

WeTeach_CS and You Can Too!

Carol L. Fletcher, Ph.D.

Pareesa Schulte



Virtual Conference

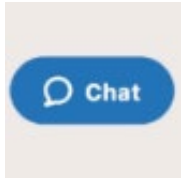
#T3IC





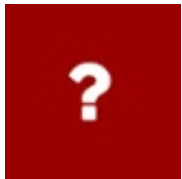
Profile

Select My Profile to edit your profile information and upload your picture.



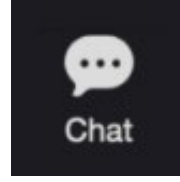
Bravura tech support

Have a quick question? Use the Chat icon, located in the lower right corner of your screen, to connect with a live Bravura agent.



Bravura user guide

Select the question mark icon to see the Bravura User Guide for additional step-by-step instructions.



Chat

Use the Zoom Chat icon to submit any session questions and chat during the session.



Announcements

Don't miss out on conference information. Use the Announcement icon at the top of your browser to view any updates.



Slack app

Keep the conversation going! Use the Slack app for peer-to-peer communication.

Supporting Educational Partnerships



Pareesa Schulte

Education Technology Consultant

Texas ESCs 4, 10-13, 15, 18-20, Arizona,
New Mexico

505.803.6963 | pschulte@ti.com

9:55 – 10:00 CT Participant Login

10:00 – 10:05 CT Introduction

10:05 – 11:10 CT Featured Speaker – Carol Fletcher, Ph.D.

11:10 – 11:15 CT Q&A

11:15 – 11:25 CT TI Representative – Pareesa Schulte

11:25 – 11:30 CT Q&A/Closing

TI Talks
February 2021



WeTeach_CS and You Can Too!



WeTeach_CS



The University of Texas at Austin
Texas Advanced Computing Center

Carol L. Fletcher,
Ph.D.
Director, EPIC

cfletcher@tacc.utexas.edu
[@weteachcs](https://twitter.com/weteachcs)
[WeTeachCS.org](https://www.weteachcs.org)

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February 2021

Thank you to Texas Instruments!



WeTeach_CS



TEXAS
INSTRUMENTS

Today's Goals



- Why teach CS?
- Who should take CS?
- What does CS look like across America?
- What counts as CS?
- How can your district teach CS?



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**What will
her world
be like in
2038?**



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What Happened in 2004?

100 million fax machines worldwide



The iPod was revolutionizing music

Blockbuster ruled the world!



What Hadn't Happened Yet in 2004?

amazon

Amazon stock was \$44/share (it's \$3,342/share now)



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Our job is to prepare today's students for their future, not our past.



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CSforAll is our mission!

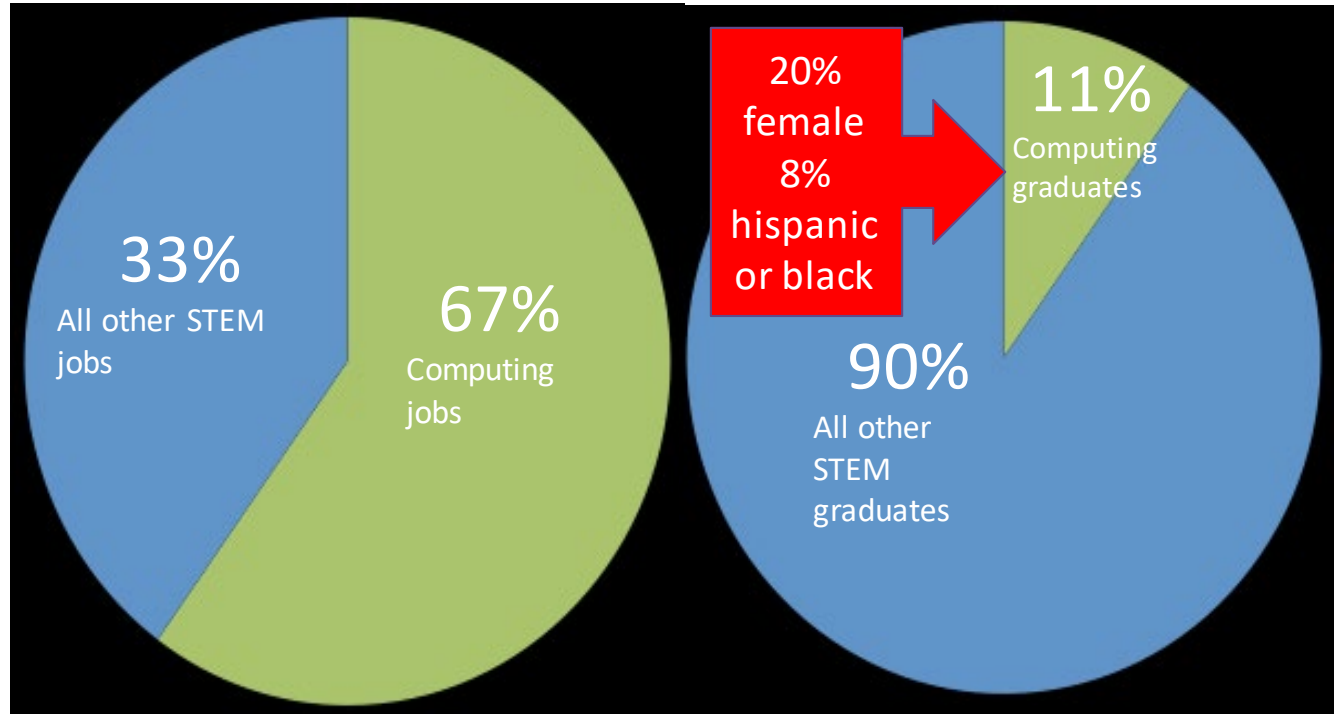
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WeTeach_CS



The STEM problem is in CS



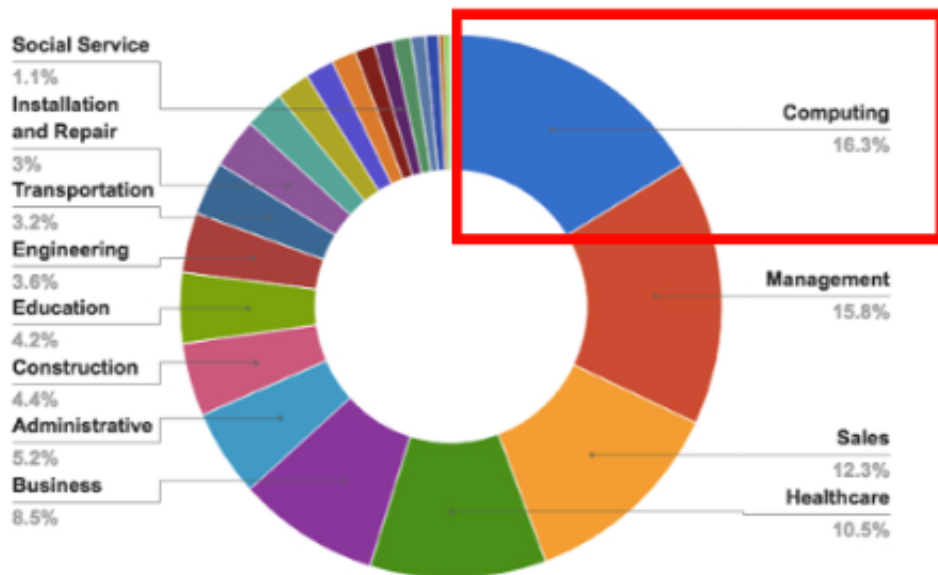
Sources: College Board, Bureau of Labor Statistics, National Science Foundation

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Computing jobs are the #1 source of new wages in the United States

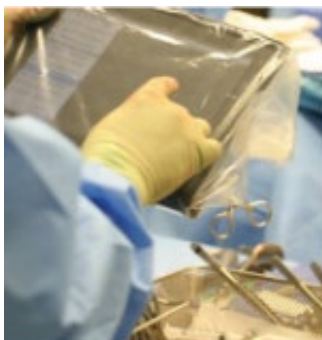


500,000 current openings: These jobs are in **every** industry and **every** state, and they're projected to grow at twice the rate of all other jobs.



