB examinations received passing scores were English Literature, German, Italian, Social and Cultural Anthropology, and Spanish Language and Literature. The content areas in which the lowest percentages of IB examinations received passing scores were Design Technology and Economics.

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 4% from 2011-2012 to 2012-2013 (from 491 students in 2011-2012 to 511 students in 2012-2013).
- A total of 375 M-DCPS students, or 73% of eligible students, received IB diplomas at the conclusion of the 2012-2013 school year.
- Overall, the percentage of eligible IB program students receiving an IB diploma increased by 7 percentage points (from 66% in 2011-2012 to 73% in 2012-2013).
- Of the six IB high schools, Miami Beach Senior and Coral Reef Senior had the greatest percentages of eligible students receiving IB diplomas (89% and 85%, respectively).
- Four M-DCPS senior high schools (Coral Gables Senior, John A. Ferguson Senior, Miami Beach Senior, and North Miami Senior) posted increases in the percentages of eligible students receiving diplomas from 2011-2012 to 2012-2013. The percentages of students receiving IB diplomas remained stable at South Dade Senior and decreased at Coral Reef 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, 2011-2012 and 2012-2013

M-DCPS, All IB Schools Combined

	# of Tes	ts Taken	% of Test	s Passed
Subject Area	2011- 2012	2012- 2013	2011- 2012	2012- 2013
Biology	369	280	58%	62%
Business and Management	25	19	80%	53%
Chemistry	122	208	74%	56%
Chinese B	1	1	n/a	n/a
Computer Science	1	3	n/a	n/a
Dance	8	8	n/a	n/a
Design Technology	35	14	17%	29%
Economics	11	19	46%	37%
English A Literature	484	506	90%	95%
Film	2	23	n/a	70%
French B	106	89	76%	83%
German B	28	33	89%	94%
History	511	497	71%	75%
Information Technology in a Global Society	24	109	42%	79%
Italian B	24	20	67%	90%
Mathematical Studies	300	410	82%	85%
Mathematics	182	149	68%	62%
Music	4	1	n/a	n/a
Physics	13	25	39%	52%
Psychology	163	184	74%	80%
Social & Cultural Anthropology	73	51	100%	100%
Spanish A Language & Literature	28	23	100%	100%

Spanish AB	1	8	n/a	n/a
Spanish B	312	358	94%	94%
Theatre	38	66	87%	89%
Visual Arts	61	30	48%	83%
Total, All Subjects	2,926	3,134	76%	80%

Table 2. Number of Students Taking IB Examinations and Percent Passing Examinations by Subject Area, 2011-2012 and 2012-2013

Coral Gables Senior

	# of Tests Taken		% of Test	s Passed
Subject Area	2011- 2012	2012- 2013	2011- 2012	2012- 2013
Biology	101	129	33%	60%
Business and Management	22	15	86%	53%
Chemistry	15	27	27%	15%
Chinese B	1	1	n/a	n/a
Computer Science	1	3	n/a	n/a
English A Literature	116	154	85%	96%
Film	0	7	n/a	n/a
French B	31	36	81%	97%
German B	12	10	75%	100%
History	143	145	76%	85%
Italian B	6	7	n/a	n/a
Mathematical Studies	71	102	96%	94%
Mathematics	49	52	39%	44%
Music	4	1	n/a	n/a
Physics	10	18	40%	50%

Psychology	71	102	69%	85%
Spanish A Language & Literature	9	23	n/a	100%
Spanish B	59	82	97%	96%
Theatre	0	11	n/a	100%
Visual Arts	6	2	n/a	n/a
Total, All Subjects	727	927	71%	81%

Table 3. Number of Students Taking IB Examinations and Percent Passing Examinations by Subject Area, 2011-2012 and 2012-2013

Coral Reef Senior

	# Tests Taken		% of Test	s Passed
Subject Area	2011- 2012	2012- 2013	2011- 2012	2012- 2013
Biology	112	0	68%	n/a
Chemistry	93	103	84%	78%
English A Literature	145	175	100%	98%
French B	36	32	92%	97%
German B	16	23	100%	91%
History	145	175	78%	73%
Information Technology in a Global Society	24	109	42%	79%
Mathematical Studies	86	146	93%	96%
Mathematics	61	34	87%	100%
Psychology	20	0	90%	n/a
Social & Cultural Anthropology	73	51	100%	100%
Spanish B	104	132	99%	99%
Theatre	22	47	100%	92%
Total, All Subjects	937	1,027	88%	89%

