



RESEARCH BRIEF

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Miami-Dade County Public Schools: 2015-2016 Student Performance in the Cambridge Advanced International Certificate of Education Program

Results at a Glance

This Research Brief summarizes the performance of Miami-Dade County Public Schools (M-DCPS) students participating in the Cambridge Advanced International Certificate of Education (AICE) Program. Cambridge courses and examinations were offered at 13 M-DCPS high schools in 2015-2016. The number of Cambridge AICE examinations taken by M-DCPS students increased by 47% from 2014-2015 to 2015-2016. The percentage of AICE examinations receiving passing scores also increased, from 63% in 2014-2015 to 68% in 2015-2016. At the conclusion of the 2015-2016 school year, 85% of eligible Cambridge students received AICE diplomas, a 14 percentage point increase from 2014-2015.

The Cambridge Advanced International Certificate of Education (AICE) diploma program is an international curriculum and examination system that emphasizes the value of broad and balanced study. Along with 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 six full-credit AICE courses and pass the corresponding examinations for each course. The program is made up of Advanced (A) Level and Advanced Subsidiary (AS) Level courses. Cambridge A Level courses cover approximately two years of college-level curriculum and count as double credit toward the AICE diploma. AS Level courses cover the first year of the two-year A Level curriculum and count as a single credit. There are approximately 50 Cambridge A and AS Level subjects to choose from across three subject groups: mathematics and science, languages, and arts and humanities. At least one course and examination must be from each of the three subject areas. A fourth subject area, Global Perspectives, is a core part of the revised Cambridge AICE diploma and will become a compulsory part of the curriculum beginning in 2017. Global Perspectives is a cross-curricular and skills-based program that emphasizes the development of students' critical thinking, research, communication, and collaboration skills in practical, real-world contexts.

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 following 13 Miami-Dade County Public Schools (M-DCPS) high schools offered Cambridge courses and examinations in 2015-2016:

- American Senior
- G. Holmes Braddock Senior*
- Cutler Bay Senior*
- Hialeah Gardens Senior*
- Center for International Education: A Cambridge Associate School
- Keys Gate Charter High School*
- Maritime & Science Technology (MAST) Academy*
- Miami Killian Senior
- Miami Lakes Educational Center*
- Miami Norland Senior
- Miami Springs Senior*
- Ronald W. Reagan/Doral Senior*
- South Miami Senior

There are many M-DCPS students who are not on a Cambridge diploma track but are earning college credit by taking Cambridge courses and examinations. Of the 13 M-DCPS high schools that offered Cambridge courses and examinations in 2015-2016, eight schools offered a full diploma track program and had students who were eligible for AICE diplomas. These schools are marked with an asterisk above.

This Research Brief includes data on the 13 M-DCPS schools that offered Cambridge courses and examinations in 2015-2016. The number of AICE examinations taken, the percentage of examinations receiving passing scores, and the number and percentage of participating students earning diplomas are provided for 2014-2015 and 2015-2016, across all M-DCPS Cambridge AICE schools.

The reader should note that the tables in this report include only the subject area examinations taken by students at M-DCPS schools. Results are not reported if fewer than 10 examinations were taken.

Participation in Cambridge AICE Examinations

- The number of M-DCPS schools offering Cambridge courses and examinations increased from 12 in 2014-2015 to 13 in 2015-2016.
- The number of AICE examinations taken by M-DCPS students increased by 47% (from 5,008 in 2014-2015 to 7,385 in 2015-2016).
- In 2015-2016, AICE examinations were taken in 27 different subject areas. The subject areas in which the largest numbers of M-DCPS students took examinations were English Language, General Paper, History, and Psychology. 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.

Examination Results

- The percentage of AICE examinations receiving passing scores in M-DCPS increased by five percentage points, from 63% in 2014-2015 to 68% in 2015-2016.
- The 2015-2016 subject areas in which the highest percentages of AICE examinations received passing scores were Media Studies, Portuguese, and Spanish. The subject areas in which the lowest percentage of examinations received passing scores were Biology, Business, Economics, and Mathematics.