Computing is revolutionizing EVERY field

Counselor and
Administrator
Webinar
2020-21



Health Care



Transportation



Home



Entertainment

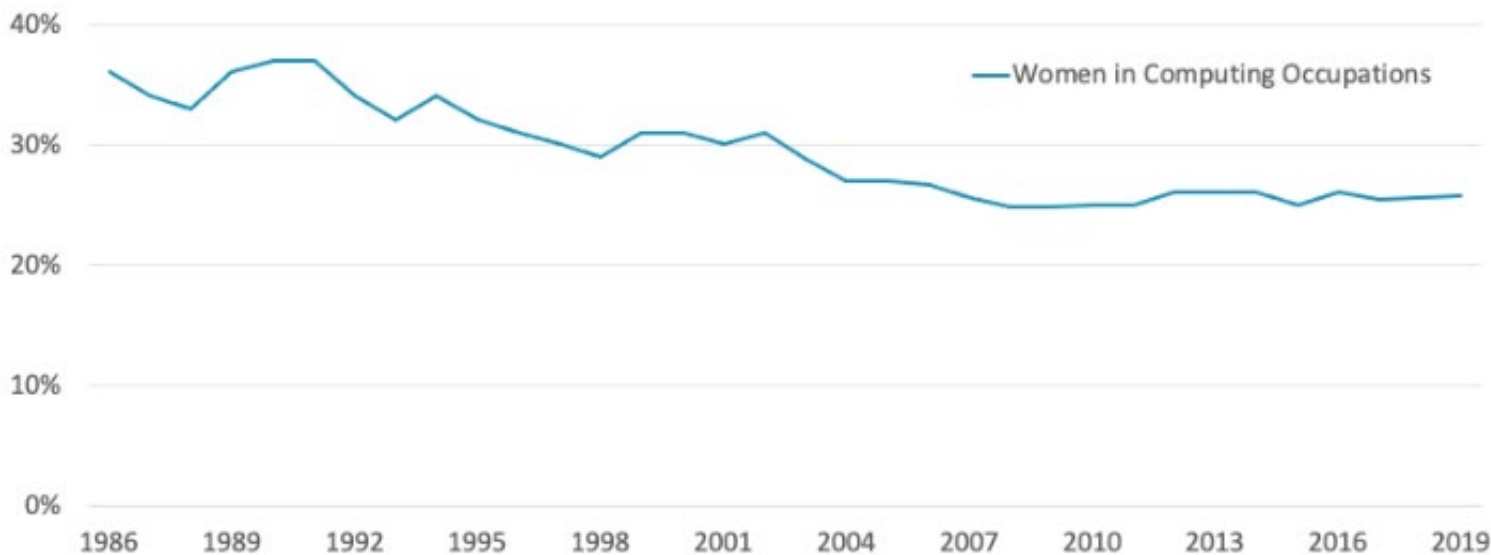


Space



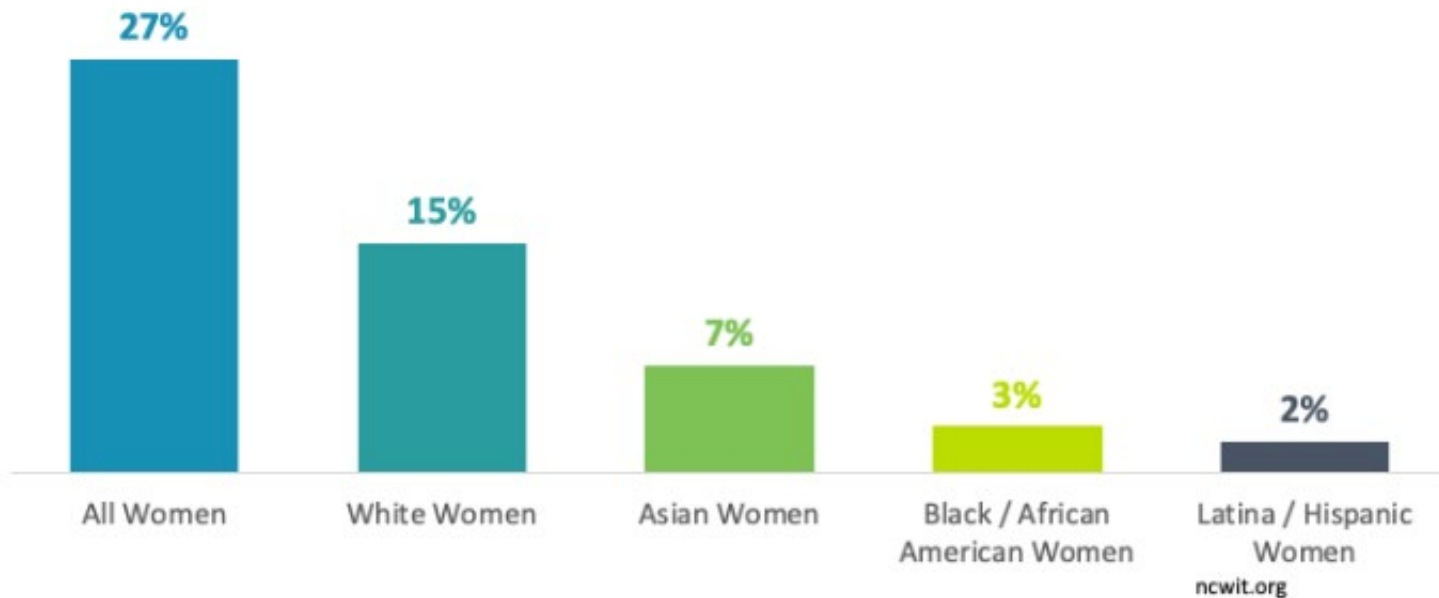
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Computing Occupations Held by Women Declining Since 1991



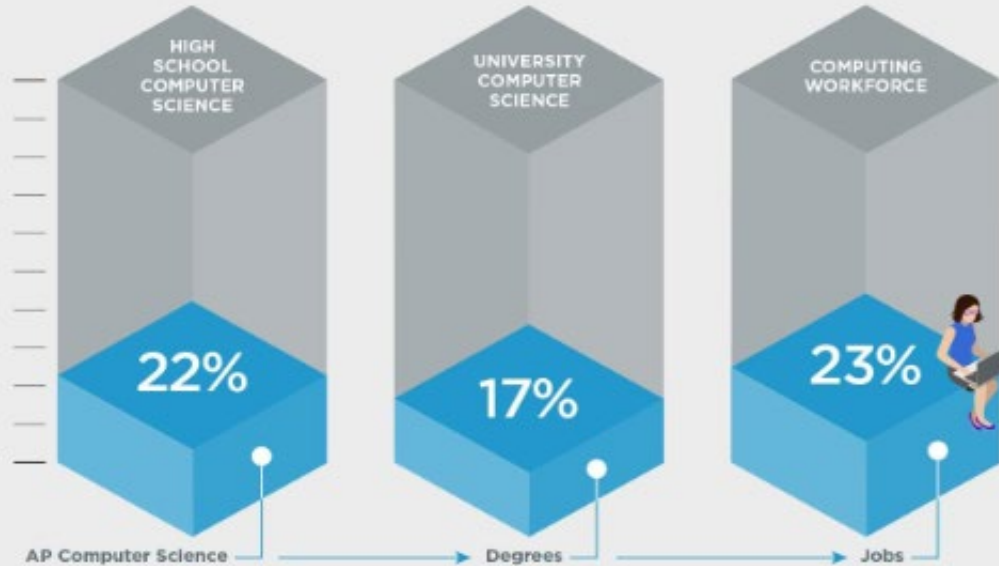
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Percentage of Computing Jobs Held by Women



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The diversity problem in tech starts in schools

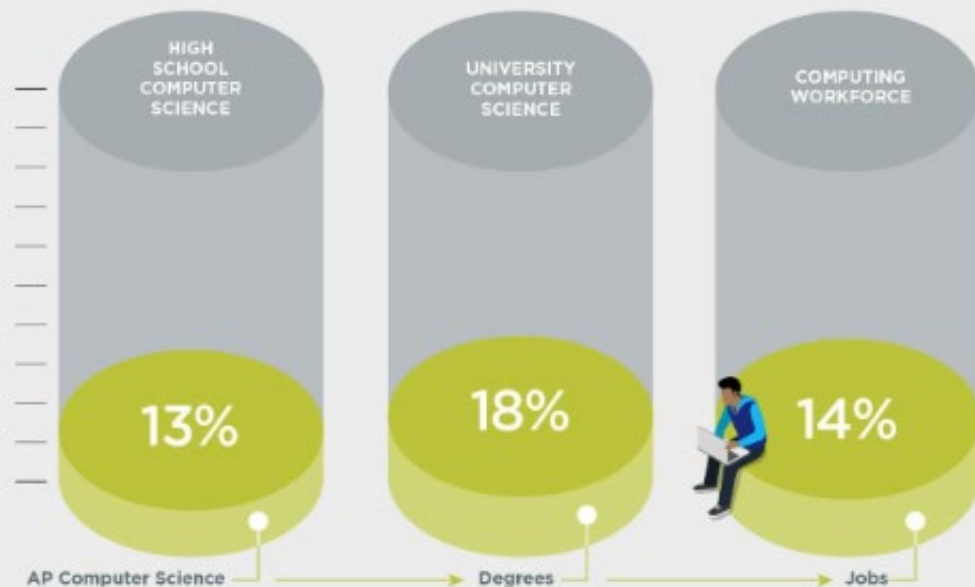


Women who try AP Computer Science in high school are **ten times more likely to major in it in college.**



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The diversity problem in tech starts in schools



Hispanic and Black students who try AP Computer Science in high school are **seven times more likely to major in it in college.**



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National K-12 CSEd Landscape

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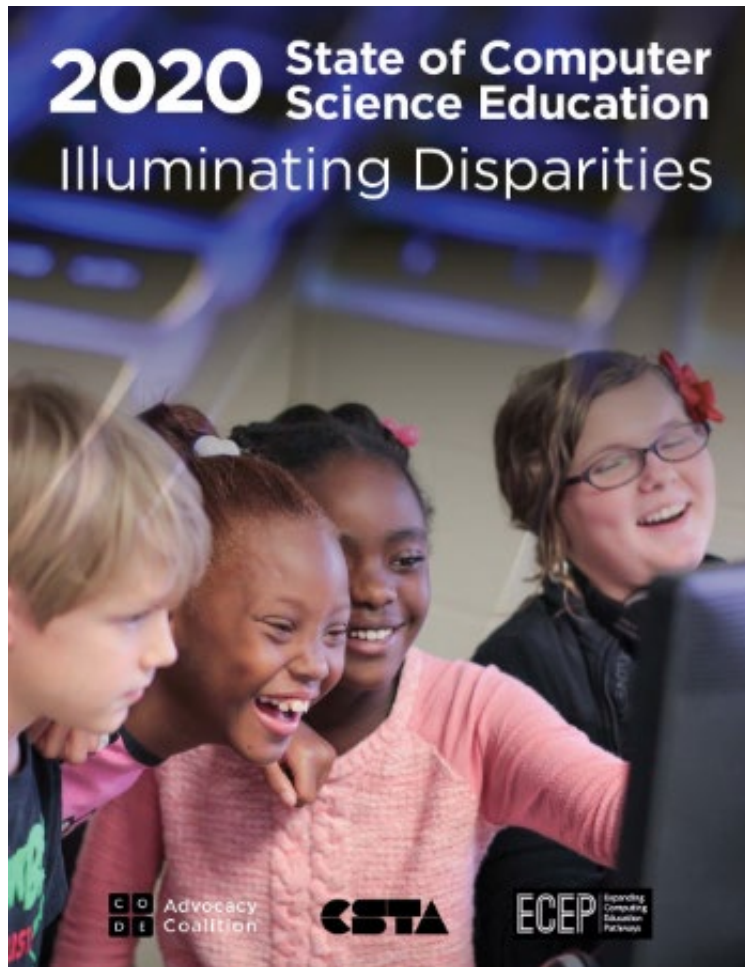
- Annual report published by Code.org Advocacy Coalition, CSTA, and ECEP
- Detailed data for every state
- Access report & your state's fact sheet at <https://advocacy.code.org/stateofcs>



