

## 24 High Schools Offering AICE

which represents 6 schools increase from the previous year. Second consecutive year with an increase in participation (13 schools in 2019 to 18 schools in 2020).

# 83.4%

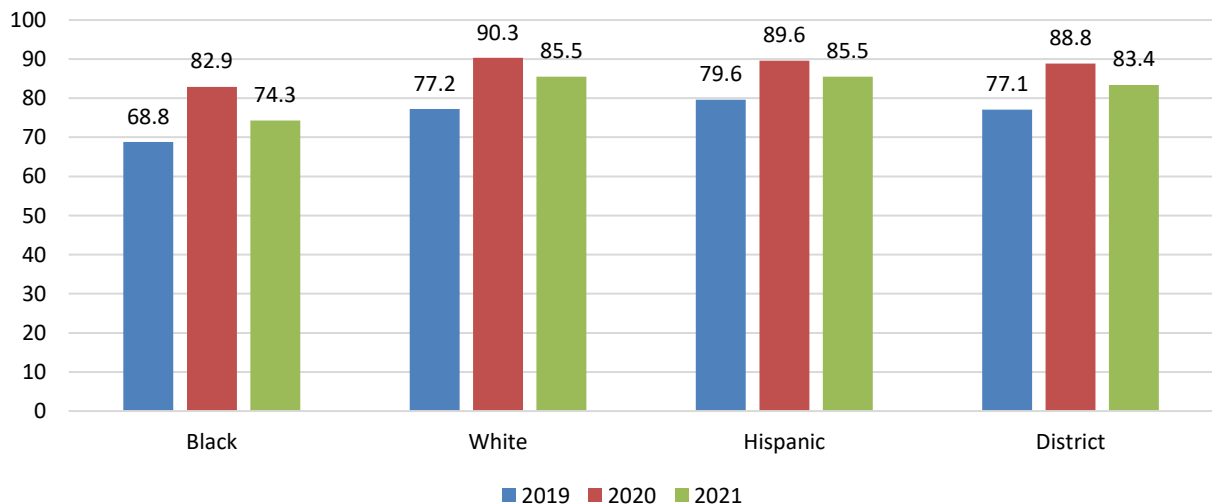
## Exam Passing Rate

with students earning scores of 3 or higher, a decrease of 5.4% over the previous year

### AICE at a Glance

- In 2020-21, 10,258 BCPS high school students completed 20,935 AICE tests, an average of 2.0 exams per participant.
- The AICE exam passing rate for the District decreased by 5.4% over the past year from 88.8% to 83.4% for the 2020-21 school year.
- The passing rate for each of the three largest racial/ethnic groups, Black, White and Hispanic students, decreased compared to the previous year.
- The percent of Black students passing decreased by 8.6 percentage points, the percent of Hispanic students passing decreased by 4.1 percentage points, and the percent of White students passing decreased by 4.8 percentage points.
- Comparing last year to this year, the gap in passing rates between Black and White students increased by 3.8 percentage points.
- Comparing last year to this year, the gap in passing rates between Hispanic and White students increased by 0.7 percentage points in favor of Hispanic students.

AICE Exam Passing Rates, 2019-2021



#### Additional Resources

A detailed report and data tables specific to AICE in Broward County may be accessed at:

<https://www.browardschools.com/sar>

For further information on the AICE program, see:

<https://www.cambridgeinternational.org/programmes-and-qualifications/cambridge-advanced/>

**DR. NICOLE MANCINI, CHIEF ACADEMIC OFFICER (TASK-ASSIGNED)**  
**OFFICE OF ACADEMICS**

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*Signatures on File*

**DATE:** November 1, 2021

**TO:** High School Principals  
Center Principals  
Charter High School Principals

**FROM:** Nicole Mancini  
Chief Academic Officer (Task Assigned)

**VIA:** Valerie S. Wanza, Ph.D.  
Chief School Performance & Accountability Officer

**SUBJECT: ADVANCED INTERNATIONAL CERTIFICATE OF EDUCATION (AICE), 2018-19 through 2020-21**

The Cambridge AICE Diploma was first awarded in 1997 and has since become popular with a range of schools in different parts of the world. It encompasses the 'gold standard' Cambridge International AS and A Level qualification and offers students the opportunity to tailor their studies to their individual interests, abilities and future plans within an international curriculum framework.

