

# **Diversity & Growing Enrollments in CS Education**

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# Participation of Students in AP Computer Science exams, 2013-15

	2013	2014	2015
Native American	0.4%	0.4%	0.4%
African American / Black	4%	4%	4%
Latino/a	8%	9%	9%
Asian	29%	30%	29%
White	54%	52%	52%
Females	19%	20%	22%
TOTAL	29,555	37,327	46,344

# Participation of Students in AP Computer Science exam, 2015

	<b>% Female Participants in Racial/Ethnic Group</b>	<b>Pass Rate for Females</b>	<b>Pass Rate for Males</b>
Native American	24%	48%	55%
African American / Black	25%	31%	40%
Latino/a	24%	30%	44%
Asian	29%	71%	72%
White	17%	62%	67%
TOTAL	22%	61%	65%

# Underlying Belief Systems:

## “CS for All” or “CS for Some”?

	<b>CS for Some: Identifying Talent</b>	<b>CS for All: Building Talent</b>
<b>Purpose</b>	National imperative to have more (diverse) students enter the CS pipeline, economic demands	Computing is a 21 <sup>st</sup> century literacy needed for civic and social participation
<b>Targeted Students</b>	“Best and the brightest” and “cream of the crop” students are identified and supported	Advisors/counselors and faculty invite all students into CS ~OR~ funnel all students into CS
<b>Curricular Content</b>	Emphasis on coding and the tools and programming languages of industry	Core computing concepts, linked to engaging and relevant contexts
<b>Student Success</b>	Persistence in the pipeline; more diverse “representation” of CS majors and industry	Increased knowledge, attitudes, and awareness of computing in students’ lives

# Measuring Structural Systems: Access, Diversity, and Equity

ACCESS: Courses/Programs available for students

Faculty Support

Administrative  
Support

Having courses  
“Count” towards  
graduation

Enrollment  
space

DIVERSITY: Attracting and enrolling  
diverse students into class

Reputation of  
course

Active  
Recruitment

Placement into  
course

EQUITY: Effectively teaching  
all students

Engaging  
Curriculum

Culturally Relevant  
Pedagogy

Inclusive Learning  
Environment