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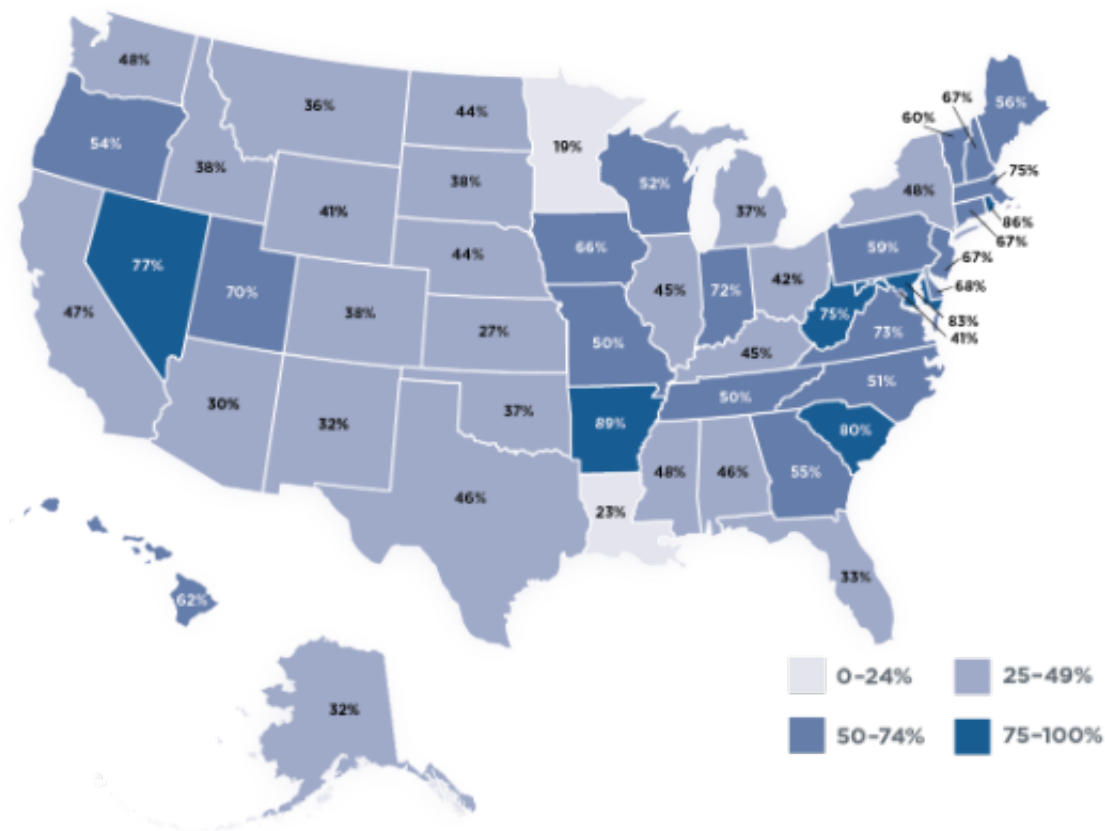
State	Alabama
State Plan	The Governor's Computer Science Advisory Council made a series of policy recommendations in 2019, including goals and strategies, but these recommendations did not include timelines.
Standards	The state adopted K-12 computer science and digital literacy standards in 2019. The "Equitable Access" Position Statement in the standards document includes examples of ways to broaden participation in computer science education, and the standards address concepts of equity, such as bias, accessible technology, and inclusivity.
Funding	HB 187 (FY 2021) and SB 199 (FY 2021) appropriated \$1,779M and \$2,779M for CS education. \$600M for the Middle School Programming Initiative, \$300M for CS-educator training, \$1 and \$2M for CS4ALL, and \$824M for the Technology in History Program to train K-12 teachers in computer science. HB 175 (FY 2019) appropriated \$60M for the Middle School Programming Initiative, and an additional \$300M was allocated for professional development. SB 129 (FY 2016) allocated \$5.75M for the Middle School Programming Initiative.
Certification	Teachers with existing licensure can add K-12 computer science as an additional teaching field by passing the Praxis CS exam. Teachers can also obtain a course-specific permit by completing an approved training or college-credit for the specific course. State funding for computer science can support understanding for teachers.
Prevalence	In September 2019, the State Board of Education passed Teacher Educator Standards for Computer Science, which are used to approve programs at institutions of higher education.
CS Specialist	The State Department of Education has an Education Specialist and an Educator Administrator for Digital Literacy and Computer Science.
All High Offer	Act 390 requires all high schools, middle schools, and elementary schools to offer CS by the 2020-2021 school year. There is public reporting of CS enrollment demographics at the state level.
Grade Credit	Courses including AP Computer Science A or AP Computer Science Principles can count as a mathematics or science credit for graduation.
HS Admission	AP CS A or AP CS Principles count towards mathematics or science admission requirements, as determined by each public institution of higher education.

Alabama is a member of the ECEP Alliance, has a CSTA chapter, and Governor Kay Ivey is a member of the Governors' Partnership for K-12 Computer Science.



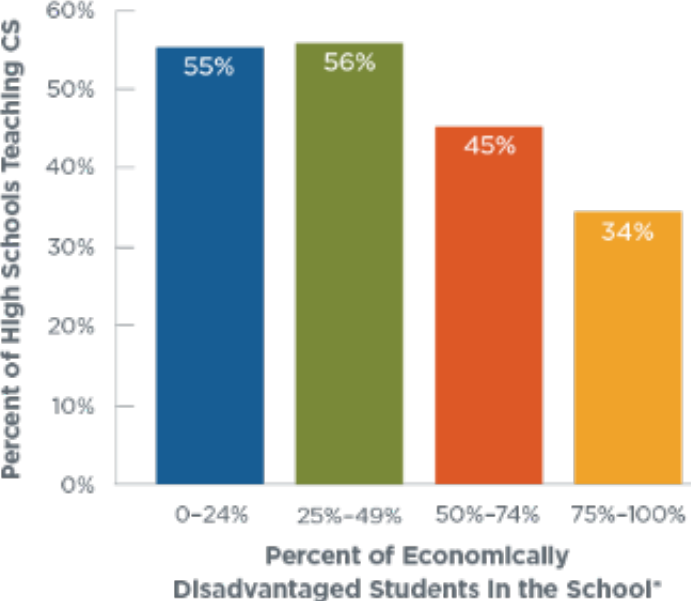
K-12 CS Access Report

For the first time, data from all 50 states shows that just 47% of public high schools teach at least one foundational computer science course.

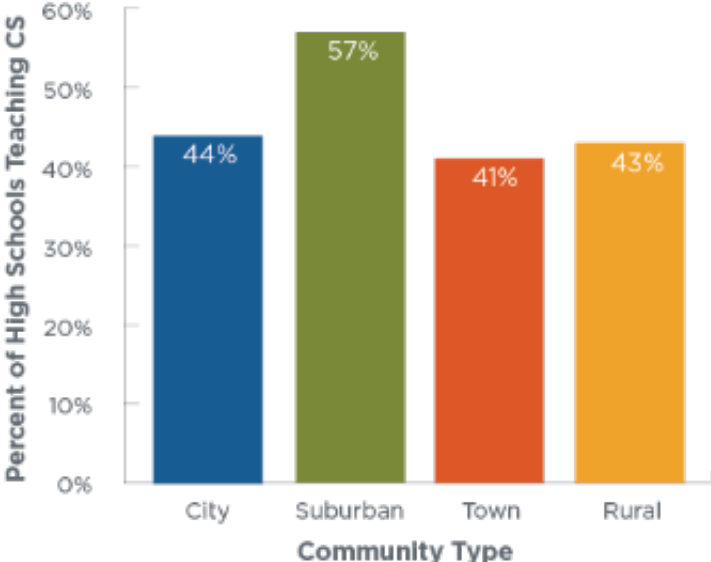


K-12 Computer Science Access Report

Income Level and Access to Computer Science



Percent of High Schools Teaching Computer Science by Community Type



Disparities in Access

Students from marginalized racial and ethnic groups are underrepresented in taking AP computer science exams, even when they attend a school that teaches it.

They are also less likely to take an exam than their white and Asian peers.

National AP CS Access and Participation by Race/Ethnicity

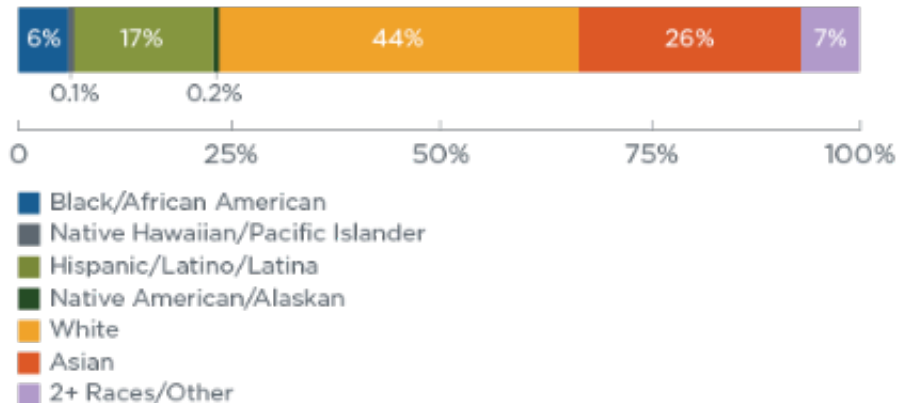
Overall Student Demographics



Demographics in Schools Teaching AP CS

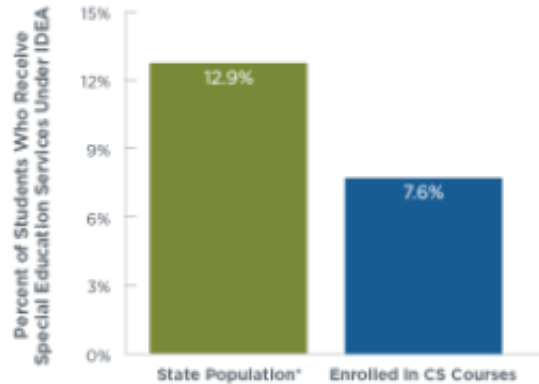


Demographics of Students Taking AP CS Exams

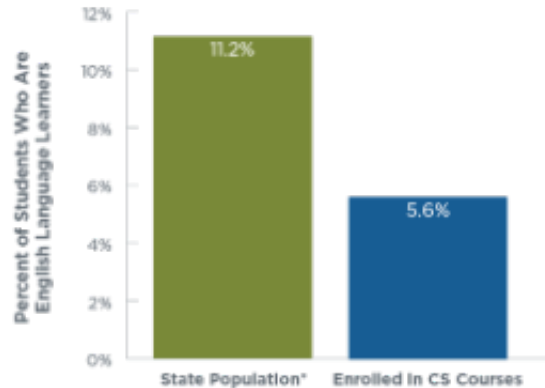


Alabama, Arkansas, Connecticut, Florida, Hawaii, Indiana, Massachusetts, Mississippi, New Jersey, New Mexico, and Texas provided data on the demographics of students enrolled in CS courses.