The Cambridge AICE Diploma is an international curriculum and examination system that emphasizes the value of broad and balanced study. Alongside in-depth understanding of a variety of subjects, students also need to master a broader range of skills critical for success in university study and employment. AICE exams are scored on a seven-point scale, and many colleges and universities will award course credit for scores of 3 or higher.<sup>1</sup>

The Cambridge program in Broward started at Fort Lauderdale High School as a Magnet Program in 2003. Broward County Public Schools has since grown to include Cambridge as an Innovative Program in elementary, middle, and high schools. In the past 3 years, the high school AICE program has grown in Broward by 63 percent.

The Cambridge elementary and middle school programs prepare the students for success in the high school program. Each year, additional schools add the Cambridge program. Currently there are three elementary, 12 middle, and 24 high schools that offer Cambridge.

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<sup>1</sup> For further information on the AICE program, see <https://www.cambridgeinternational.org/programmes-and-qualifications/cambridge-advanced/>

The high schools' Cambridge program allow students to earn the Cambridge AICE Diploma. This international curriculum and examination system emphasize the value of broad and balanced study. Alongside in-depth understanding of a variety of subjects, students also master a broader range of skills critical for success at the university and career. The students who earn the AICE Diploma receive 100% Full Bright Future Scholarship without needing to meet the SAT/ACT minimum requirement.

The 2020-21 AICE results as of August 10, 2021 for Broward County Public Schools (BCPS) students are detailed in the attached Brief and appendices.

The findings related to the 2020-21 AICE results include:

- Participation in AICE courses increased by over 3% for the District, grades 9, 10, 11 and increased 1% for grade 12 compared to the 2019-20 school year.
- AICE exam participation in BCPS increased by 3,169 (18%) from 2019-20 to 2020-21. This trend continues from 2018-19 to 2019-20 which showed a 2,831 (20%) increase.
- The passing rate decreased by 5.4 percentage points in the 2020-21 school year compared to 2019-20, from 88.8% in 2019-20 to the current rate of 83.4%.
- The 2020-21 results show a 3.8 percentage point increase in the gap between Black and White students. Passing rates decreased for the three largest racial/ethnic groups (Hispanic, Black, and White).

If you have any comments concerning this memorandum or the attached brief, please contact **Richard Baum, Director, Student Assessment & Research at 754-321-2500**. For questions about AICE courses or staff training, please contact **Hope Targoff, District Magnet Coordinator at 754-321-2078**.

VSW/DG/RGB/RAA/MJJ/rs  
Attachments

cc: School Board Members  
Senior Leadership Team  
Cadre Directors  
Director, Charter School Support



# Assessment Brief

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Number 208

Report from the Office of the Superintendent

November 2021

## ADVANCED INTERNATIONAL CERTIFICATE OF EDUCATION ENROLLMENT AND RESULTS, 2018-19 THROUGH 2020-21

The Cambridge AICE Diploma was first awarded in 1997 and has since become popular with a range of schools in different parts of the world. It encompasses the 'gold standard' Cambridge International AS and A Level qualification and offers students the opportunity to tailor their studies to their individual interests, abilities and future plans within an international curriculum framework.

The Cambridge program in Broward started at Fort Lauderdale High School as a Magnet Program in 2003. Broward County Public Schools has since grown to include Cambridge as an Innovative Program in elementary, middle, and high schools. In the past 3 years, the high school AICE program has grown in Broward by 63 percent.