Table 4. Number of Students Taking IB Examinations and Percent Passing Examinations by Subject Area, 2011-2012 and 2012-2013

John A. Ferguson Senior

	# of Tes	ts Taken	% of Test	s Passed
Subject Area	2011- 2012	2012- 2013	2011- 2012	2012- 2013
Biology	76	72	74%	81%
Business and Management	3	4	n/a	n/a
Chemistry	13	52	62%	46%
Dance	8	8	n/a	n/a
Design Technology	35	14	17%	29%
English A Literature	115	74	89%	91%
Film	2	16	n/a	63%
French B	28	14	57%	29%
History	115	75	61%	73%
Italian B	18	12	72%	83%
Mathematical Studies	51	61	71%	80%
Mathematics	47	50	70%	52%
Physics	3	7	n/a	n/a
Psychology	13	5	100%	n/a
Spanish A2	19	0	100%	n/a
Spanish B	50	56	92%	91%
Visual Arts	36	20	42%	90%
Total, All Subjects	632	540	70%	73%

Table 5. Number of Students Taking IB Examinations and Percent Passing Examinations by Subject Area, 2011-2012 and 2012-2013

Miami Beach Senior

	# of Tests Taken			ts Passed
Subject Area	2011- 2012	2012- 2013	2011- 2012	2012- 2013
Biology	15	1	67%	n/a
Chemistry	0	26	n/a	35%
English A Literature	28	27	100%	100%
History	28	27	86%	96%
Italian B	0	1	n/a	n/a
Mathematical Studies	14	26	100%	100%
Mathematics	15	0	100%	n/a
Psychology	14	28	79%	96%
Spanish AB	0	4	n/a	n/a
Spanish B	28	22	100%	100%
Visual Arts	14	0	57%	n/a
Total, All Subjects	156	162	88%	87%

Table 6. Number of Students Taking IB Examinations and Percent Passing Examinations by Subject Area, 2011-2012 and 2012-2013

North Miami Senior

	# of Tes	ts Taken	% of Tests Passed	
Subject Area	2011- 2012	2012- 2013	2011- 2012	2012- 2013
Biology	27	36	78%	69%
Economics	11	19	46%	37%
English A Literature	41	34	83%	100%
French B	7	6	n/a	n/a
History	41	34	73%	68%
Mathematical Studies	38	33	61%	67%
Mathematics	10	13	30%	69%
Psychology	11	15	82%	73%
Spanish AB	1	4	n/a	n/a
Spanish B	36	25	72%	64%
Theatre	16	8	69%	n/a
Total, All Subjects	239	227	70%	70%

Table 7. Number of Students Taking IB Examinations and Percent Passing Examinations by Subject Area, 2011-2012 and 2012-2013

South Dade Senior

	# of Tests Taken			% of Tests Passed	
Subject Area	2011- 2012- 2012 2013		2011- 2012	2012- 2013	
Biology	38	42	47%	33%	
Chemistry	1	0	n/a	n/a	
English A Literature	39	42	69%	83%	
French B	4	1	n/a	n/a	

History	39	41	49%	46%
Mathematical Studies	40	42	63%	36%
Psychology	34	34	59%	53%
Spanish B	35	41	91%	90%
Visual Arts	5	8	n/a	n/a
Total, All Subjects	235	251	61%	57%

Table 8. Number and Percent of Students Receiving IB Diplomas, by School and M-DCPS Overall, 2011-2012 and 2012-2013

School	Number of Students Eligible for IB Diplomas		Number of Students Receiving IB Diplomas		Percent of Students Receiving IB Diplomas	
	2011- 2012	2012- 2013	2011- 2012	2012- 2013	2011- 2012	2012- 2013
Coral Gables Senior	117	155	63	120	54%	77%
Coral Reef Senior	145	175	131	148	90%	85%
John A. Ferguson Senior	115	77	69	48	60%	62%
Miami Beach Senior	28	27	23	24	82%	89%
North Miami Senior	46	35	24	19	52%	54%
South Dade Senior	40	42	15	16	38%	38%
Total, All IB Schools	491	511	325	375	66%	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 AICE program is available at four M-DCPS traditional high schools, one full service high school/vocational-technical training center, and one charter school: 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 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.