Diploma Results

- Grades 11 and 12 students who were enrolled in the Cambridge full diploma track program, met all program requirements, and took the required examinations were eligible to receive AICE diplomas. Districtwide, the number of students eligible to receive AICE diplomas increased by 13% (from 238 students in 2014-2015 to 268 students in 2015-2016).
- A total of 228 M-DCPS students, or 85% of the 268 eligible M-DCPS students, received AICE diplomas at the conclusion of the 2015-2016 school year. From 2014-2015 to 2015-2016, the percentage of M-DCPS students receiving AICE diplomas increased by 14 percentage points (from 71% to 85%).
- Of the eight M-DCPS schools offering full diploma track programs, Keys Gate Charter School had the highest percentage of eligible students receiving AICE diplomas (100%), followed by Ronald W. Reagan/Doral Senior (95%), G. Holmes Braddock Senior (94%), MAST Academy (85%), Hialeah Gardens Senior (76%), Miami Springs Senior (70%), and Miami Lakes Educational Center (61%). The number and percentage of students receiving a diploma are not reported for Cutler Bay Senior because fewer than 10 students were eligible for an AICE diploma.

- The percentage of students receiving diplomas increased by 74 percentage points at Keys Gate Charter School, by 31 percentage points at Hialeah Gardens Senior, and by 17 percentage points at Miami Lakes Educational Center. The percentage of students receiving diplomas decreased by two percentage points at G. Holmes Braddock Senior and by one percentage point at Ronald W. Reagan/Doral Senior. Year-to-year comparisons are not provided for Cutler Bay Senior, MAST Academy, and Miami Springs Senior because 2015-2016 was the first school year that students at those schools received AICE diplomas.

**Table 1. Number of Students Taking Cambridge AICE Examinations
and Percent Passing Examinations by Subject Area,
2014-2015 and 2015-2016
M-DCPS, All Cambridge AICE Schools Combined**

Subject Area	# of Exams Taken		% of Exams Passed	
	2014-2015	2015-2016	2014-2015	2015-2016
Accounting	31	8	0%	N/A
Art and Design	55	50	49%	42%
Biology	168	280	35%	39%
Business	6	118	N/A	34%
Chemistry	112	148	47%	45%
Computer Science	9	0	N/A	N/A
Economics	35	25	71%	36%
English Language	608	808	85%	82%
English Literature	289	426	66%	75%
Environmental Management	150	379	77%	90%
French (A Level)	0	6	N/A	N/A
French Language (AS Level)	45	26	96%	89%
General Paper	363	836	93%	93%
Global Perspectives	54	0	74%	N/A
Global Perspectives & Research	273	646	98%	92%
History	795	871	44%	49%
Marine Science	280	536	49%	54%
Mathematics	267	293	43%	33%
Media Studies	0	28	N/A	100%
Music	13	18	54%	78%
Physics	131	106	37%	43%
Portuguese (A Level)	0	13	N/A	100%
Portuguese Language (AS Level)	31	21	100%	100%
Psychology	441	747	44%	41%
Sociology	158	43	33%	42%
Spanish (A Level)	0	24	N/A	100%
Spanish Language (AS Level)	234	372	93%	100%
Thinking Skills	383	408	75%	76%
Travel/Tourism	77	149	34%	71%
Total, All Subjects	5008	7385	63%	68%

Table 2. Number and Percent of Students Receiving Cambridge AICE Diplomas, by School and M-DCPS Overall, 2014-2015 and 2015-2016

School	Number of Students Eligible for AICE Diplomas		Number of Students Receiving AICE Diplomas		Percent of Students Receiving AICE Diplomas	
	2014-2015	2015-2016	2014-2015	2015-2016	2014-2015	2015-2016
Cutler Bay Senior	N/A	2	N/A	N/A	N/A	N/A
Keys Gate Charter	23	11	6	11	26%	100%
G. Holmes Braddock Senior	49	52	47	49	96%	94%
Hialeah Gardens	53	51	24	39	45%	76%
MAST Academy	N/A	27	N/A	23	N/A	85%
Miami Lakes Educational Center	32	23	14	14	44%	61%
Miami Springs Senior	N/A	20	N/A	14	N/A	70%
Ronald W. Reagan/Doral Senior	81	82	78	78	96%	95%
Total, All Cambridge AICE Schools	238	268	169	228	71%	85%

Summary

This Research Brief summarized the performance of M-DCPS students participating in the Cambridge AICE program. Cambridge courses and examinations were available at a total of 13 M-DCPS schools in 2015-2016. The number of Cambridge AICE examinations taken by M-DCPS students increased by 47% from 2014-2015 to 2015-2016. M-DCPS students took 7,385 AICE examinations in 27 subject areas in 2015-2016. The percentage of AICE examinations receiving passing scores in M-DCPS increased by five percentage points, from 63% in 2014-2015 to 68% in 2015-2016. Overall, the percentage of eligible M-DCPS students receiving a Cambridge AICE diploma increased by 14 percentage points, from 71% in 2014-2015 to 85% in 2015-2016.