This Brief presents enrollment rates and exam results for Broward County Public Schools' (BCPS) Advanced International Certificate of Education (AICE) program as of August 10, 2021. The Cambridge AICE Diploma is an international curriculum and examination system that emphasizes the value of broad and balanced study. Alongside in-depth understanding of a variety of subjects, students also need to master a broader range of skills critical for success in university study and employment. AICE exams are scored on a seven-point scale, and many colleges and universities will award course credit for scores of 3 or higher.

### Student participation rates, overall and by race/ethnicity

As shown in Table 1, BCPS' total high school enrollment increased by 916 (1.2%) students since the 2019-20 school year, while AICE participation increased by 3.1%. AICE exams increased in the 2020-21 school year by 3,710 exams compared to the 2019-20 school year.

AICE participants completed, on average, 2.0 AICE exams in 2020-21. The average number of AICE exams taken is unchanged from the previous year (see Table 2). Native American participants completed more exams on average (2.3) than students of any other race/ethnicity. Across the three years reviewed, while there has been slight variability in the number of program participants and exams administered, there has been almost no variation in the average number of exams taken in aggregate or by demographic group.

Table 1

*High School Enrollment<sup>2</sup>, AICE Enrollment and AICE Course Participation, 2019 through 2021*

Grade	High School Enrollment	AICE Enrollment	AICE Exams	AICE Course Participation Rate
<b>2018-19</b>				
Total	78,346	6,573	14,394	8.3%
9th	19,803	1,506	2,617	7.6%
10th	19,535	1,881	4,593	9.6%
11th	19,332	1,741	4,599	9.0%
12th	19,676	1,445	2,585	7.3%
<b>2019-20</b>				
Total	77,994	8,677	17,225	11.1%
9th	20,052	2,012	3,310	10.0%
10th	19,705	2,558	5,916	13.0%
11th	18,799	2,269	5,288	12.1%
12th	19,438	1,838	2,711	9.5%
<b>2020-21</b>				
Total	78,910	11,213	20,934	14.2%
9th	20,301	2,954	4,671	14.6%
10th	20,000	3,254	6,904	16.3%
11th	19,229	2,961	6,439	15.4%
12th	19,380	2,044	2,921	10.5%

Table 2

*Number of AICE Students Tested, Number of AICE Examinations, and Average Number of Exams by Race/Ethnicity in Broward County, 2018-19 through 2020-21*

Race/ Ethnicity	2018-19			2019-20			2020-21		
	N Tested	n Exams	Avg. n Exams	N Tested	n Exams	Avg. n Exams	N Tested	N Exams	Avg. n Exams
Broward	6,444	14,394	2.2	8,423	17,225	2.0	10,258	20,934	2.0
Asian	471	1,045	2.2	614	1,369	2.2	755	1,595	2.1
Black	1,135	2,470	2.2	1,540	3,229	2.1	2,322	4,678	2.0
Hispanic	2,674	5,625	2.1	3,270	6,437	2.0	3,743	7,461	2.0
Multi-ethnic	210	526	2.5	262	567	2.2	304	646	2.1
Native American	18	35	1.9	27	62	2.3	31	72	2.3
White	1,931	4,685	2.4	2,710	5,561	2.1	3,103	6,482	2.1

<sup>2</sup> Enrollment calculated using BCPS benchmark day enrollment data which is recorded on the 20<sup>th</sup> day of school.

## Average scores and passing rates for the District's largest racial/ethnic groups

Figure 1 shows the passing rates for each of the three largest racial/ethnic groups. All three groups have decreased their passing rate for 2020-21. The largest decrease of 8.6 percentage points occurred in Black students' passing rate down to 74.3% in 2020-21, Hispanic students' passing rate decreased by 4.1 percentage points, and White students' passing rate decreased by 5.4 percentage points.