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 AICE 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 not provided for American Senior and Keys Gate Charter High School. American Senior does not offer a full diploma track program and Keys Gate Charter High students were not yet eligible for AICE diplomas in 2012-2013.

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 2012-2013, AICE examinations were taken in 26 content areas. The number of AICE examinations taken by M-DCPS students increased by 78% (from 1,885 examinations in 2011-2012 to 3,349 examinations in 2012-2013).
- Of all AICE examinations taken during the 2012-2013 school year, the largest number was taken by students at Hialeah Gardens Senior. They participated in 36% of all AICE examinations. The percentages of examinations taken at the other five M-DCPS Cambridge schools were as follows:
 - Ronald W. Reagan/Doral Senior: 28%
 - o G. Holmes Braddock Senior: 16%
 - American Senior: 10%
 - Miami Lakes Educational Center: 6%
 - Keys Gate Charter High School: 4%
- Overall, the most AICE examinations were taken in Thinking Skills, History, and General Paper (multi-disciplinary subject matter drawn from across the curriculum) in 2012-2013.
- In 2012-2013, AICE examinations were taken in more content areas (21) at Ronald W. Reagan/Doral Senior than at the other five M-DCPS Cambridge schools (15 content areas at Hialeah Gardens Senior, 14 content areas at G. Holmes Braddock Senior, 6 content areas at American Senior, 5 content areas at Miami Lakes Educational Center, and 2 content areas at Keys Gate Charter High School).
- Of the four M-DCPS high schools that administered AICE examinations in 2011-2012 and 2012-2013, the number of examinations taken increased by 15% at Miami Lakes Educational Center, 14% at Ronald W. Reagan/Doral Senior, and 4% at American Senior. The number of AICE examinations taken at G. Holmes Braddock Senior decreased by 4%.

Cambridge AICE Examination Results

- Overall, the percentage of AICE examinations receiving passing scores decreased by 4 percentage points, from 61% in 2011-2012 to 57% in 2012-2013.
- From 2011-2012 to 2012-2013, the percentage of AICE examinations receiving passing scores increased at three of the four M-DCPS Cambridge high schools that administered AICE examinations both years (G. Holmes Braddock Senior, Miami Lakes Educational Center, and Ronald W. Reagan/Doral Senior). The percentage of passing examinations decreased at American Senior.
- During the 2012-2013 school year, Miami Lakes Educational Center had the highest percentage of AICE examinations receiving passing scores (88%), followed by Ronald

- W. Reagan/Doral Senior (77%), G. Holmes Braddock Senior (63%), Keys Gate Charter High School (59%), Hialeah Gardens Senior (45%), and American Senior (12%).
- Overall, the 2012-2013 content areas in which the highest percentages of AICE examinations received passing scores were French Language, Spanish Language, and Spanish Literature. Content areas in which the lowest percentages of examinations received passing scores were Geography and Travel/Tourism.

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 66% (from 118 students in 2011-2012 to 196 students in 2012-2013).
- A total of 94 M-DCPS students, or 48% of the 196 M-DCPS students enrolled in Cambridge full diploma track programs, received AICE diplomas at the conclusion of the 2012-2013 school year.
- Overall, the percentage of AICE program students receiving diplomas decreased by 18 percentage points (from 66% in 2011-2012 to 48% in 2012-2013).
- Ronald W. Reagan/Doral Senior had the highest percentage of Cambridge students receiving AICE diplomas (76%), followed by G. Holmes Braddock Senior (52%), Miami Lakes Educational Center (32%), and Hialeah Gardens Senior (21%).
- Of the three M-DCPS schools with students eligible for AICE diplomas in both 2011-2012 and 2012-2013, the percentage of students receiving diplomas increased at G. Holmes Braddock Senior, but decreased at Miami Lakes Educational Center and Ronald W. Reagan/Doral Senior.