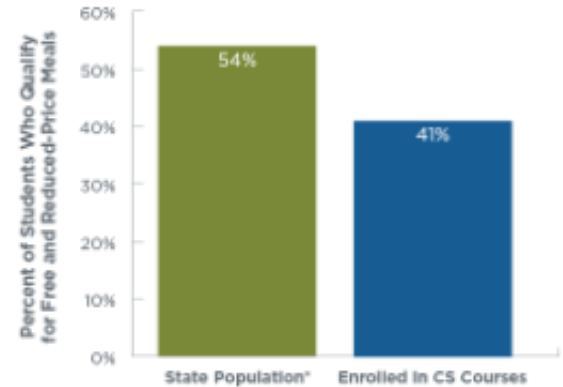
Students with Disabilities and Participation in Computer Science



English Language Learners and Participation in Computer Science

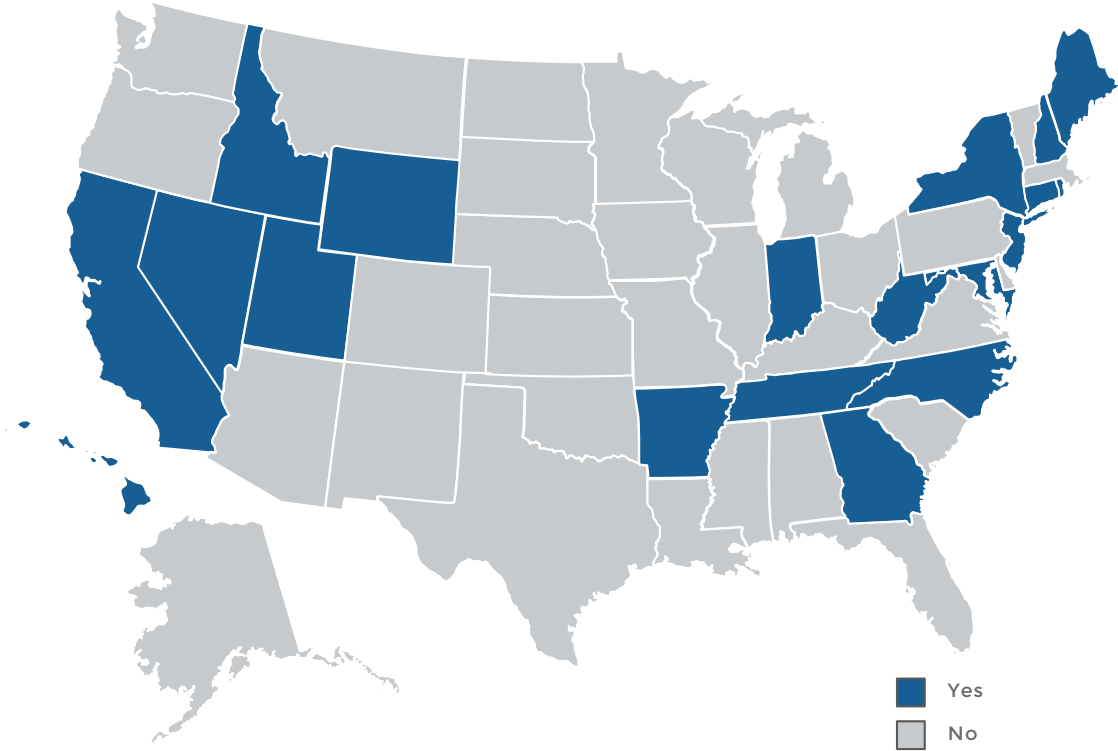


Economically Disadvantaged Students and Participation in Computer Science



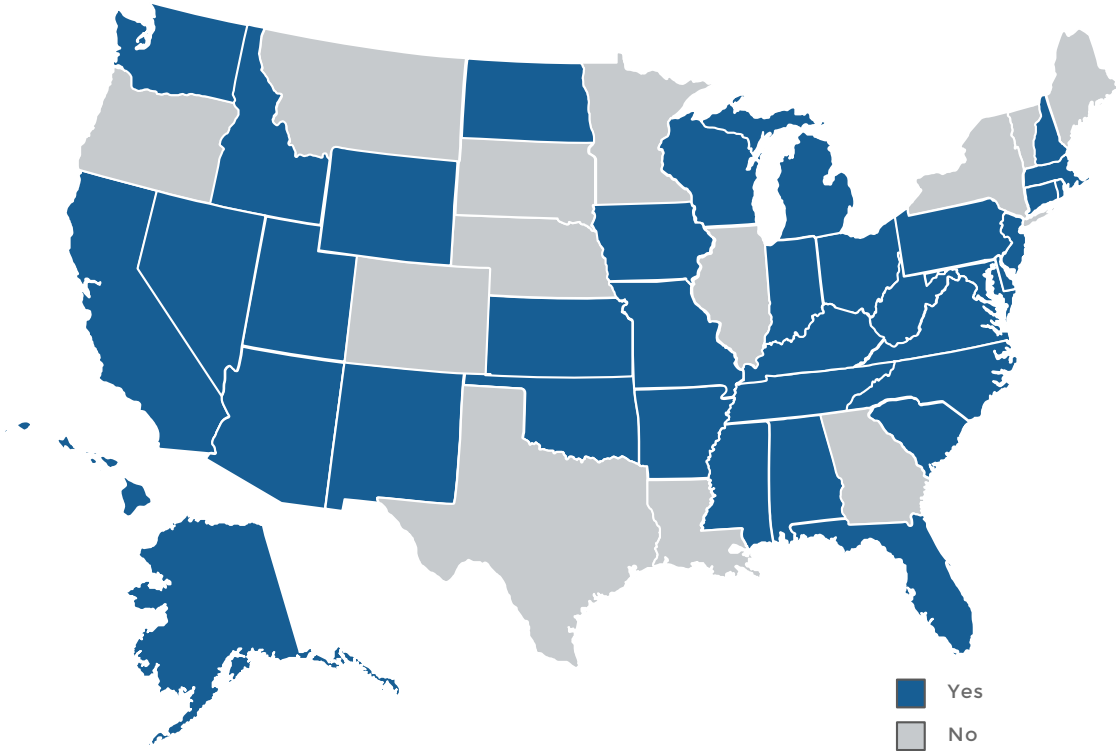
State Plan for K–12 CS

18
states



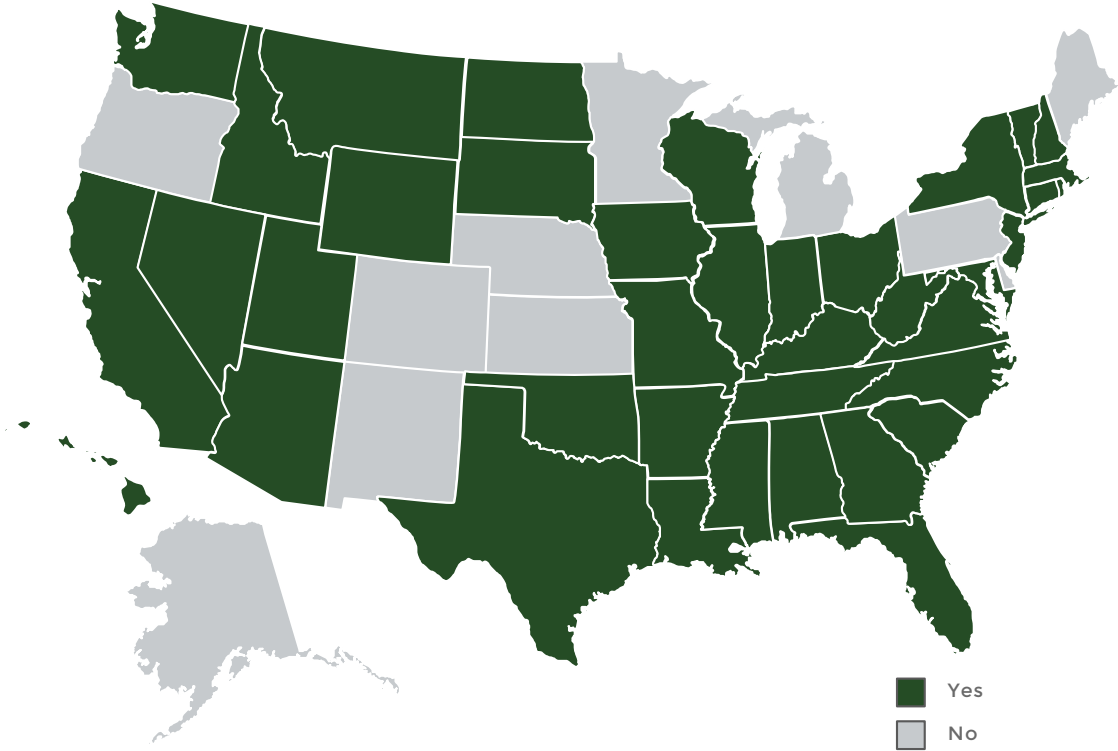
K-12 CS Standards

37
states