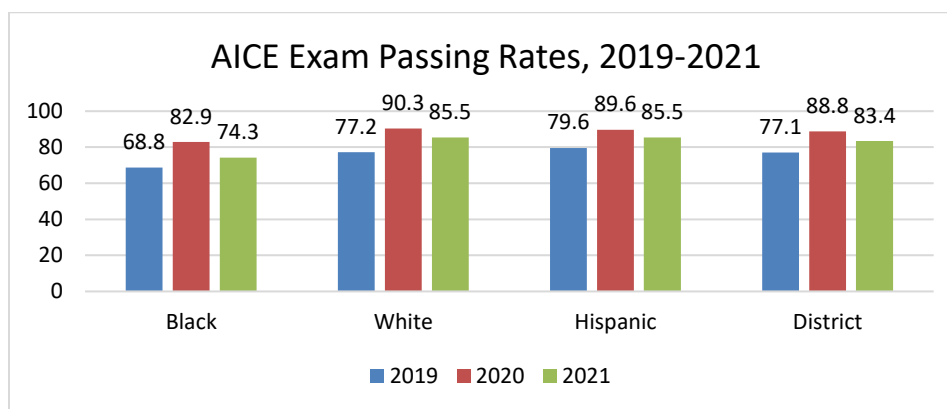


Figure 1. AICE exam passing rates for three largest racial/ethnic groups, 2018-19 through 2020-21.

Table 3 displays performance on AICE exams across student racial/ethnic groups. Performance differed across racial/ethnic groups. Asian students consistently earned the highest scores while Black students consistently earned the lowest scores of all the racial/ethnic groups for the past three years. All racial/ethnic groups achieved a passing rate above 80% last school year. The 2020-21 school year shows all racial/ethnic groups continuing a passing rate above 80% except Black students. All racial/ethnic groups had a decrease in passing percentage by at least 2 percentage points.

Table 3

*AICE Passing Rates and Mean Scores in BCPS by Race/Ethnicity, 2018-19 through 2020-21*

Ethnicity	2018-19			2019-20			2020-21		
	<i>n</i> Exams 3+	% Exams 3+	Mean Score	<i>n</i> Exams 3+	% Exams 3+	Mean Score	<i>n</i> Exams 3+	% Exams 3+	Mean Score
Broward	11,092	77.1	3.61	15,291	88.8	4.49	17,454	83.4	4.06
Asian	888	85.0	4.21	1,260	92.0	4.91	1,434	89.9	4.66
Black	1,699	68.8	2.96	2,676	82.9	3.88	3,475	74.3	3.33
Hispanic	4,477	79.6	3.83	5,768	89.6	4.62	6,382	85.5	4.31
Multi-ethnic Native	376	71.4	3.39	514	90.7	4.62	557	86.2	4.21
American	28	80.0	3.57	54	87.1	4.55	61	84.7	4.07
White	3,618	77.2	3.59	5,019	90.3	4.59	5,545	85.5	4.14

Performance gaps between Black and Hispanic students and their White peers have been a long-standing concern. Comparing last year to this year, the gap in passing rates between Black and White students increased by 3.8 percentage points. The gap between Hispanic and White students increased in favor of Hispanic students. This resulted in Hispanic and White students performing on average at the same rate (Table 4).

Table 4  
*Differences in Percent of AICE Exams Scored 3 or Above in BCPS by Race/Ethnicity, 2018-19 through 2020-21*

Group	Percent of Exams 3 or Above			Change in gap 2019-20 to 2020-21
	2018-19	2019-20	2020-21	
Black	68.8	82.9	74.3	
<i>Black and White Gap</i>	<i>8.4</i>	<i>7.4</i>	<i>11.2</i>	<i>3.8</i>
White	77.2	90.3	85.5	
<i>White and Hispanic Gap</i>	<i>-2.4</i>	<i>0.7</i>	<i>0</i>	<i>-0.7</i>
Hispanic	79.6	89.6	85.5	

Table 5 shows the gaps in the mean exam scores between Black, Hispanic, and White students. In 2020-21, Hispanic students' mean AICE exam score was greater than White students' mean AICE exam score. Black students' mean score was .81 points lower than White students' mean AICE exam score. The Black-White score gap increased by .10 points, while the Hispanic-White gap increased by .14 points, in favor of the Hispanic students.

