

Program Update

Kentucky Board of Education Dec. 4, 2019

- College Readiness Program (AP)
- Access to Algebra
- Computer Science Initiatives









Mission and Expansion

2008 to Present

Mission

To expand student access to and success in rigorous coursework, particularly among populations traditionally underrepresented in these courses, enabling students to pursue advanced college and career opportunities.

College Readiness Program (AP®)

Supports middle and high school pre-AP and AP Math, Science and English courses to increase AP participation and success

Access to Algebra

Supports middle school math teachers in grades 6-8 to increase the number of students on track to meet math benchmark by the time they graduate high school

Computer Science (CS) Initiatives

Supports CS education in K-12 classrooms through Code.org training as part of the Kentucky CS Expansion Initiative and manages CSforKY, the state CSforALL campaign

2008 2014 2016









Statewide Participation

2019-2020 School Year

2019-20	Schools	Teachers	Enrollments
College Readiness Program	39 (22+17)*	161	4538
Access to Algebra	27	146	6138
CS Initiatives K-12 Training	34	38	2775
	100	345	13451

^{*}The number of schools indicated includes traditional active program schools funded for math, science, and English plus schools with individual AP MSE teachers in one or more content areas. All numbers reflect program participation as of Nov. 1, 2019.









Program Elements



The NMSI College
Readiness Program
supports improvements
in earning qualifying
scores (QS) of 3, 4, or 5
(on a 5-point scale) on
national AP® math,
science, and English
exams, which may earn
college credit.





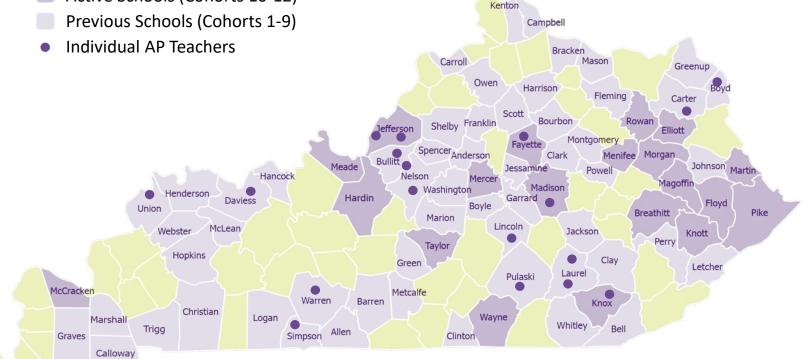






2019-20 Active Schools

Active Schools (Cohorts 10-12)



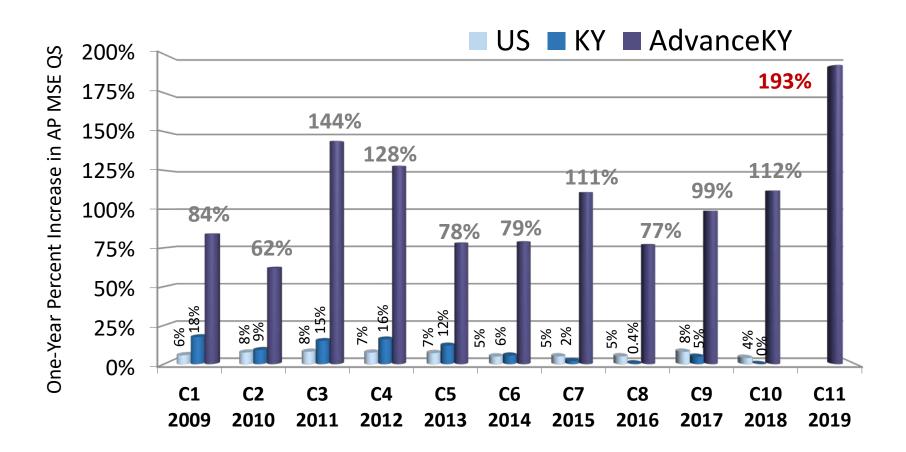








First-Year Percent Increase











Three-Year Growth: Cohorts 1-7

Cohorts 1-7	MSE QS: All Students	MSE QS: FRL Students	MSE QS: Minority Students
Baseline	2513	308	83
Year 3	6387	1255	257
% Change	<i>154.2%</i>	<i>307.5%</i>	209.6%