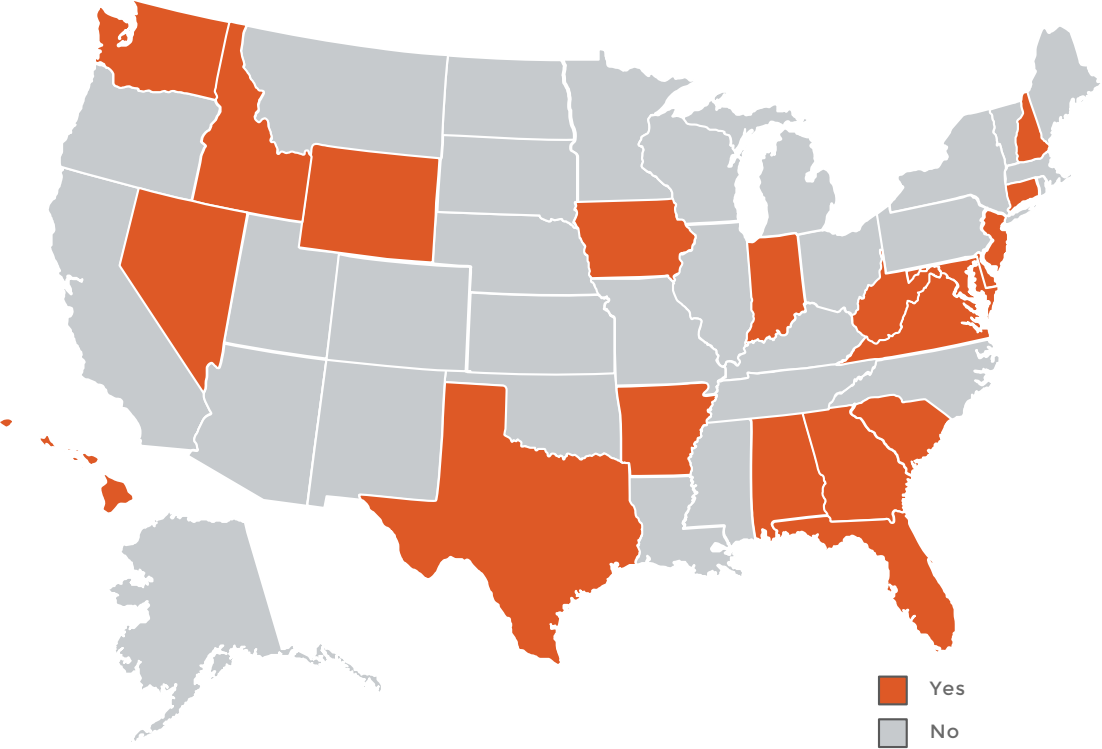
CS Teacher Certification

40
states + DC



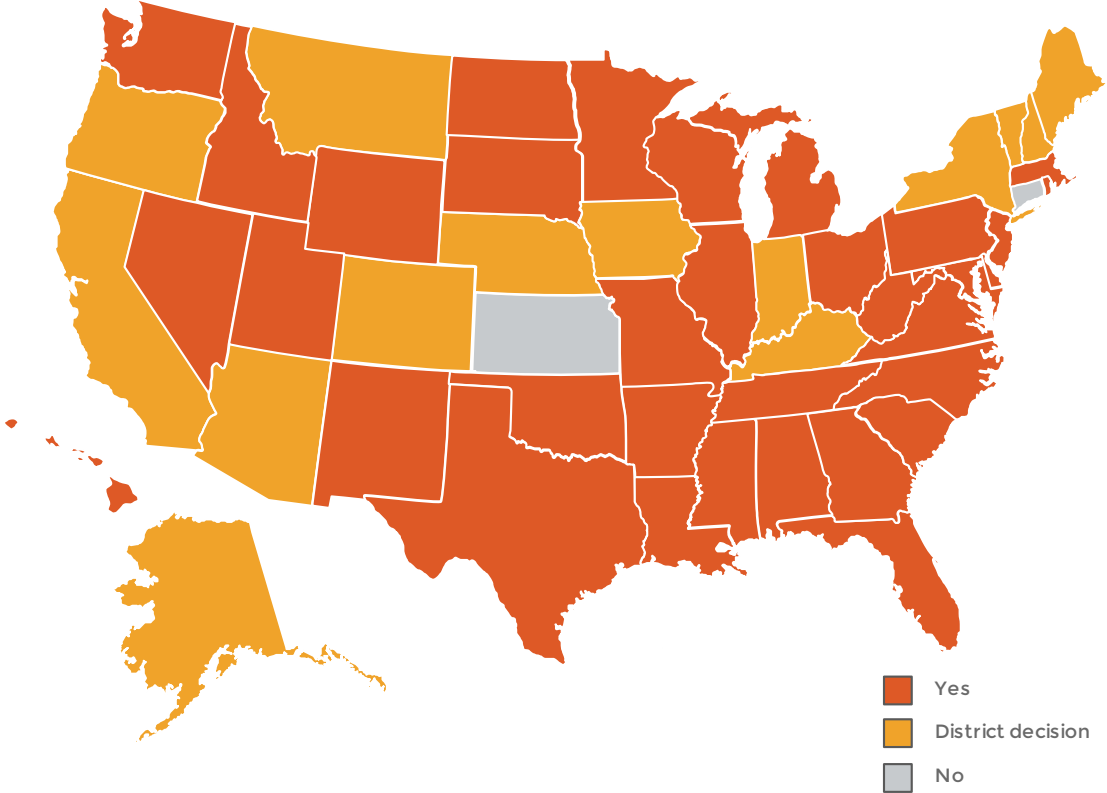
All High Schools Offer CS

20
states



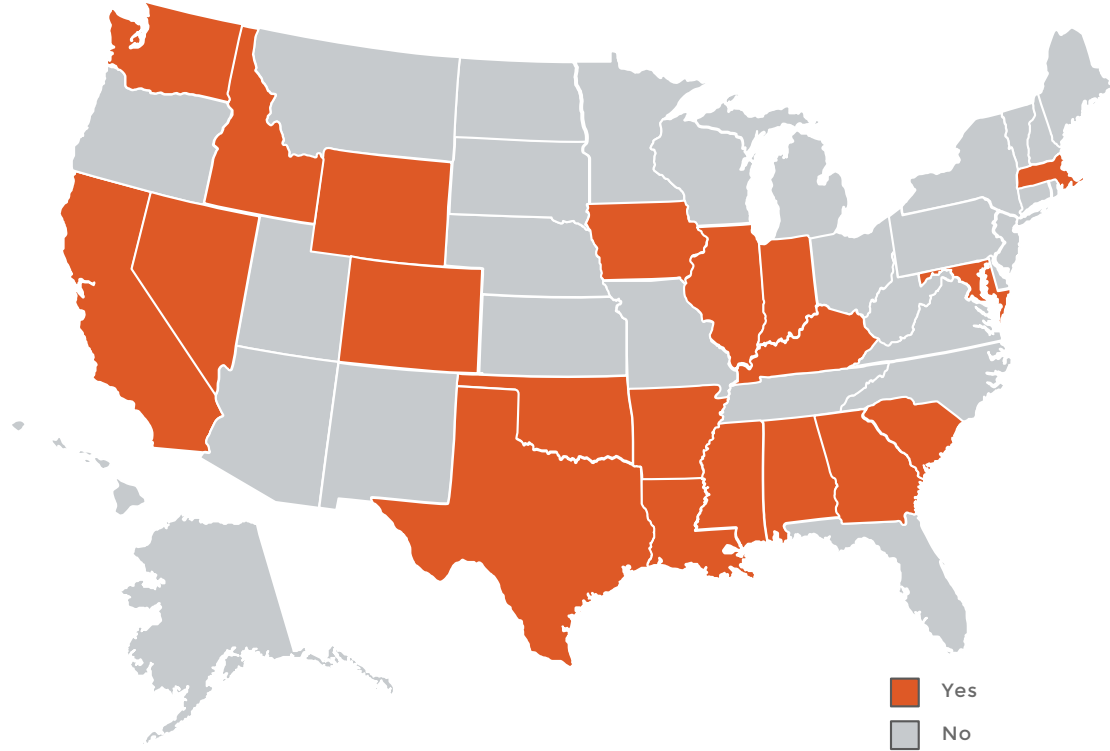
Core Graduation Credit

48
states + DC



Higher Education Admission

20
states



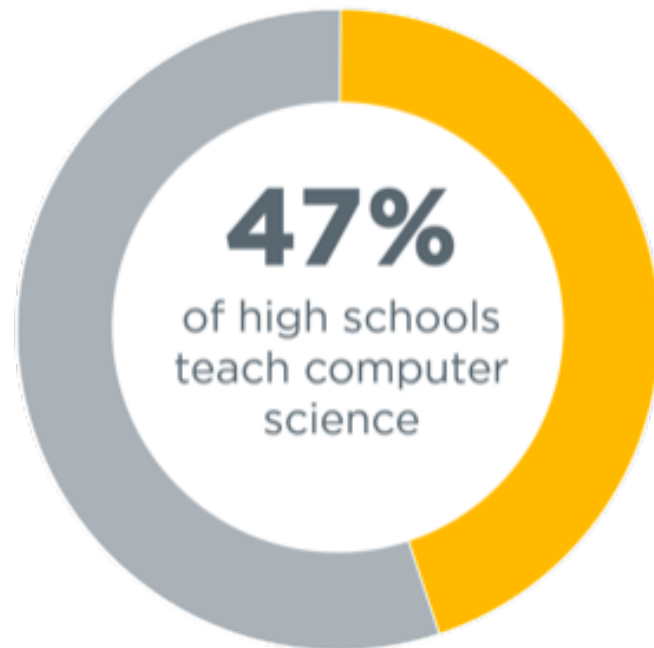
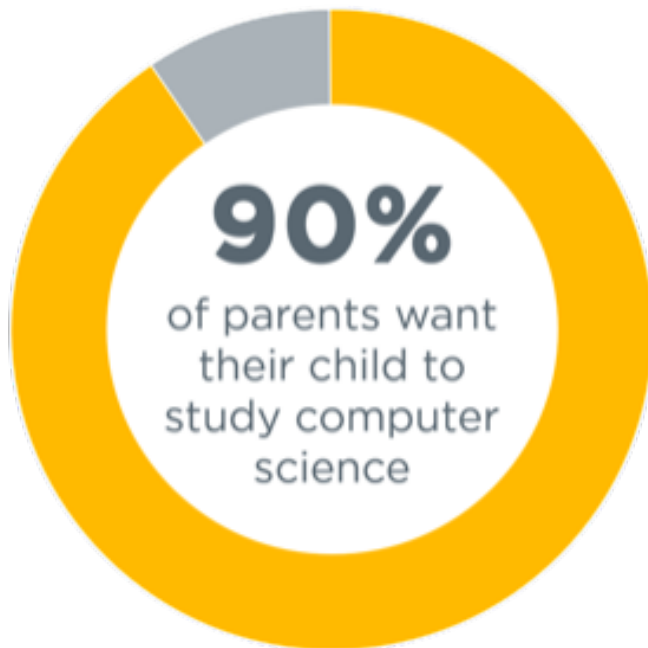
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Computers and software are changing everything...