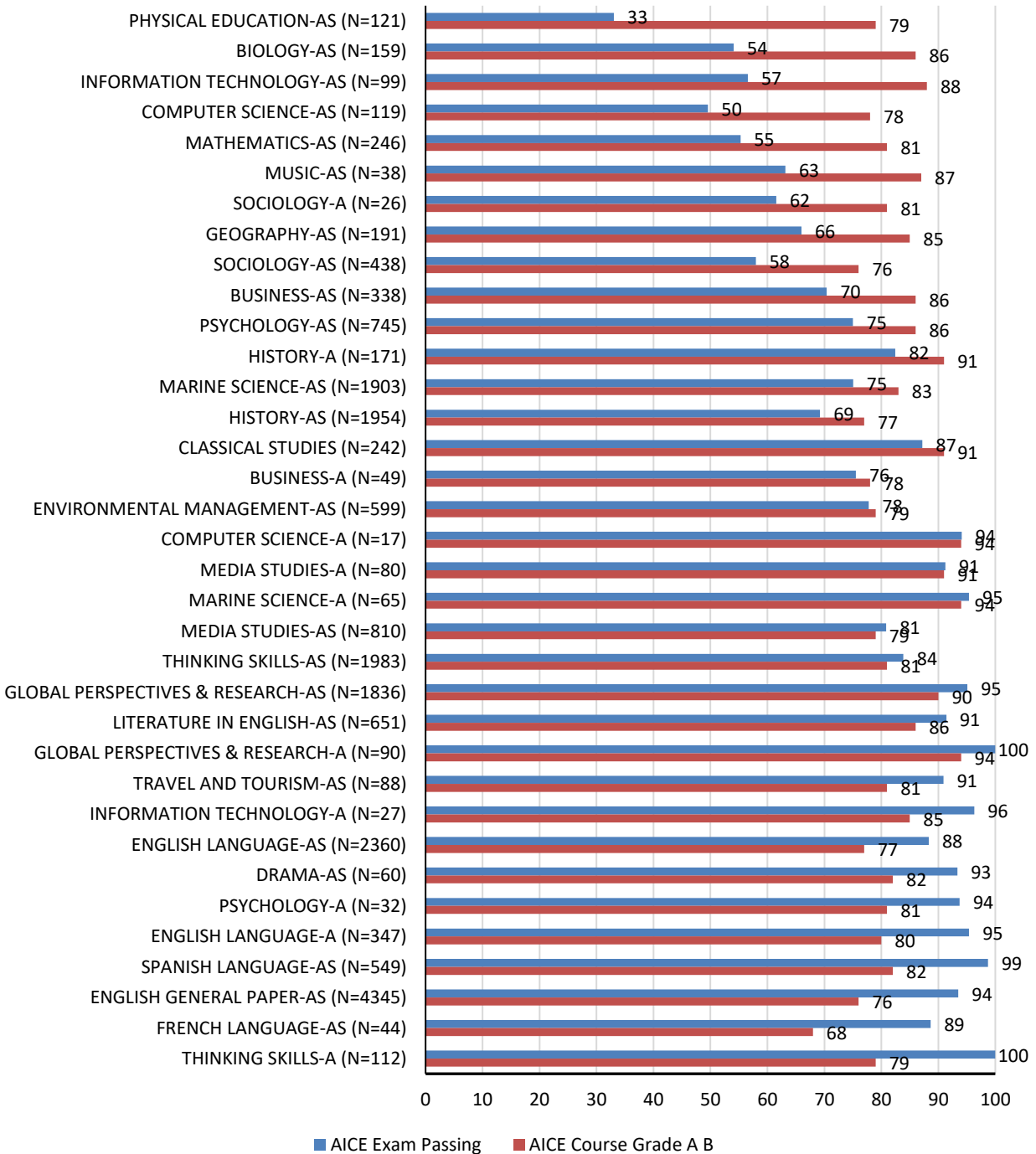
Table 5  
*Differences in Mean AICE Exam Scores in BCPS by Race/Ethnicity, 2018-19 through 2020-21*