Cambridge AICE program outcomes are presented in the following tables. Data are provided for the six M-DCPS AICE 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, 2011-2012 and 2012-2013

M-DCPS, All Cambridge AICE Schools Combined

	# of Tests Taken		% of Tests	s Passed
Subject Area	2011- 2012	2012- 2013	2011- 2012	2012- 2013
Art and Design	0	136	n/a	45%
Biology	56	87	20%	39%
Biology 2	45	3	42%	n/a
Business Studies	9	0	n/a	n/a
Chemistry	59	91	31%	22%
Chemistry 2	9	4	n/a	n/a
Economics	96	86	35%	52%
English Language	201	355	78%	83%
English Literature	221	206	59%	48%
Environmental Management	0	97	n/a	87%
French/French Language	46	34	100%	100%
French Literature	0	4	n/a	n/a
General Paper	123	434	90%	88%
Geography	34	28	0%	4%
Global Perspectives & Research	0	29	n/a	90%
History	240	448	50%	38%
Marine Science	0	172	n/a	37%
Mathematics	92	303	57%	31%
Music	0	3	n/a	n/a
Physics	53	34	36%	32%
Physics 2	9	28	n/a	29%
Psychology	109	77	66%	61%

Sociology	27	79	52%	60%
Spanish Literature	3	34	n/a	100%
Spanish/Spanish Language	126	74	98%	100%
Thinking Skills	327	483	66%	53%
Travel/Tourism 1	0	20	n/a	0%
Total, All Subjects	1,885	3,349	61%	57%

Table 10. Number of Students Taking Cambridge AICE Examinations and Percent Passing by Subject Area, 2011-2012 and 2012-2013

American Senior High

	# of Tests Taken		% of Tests Passed	
Subject Area	2011- 2012	2012- 2013	2011- 2012	2012- 2013
Business Studies	9	0	n/a	n/a
Chemistry	20	26	0%	0%
English Language	56	28	43%	25%
English Literature	38	26	21%	8%
Geography	34	28	0%	4%
History	65	84	14%	6%
Thinking Skills	98	142	17%	17%
Total, All Subjects	320	334	18%	12%

Table 11. Number of Students Taking Cambridge AICE Examinations and Percent Passing Examinations by Subject Area, 2011-2012 and 2012-2013

G. Holmes Braddock Senior

	# of Test	s Taken	% of Tests Passed	
Subject Area	2011- 2012	2012- 2013	2011- 2012	2012- 2013
Biology	52	27	14%	22%
Chemistry	16	13	75%	77%
Economics	36	18	22%	11%
English Language	50	95	78%	84%
English Literature	95	86	56%	28%
General Paper	53	81	100%	90%
History	51	41	26%	32%
Mathematics	25	11	28%	82%
Physics	9	7	n/a	n/a
Psychology	35	46	77%	54%
Sociology	27	47	52%	70%
Spanish Literature	3	3	n/a	n/a
Spanish/Spanish Language	56	21	96%	100%
Thinking Skills	65	55	74%	78%
Total, All Subjects	573	551	60%	63%

Table 12. Number of Students Taking Cambridge AICE Examinations and Percent Passing Examinations by Subject Area, 2011-2012 and 2012-2013

Hialeah Gardens Senior

	# of Tests Taken		% of Tests Passed	
Subject Area	2011- 2012	2012- 2013	2011- 2012	2012- 2013
Art and Design	0	136	n/a	45%
Biology	0	20	n/a	20%
Chemistry	0	27	n/a	22%
English Language	0	125	n/a	85%
English Literature	0	2	n/a	n/a
Environmental Management	0	12	n/a	67%
General Paper	0	207	n/a	87%
History	0	173	n/a	20%
Marine Science	0	144	n/a	35%
Mathematics	0	206	n/a	14%
Music	0	3	n/a	n/a
Sociology	0	32	n/a	44%
Spanish/Spanish Language	0	22	n/a	100%
Thinking Skills	0	73	n/a	36%
Travel Tourism 1	0	20	n/a	0%
Total, All Subjects	0	1,202	n/a	45%

Table 13. Number of Students Taking Cambridge AICE Examinations and Percent Passing by Subject Area, 2011-2012 and 2012-2013

Keys Gate Charter High School

	# of Tests Taken		% of Tests Passed	
Subject Area	2011- 2012	2012- 2013	2011- 2012	2012- 2013
General Paper	0	66	n/a	84%
Thinking Skills	0	61	n/a	33%
Total, All Subjects	0	127	n/a	59%

Table 14. Number of Students Taking Cambridge AICE Examinations and Percent Passing by Subject Area, 2011-2012 and 2012-2013

Miami Lakes Educational Center

	# of Tests	s Taken	% of Tests Passed	
Subject Area	2011- 2012	2012- 2013	2011- 2012	2012- 2013
English Language	40	40	100%	100%
English Literature	28	39	93%	97%
History	28	39	82%	82%
Mathematics	14	35	86%	69%
Psychology	17	0	47%	n/a
Thinking Skills	44	43	89%	91%
Total, All Subjects	171	196	87%	88%