...but the majority of schools don't teach computer science





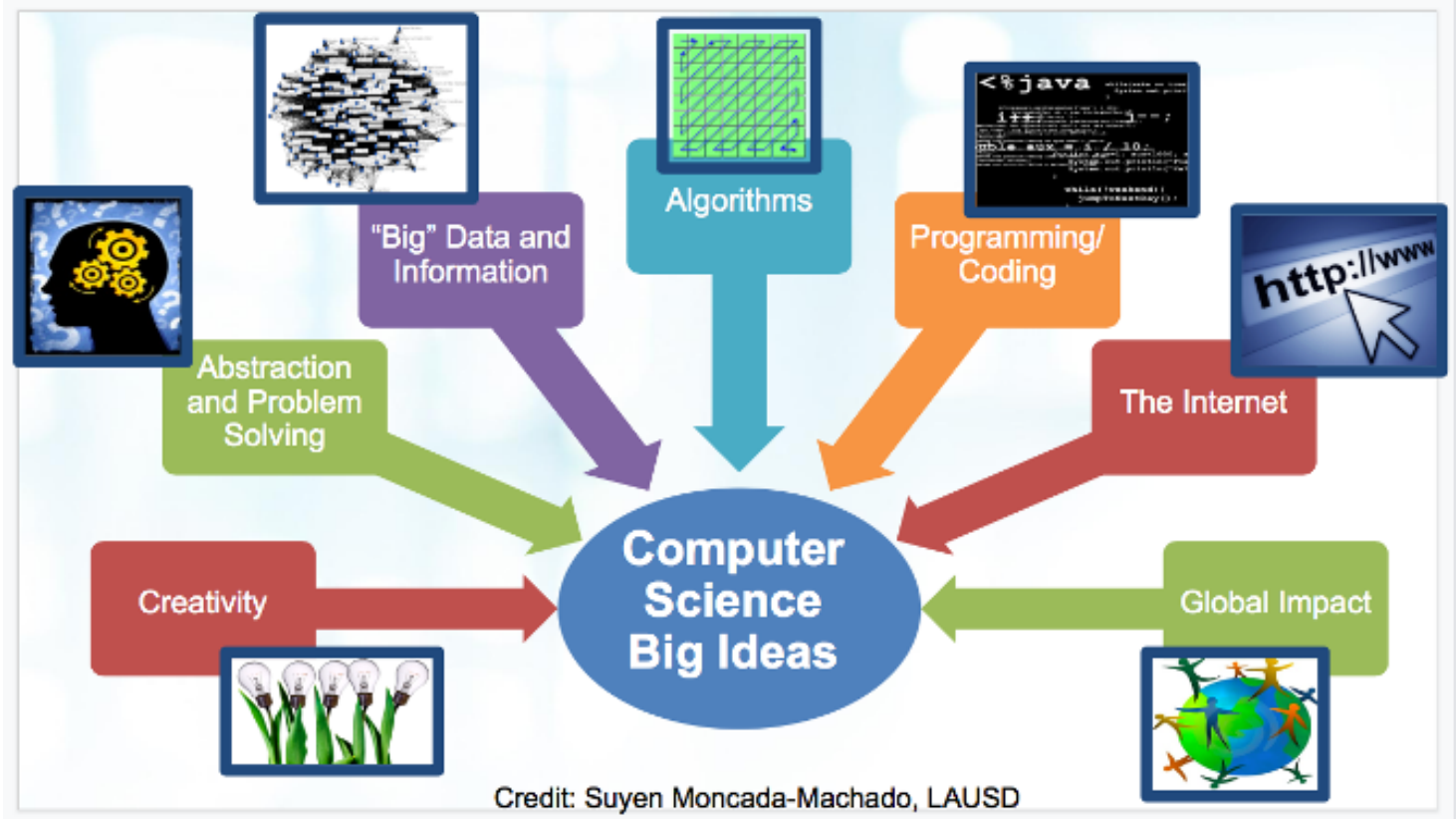
**In times of change, learners inherit
the earth; while the learned find
themselves beautifully equipped to
deal with a world that no longer**

-Eric Hoffer



What Counts as a CS class (and what doesn't)?

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What doesn't counts as CS ?



- Keyboarding
- Learn productivity applications and tools like Microsoft Word, Google Docs, etc.
- Being able to play games, text, do social media, navigate apps
- Computer Literacy
- Educational Technology
- BIM



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How to Grow Your CS Program



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CAPE

Experience
of CS Education

Student outcomes

How does the quality of instruction differ across subgroups of students? How does this affect learning?

Participation

Student enrollment

Which subgroups are underrepresented in CS courses? To what extent?

Access

Course Offerings

Are CS courses offered in low-income schools at similar rates to other schools?

Capacity
for CS Education

Teachers, funding, policies

Do districts in all geographic areas have access to CS-certified teachers?

Fletcher, C.L. & Warner, J.R. (2021, February). CAPE: A Framework for Assessing Equity throughout the Computer Science Education Ecosystem. *Communications of the ACM*, 64(2), 23-25. doi:10.1145/3442373

<https://cacm.acm.org/magazines/2021/2/250074-cape/fulltext>




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WeTeach_CS Measurable Outcomes

- 1 Increase the number of certified Computer Science teachers in Texas 



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WeTeach_CS Measurable Outcomes

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1 Increase the number of certified Computer Science teachers in Texas



2

Increase the number of high schools that offer CS



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WeTeach_CS Measurable Outcomes

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1 Increase the number of certified Computer Science teachers in Texas



2

Increase the number of high schools that offer CS



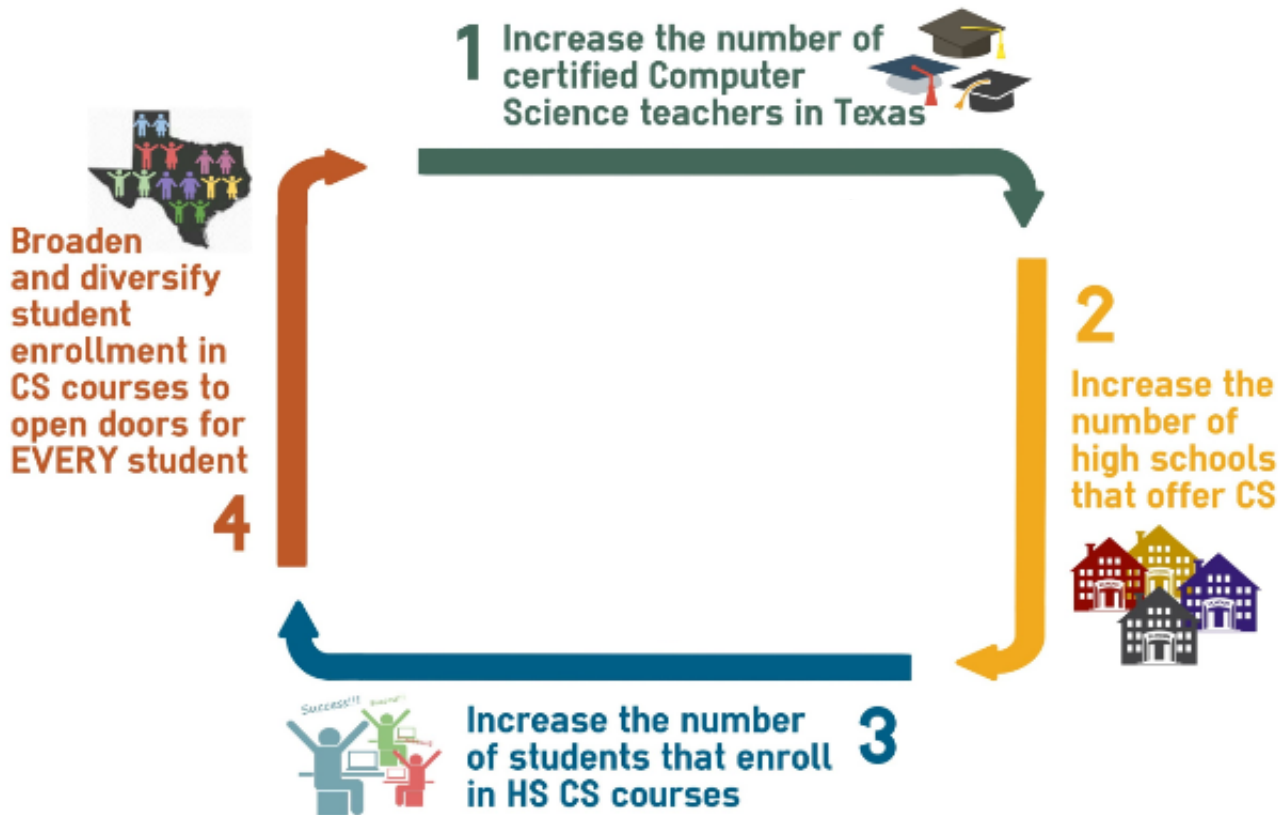
Increase the number of students that enroll in HS CS courses **3**



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WeTeach_CS Measurable Outcomes

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WeTeach_CS Measurable Outcomes

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Broaden and diversify student enrollment in CS courses to open doors for EVERY student

4

1 Increase the number of certified Computer Science teachers in Texas



5

Expand coding, programming, computational thinking and CS opportunities for students in K-8 to build a pipeline for the CS pathway in the STEM endorsement.



2

Increase the number of high schools that offer CS



Increase the number of students that enroll in HS CS courses

3



How can your district grow a CS program?

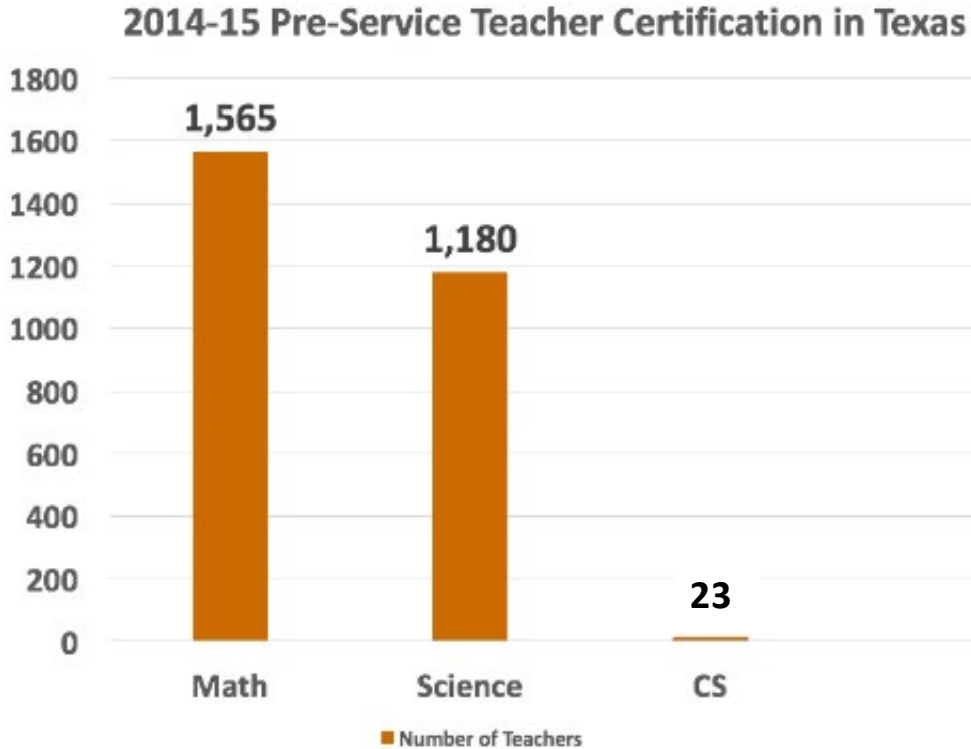


1. *Build teacher capacity*
2. *Identify aligned curriculum*
3. *Find partners to help*
4. *Connect to your state's CS Community*



Looking Back...