Group	Mean Exam Score			Change in gap 2018-19 to 2019-20
	2018-19	2019-20	2020-21	
Black	2.96	3.88	3.33	
<i>Black and White Gap</i>	<i>.63</i>	<i>.71</i>	<i>.81</i>	<i>.10</i>
White	3.59	4.59	4.14	
<i>White and Hispanic Gap</i>	<i>-.24</i>	<i>-.03</i>	<i>-0.17</i>	<i>-.14</i>
Hispanic	3.83	4.62	4.31	

### Relationship between exam passing rates and course grades

Figure 2 (next page) examines the relationship between AICE exam passing rates and course grades. The figure displays AICE subtest, the percent of students earning an exam score of 3 or higher versus the percent of those students earning a course grade of A or B. The subjects are sorted in the figure by magnitude of discrepancy between AICE exam passing rate and course grade rate – from the largest (Physical Education) discrepancy to the smallest (Thinking Skills). Only subjects with more than 20 students who have exam scores and course grades are included.

Figure 2. AICE Exam Passing Rates and Course Grades, 2020-21



There were 17 courses where course grades outpaced AICE exam performance. This difference ranged from 1 to 46 percentage points. Course grades surpassed AICE exam performance in ten courses by at least 15 percentage points. Those courses were: Physical Education AS, Biology AS, Information Technology AS, Computer Science AS, Mathematics AS, Music AS, Sociology A, Geography AS, Sociology AS, and Business AS. The large discrepancies between class grades and



exam passing rates in these courses suggest expectations for these classes may not be aligned with the rigor of the exams. Conversely, ten courses, with a discrepancy of 10 or more percentage points, saw more students passing the AICE exam than earning an A or B in coursework: Travel & Tourism AS, Information Technology A, English Language AS, Drama AS, Psychology A, English Language A, Spanish Language AS, English General Paper AS, French Language AS, and Thinking Skills A.

The most popular AICE areas based on exam participation were General Paper AS (4,377 exams), English Language AS (2,395), Thinking Skills AS (2,005), History AS (1,954), Marine Science AS (1,904), and Global Perspectives AS (1,830). The areas with the highest exam passing rates with at least 20 students participating were Thinking Skills AS (100%), Global Perspectives & Research A (100%), Spanish Language AS (98%), Information Technology A (96%), Literature in English AS (96%), Global Perspectives AS (95%), English Language A (94%), General Paper AS (94%), Drama AS (93%), Marine Science A (91%), Media Studies AS (91%), and Travel & Tourism AS (91%). The areas with the lowest exam passing rates were Physical Education AS (33%), Computer Science AS (50%), Mathematics AS (55%), Sociology AS (58%), Sociology A (59%), and Information Technology AS (60%).

### **Summary**

Across the three years examined, overall high school enrollment is unchanged while the number of students participating in AICE testing increased. The average number of exams taken by a student was unchanged, and the proportion of exams passed with a score of 3 or higher decreased across all race/ethnicity groups this school year.

District participation rate has increased, along with grade level participation. Tenth grade participation rates have shown the greatest increase.

The exam passing rate decreased for the three main ethnic groups. While passing percentages decreased for all three groups, the gap between Black students and White students increased to 3.8 percentage points compared to the previous year. The gap between Hispanic students and White students increased 0.7 percentage points in to favor of Hispanic students.

Ten courses showed a discrepancy of 15 percentage points or more between students earning an A or B in the course and those passing the corresponding AICE exam. This may suggest a misalignment of classroom expectations with exam knowledge requirements in those courses.

### **Appendices**

Additional school- and exam-level data are provided in the appendices. Appendix A provides three years of districtwide passing rates by AICE exam. Appendix B provides aggregate AICE exam results by school over a three-year period.

*Prepared by*

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