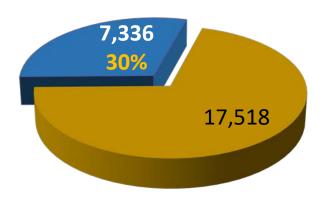


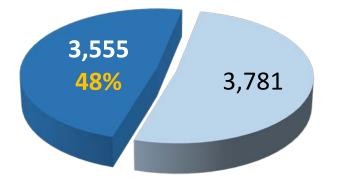




AP Participation – Matched Pair Analysis

Control Group





3x Students

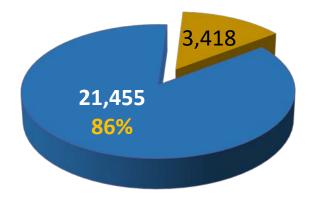
\$10 Million

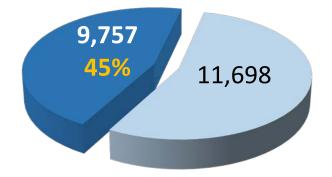
College Access

College Persistence

> College Success

AdvanceKentucky





Source: KYSTATS









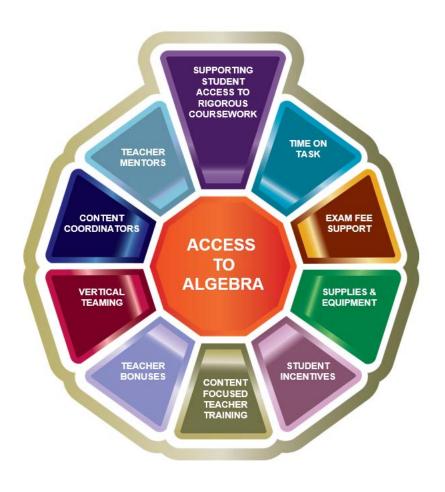
an initiative of Kentucky Science and Technology Corporation

Access to Algebra

Program Elements

Access to Algebra seeks to increase the number of students on track to meet college readiness math benchmarks by the time they enter high school, providing increased opportunities for advanced STEM coursework and careers.

The program centers around all students being given access, opportunity, and preparation to succeed in Algebra I.





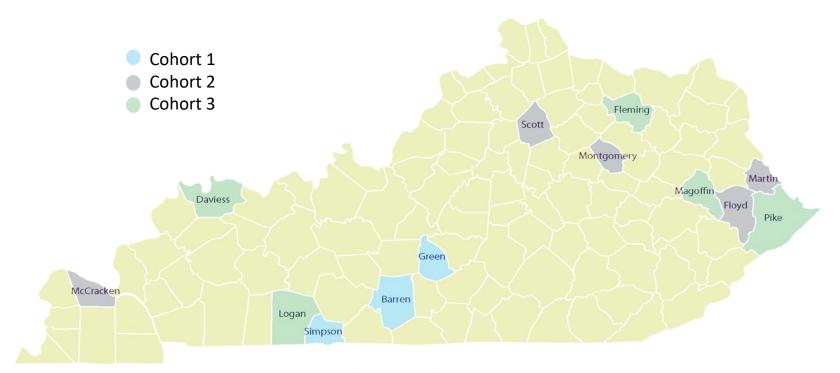






Access to Algebra

2019-20 Active Schools



Cohort 1 – 931 students Cohort 2 – 2,647 students Cohort 3 - 2,560 students Total Number of Teachers – 146 Total Number of Students – 6,138