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February 2021



Where Are the CS Teachers?

Only **23** individuals completed a pre-service teacher education program to become certified in Grades 8-12 Computer Science.



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No CS Teachers - No CS Students

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Less than **3%** of Texas high school students in 2014-15 completed a CS course.

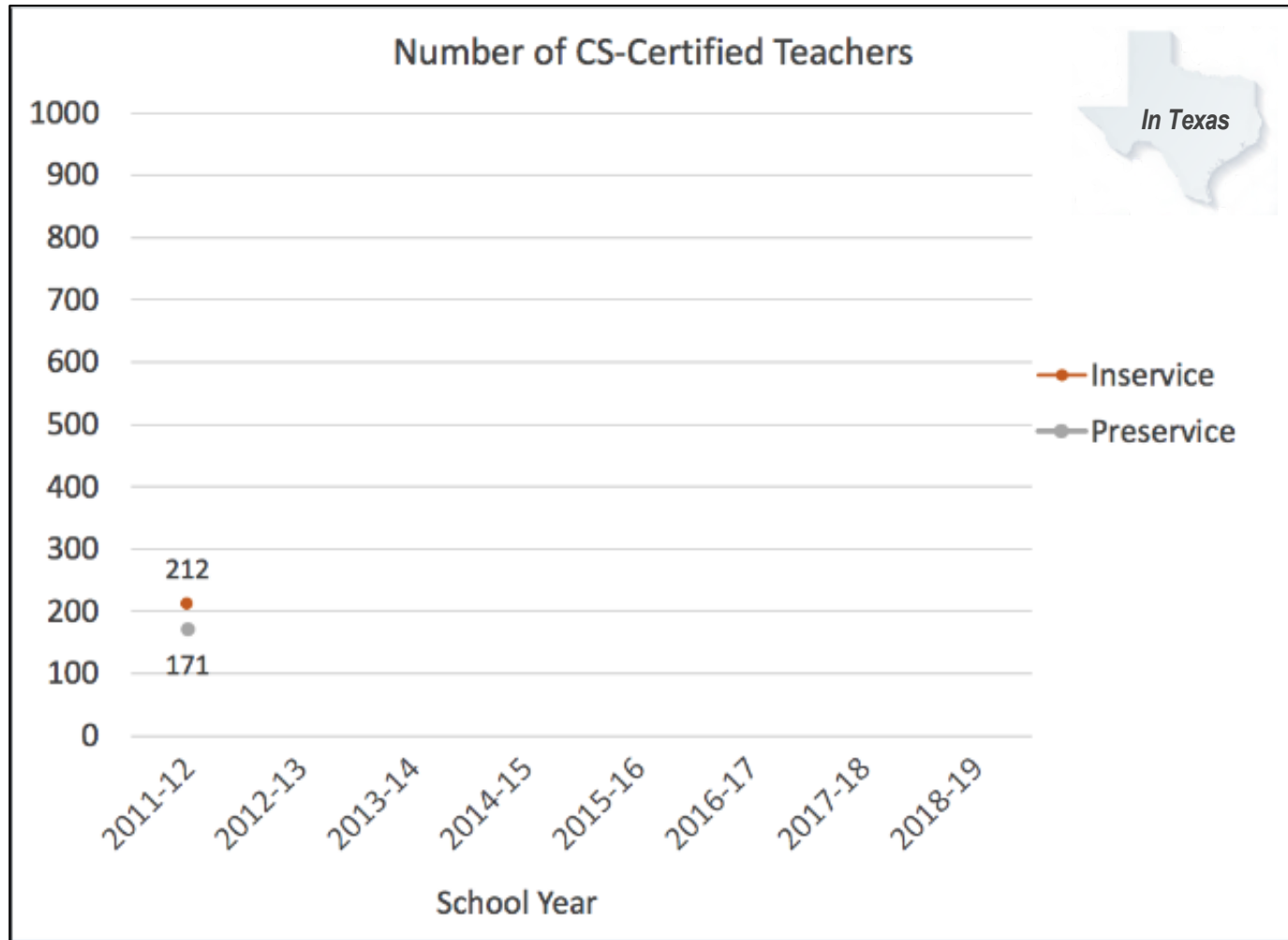
2011

2012

Counselor and
Administrator
Webinar
2020-21



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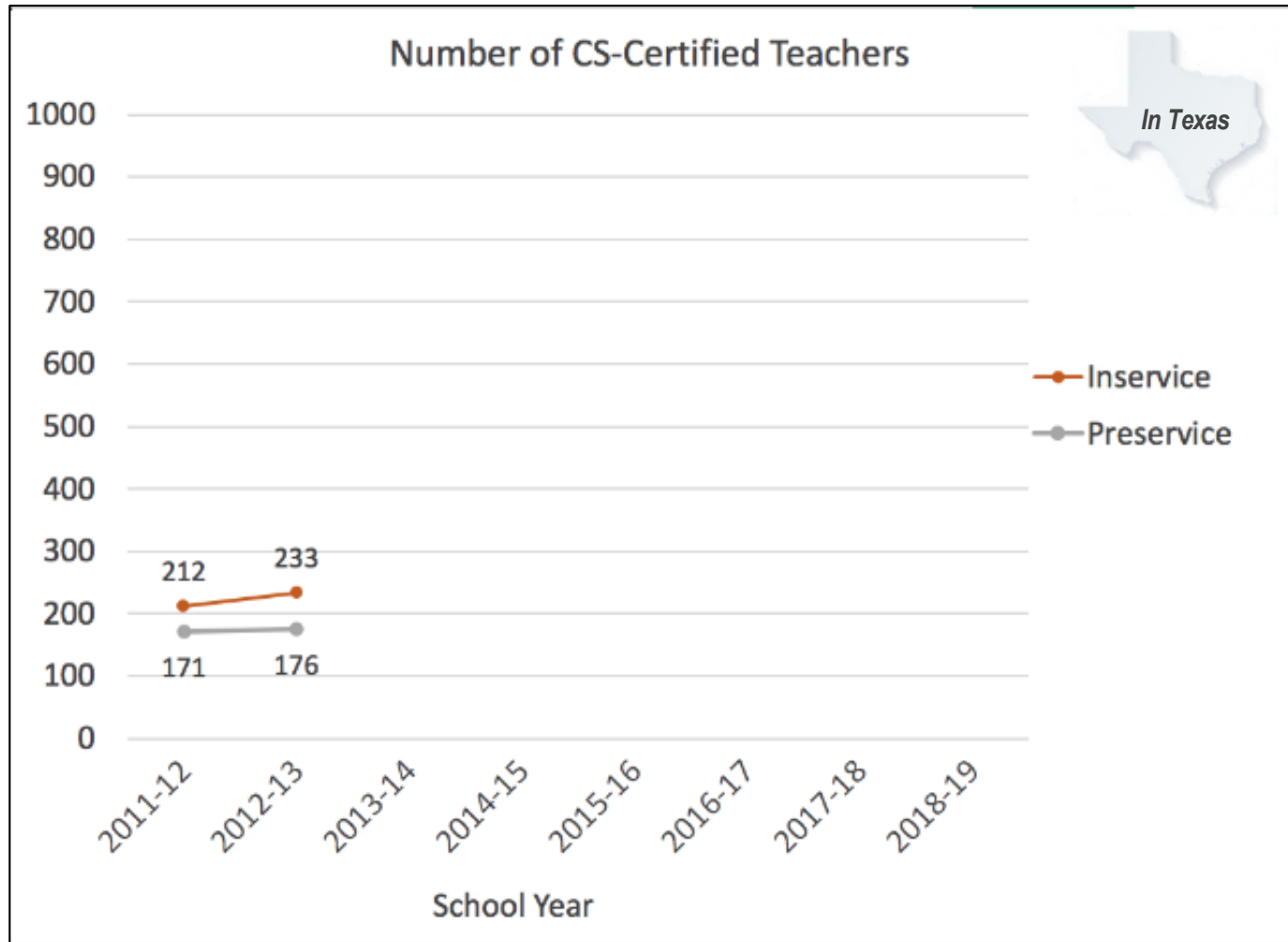
2012