Table 15. Number of Students Taking Cambridge AICE Examinations and Percent Passing Examinations by Subject Area, 2011-2012 and 2012-2013

Ronald W. Reagan/Doral Senior

	# of Test	s Taken	% of Tests Passed	
Subject Area	2011- 2012	2012- 2013	2011- 2012	2012- 2013
Biology	4	40	n/a	60%
Biology 2	45	3	42%	n/a
Chemistry	23	25	26%	16%
Chemistry 2	9	4	n/a	n/a
Economics	60	68	43%	63%
English Language	55	67	96%	93%
English Literature	60	53	73%	66%
Environmental Management	0	85	n/a	89%
French/French Language	46	34	100%	100%
French Literature	0	4	n/a	n/a
General Paper	70	80	83%	91%
Global Perspectives & Research	0	29	n/a	90%
History	96	111	77%	76%
Marine Science	0	28	n/a	46%
Mathematics	53	51	62%	67%
Physics	44	27	36%	26%
Physics 2	9	28	n/a	29%
Psychology	57	31	65%	71%
Spanish Literature	0	31	n/a	100%
Spanish/Spanish Language	70	31	100%	100%
Thinking Skills	120	109	93%	94%
Total, All Subjects	821	939	74%	77%

Table 16. Number and Percent of Students Receiving Cambridge AICE Diplomas, by School and M-DCPS Overall, 2011-2012 and 2012-2013

School	Number of Students Eligible for AICE Diplomas*		Number of Students Receiving AICE Diplomas		Students Eligible Students Receiving Students R AICE Diplomas AICE Diplomas		Receiving
	2011- 2012	2012- 2013	2011- 2012	2012- 2013	2011- 2012	2012- 2013	
American Senior**	n/a	n/a	n/a	n/a	n/a	n/a	
G. Holmes Braddock	46	50	17	26	37%	52%	
Hialeah Gardens	n/a	14	n/a	3	n/a	21%	
Keys Gate Charter***	n/a	0	n/a	n/a	n/a	n/a	
Miami Lakes Educational Center	11	81	6	26	55%	32%	
Ronald W. Reagan/ Doral Senior	61	51	55	39	90%	76%	
Total, All Cambridge AICE Schools	118	196	78	94	66%	48%	

Notes:

- * Computation of Number of Students Eligible for AICE Diplomas includes grades 11 and 12 students who met all AICE program requirements.
- ** Data on students receiving Cambridge AICE diplomas are not provided for American Senior because the school did not offer a full diploma track program.
- *** Students enrolled in the Cambridge AICE program at Keys Gate Charter High School were not yet eligible for diplomas in 2012-2013.

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 preuniversity 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 2012-2013 school year: Coral Gables Senior, Coral Reef Senior, John A. Ferguson Senior, Miami Beach Senior, North Miami Senior, and South Dade Senior. Six M-DCPS schools offered the Cambridge AICE program and administered the corresponding examinations during 2012-2013: American Senior, G. Holmes Braddock Senior, Hialeah Gardens Senior, Keys Gate Charter High School, Miami Lakes Educational Center, and Ronald W. Reagan/Doral Senior.

Participation in the IB program continued to grow, with the number of IB examinations taken increasing by 7% from 2011-2012 to 2012-2013. Over 3,000 IB examinations were taken by M-DCPS students in 26 content areas in 2012-2013. Passing rates ranged from 57% to 89% 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 2012-2013 school year.

The Cambridge program saw substantial growth in 2012-2013. The number of Cambridge AICE examinations taken by M-DCPS students increased by 78% from 2011-2012 to 2012-2013. M-DCPS students took 3,349 AICE examinations in 26 content areas in 2012-2013. Two new M-DCPS schools (Hialeah Gardens Senior and Keys Gate Charter High School) administered AICE examinations for the first time in 2012-2013. Passing rates on AICE examinations ranged from 12% to 88% at each of the schools, with an overall passing rate of 57% across the six participating schools. Miami Lakes Educational Center had the highest percentage of AICE examinations receiving passing scores. Overall, 48% of eligible students received a Cambridge AICE diploma at the conclusion of the 2012-2013 school year.