Program Numbers as of Nov. 1, 2019





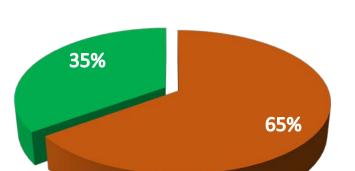




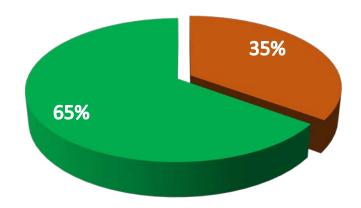
Access to Algebra

Cohort 1 Longitudinal Performance

2018 Seventh Grade



2019 Eighth Grade



- More Than One Year Below Grade Level
- On Track or at Grade Level Benchmark

- More Than One Year Below Grade Level
- On Track or At Gradel Level Benchmark

Note: Students in seventh grade identified as more than one year below grade level are 30 or more points below eighth grade benchmark.

Source: AdvanceKentucky and College Board





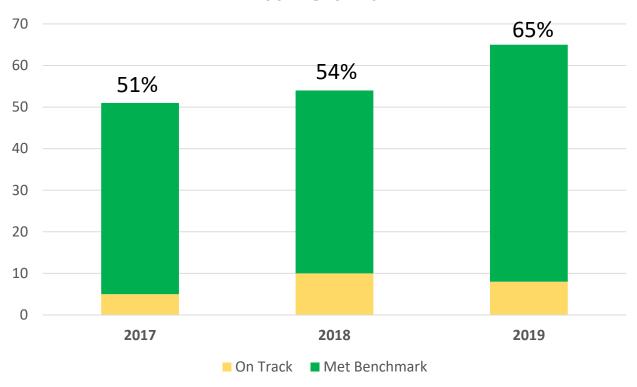




Access to Algebra

Three Year Growth - Cohort 1

Percentage of Eighth Grade Students on Track to Meet Math Benchmark



Source: AdvanceKentucky and College Board









Computer Science Initiatives

Professional Development



Supports Grades K-12

- CS Fundamentals (grades K-5)
- CS Discoveries (grades 6-10)
- AP CS Principles (grades 9-12)

CSD and **CSP** Training

- Summer Professional Development (5 days)
- 4 one-day workshops during academic year

CSF Training

2 One-day Workshops





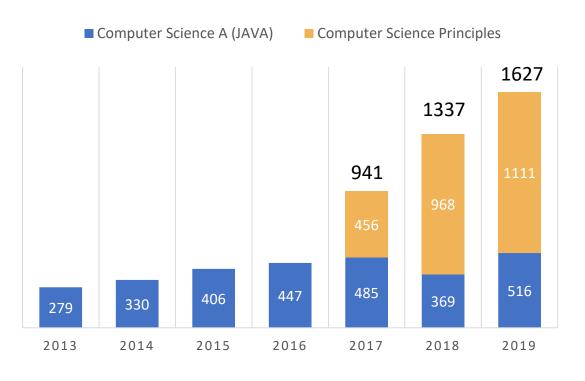




Computer Science Initiatives

Statewide Growth of CS Principles (All)

Number of AP CS Exams (All)



264%
increase in
CS exams
since the
addition of
CS
Principles
(2019)

Source: College Board







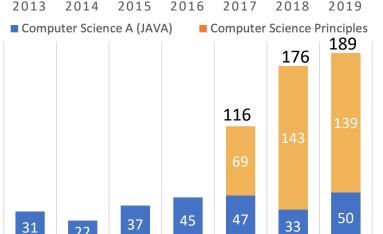


Computer Science Initiatives

Statewide Growth of CS Principles (Female & Minority)

an initiative of Kentucky Science and Technology Corporation





2016

2017

2018

Number of AP CS Exams (Female)

- 336% increase since the addition of AP CS Principles
- Female students represented
 25% of all exams in 2016 and
 30% of all exams in 2019

Number of AP CS Exams (Minority)

- 320% increase since the addition of AP CS Principles
- Minority students represented
 10% of all exams in 2016
 12% of all exams in 2019

Source: College Board



2013

2014

2015



2019