2013

Counselor and Administrator Webinar 2020-21



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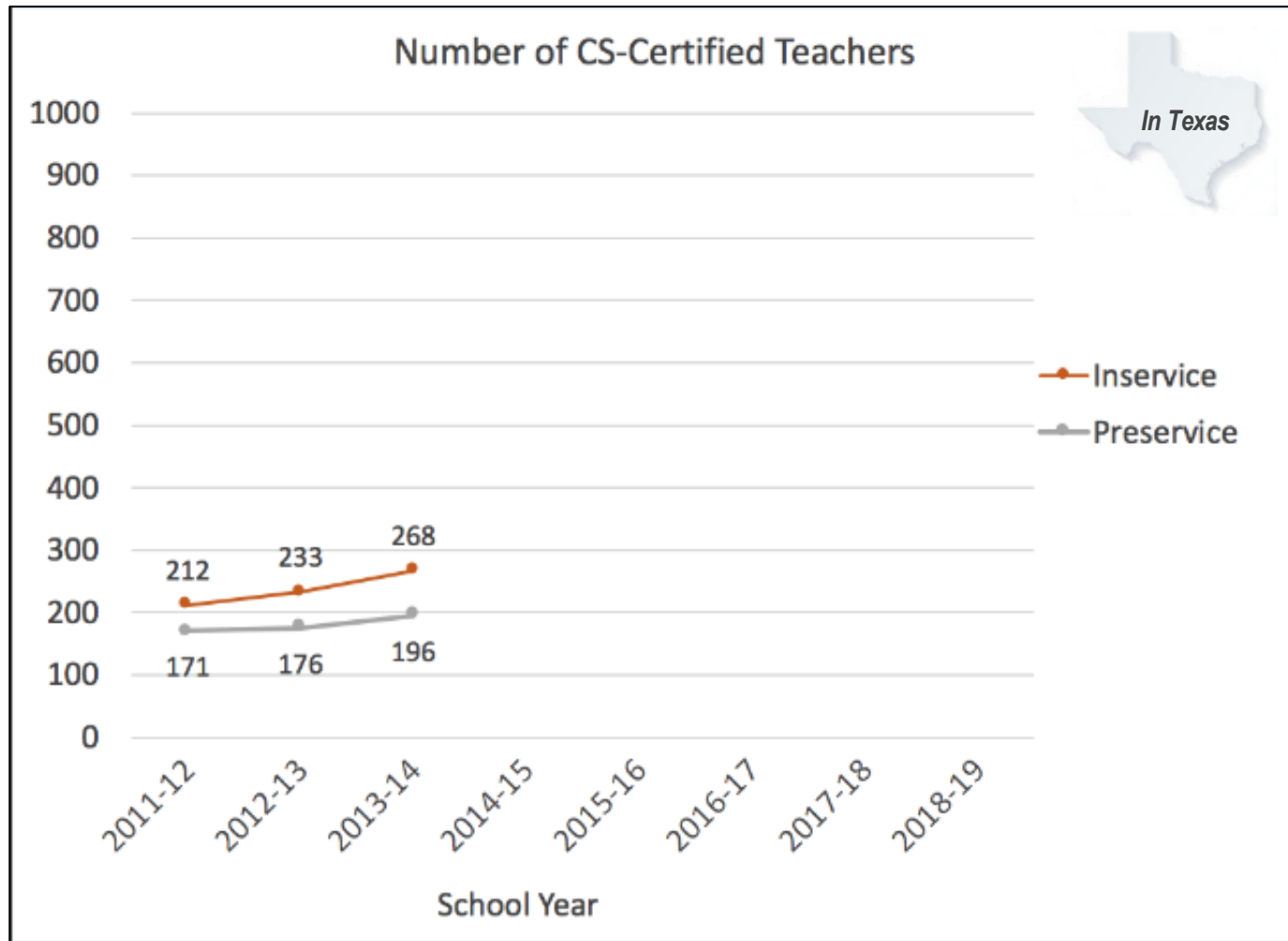
2013

2014

Counselor and
Administrator
Webinar
2020-21



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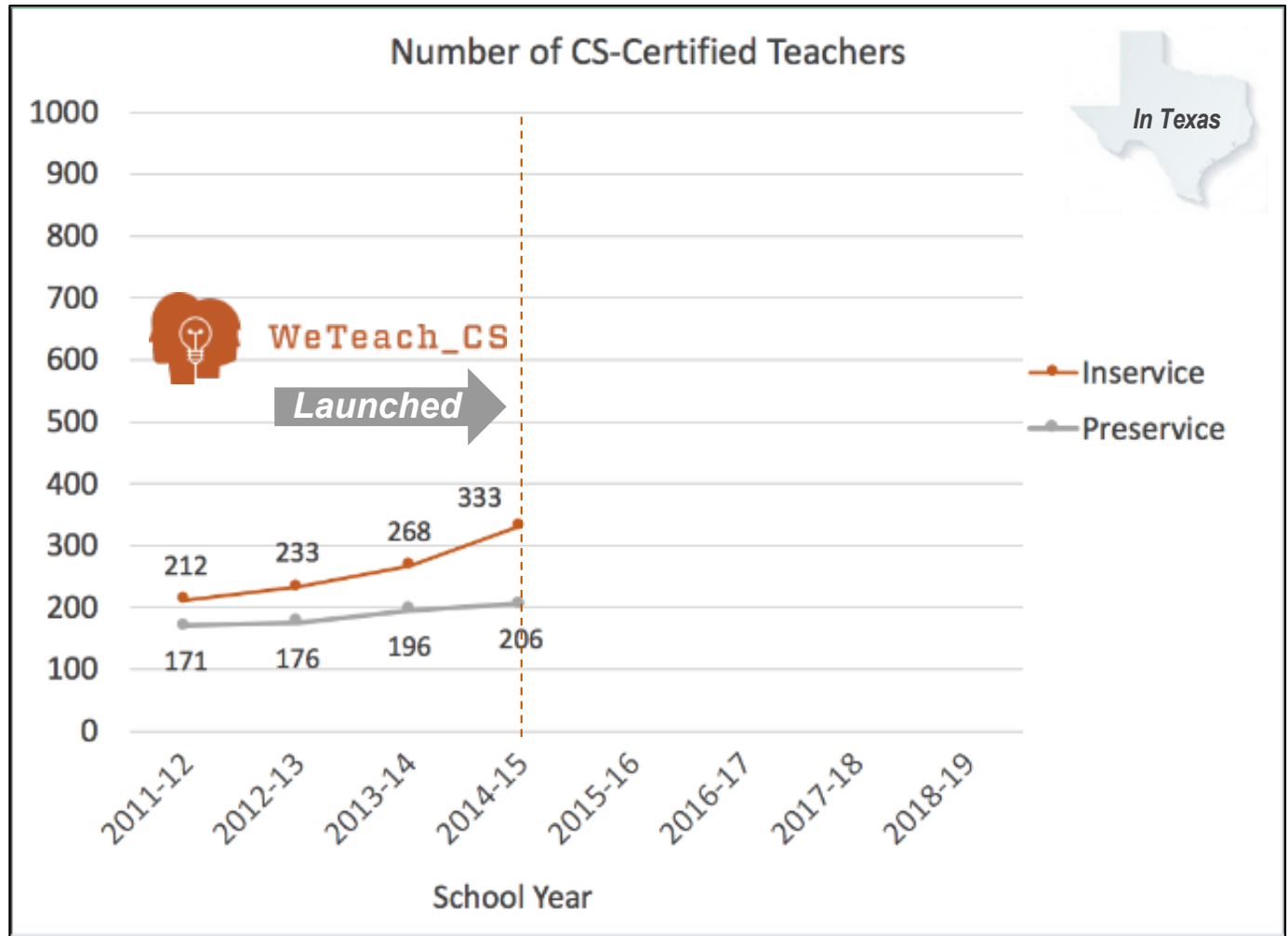
2014

2015

Counselor and Administrator Webinar 2020-21



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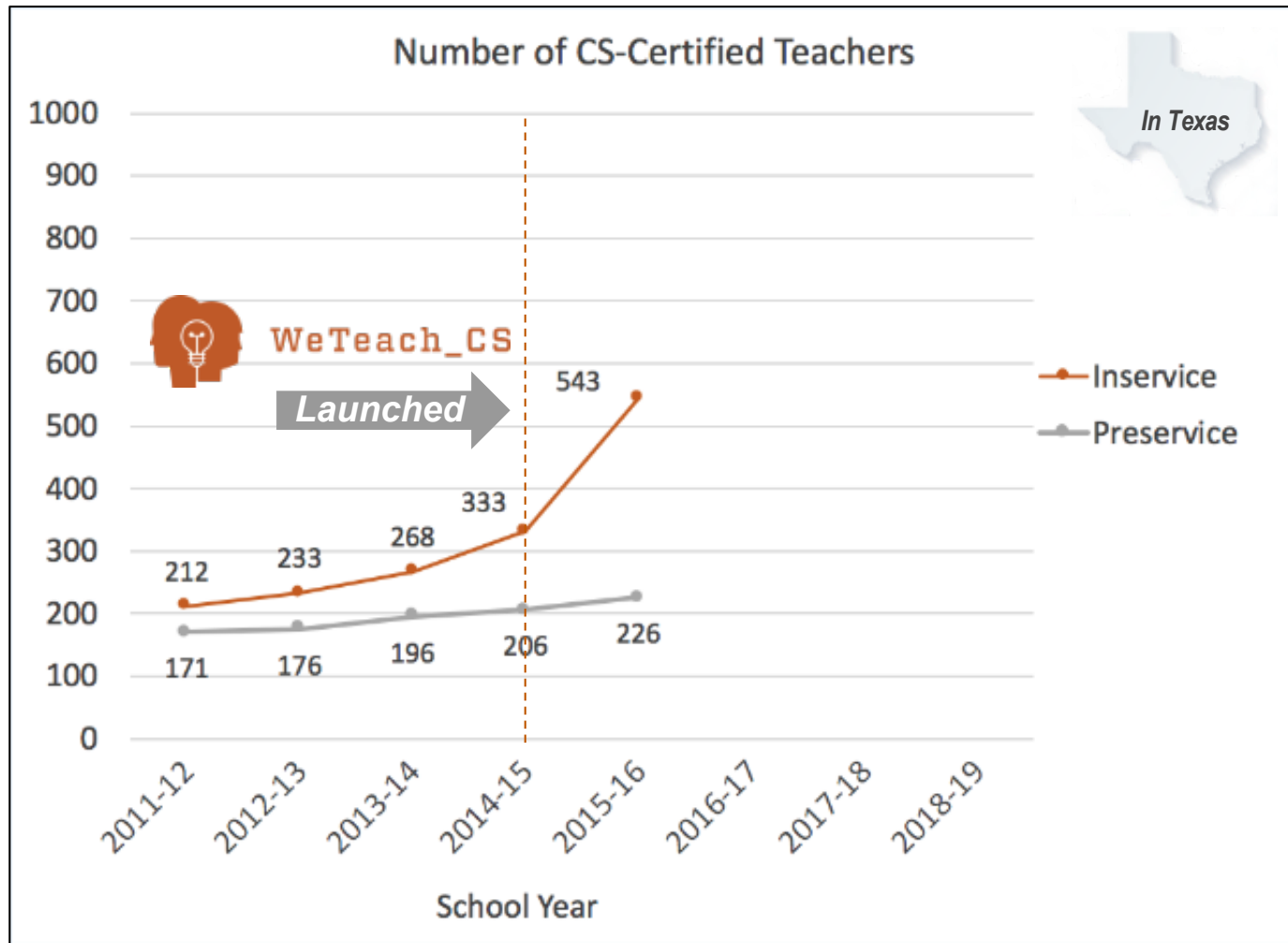
2015

2016

Counselor and
Administrator
Webinar
2020-21



WeTeach_CS



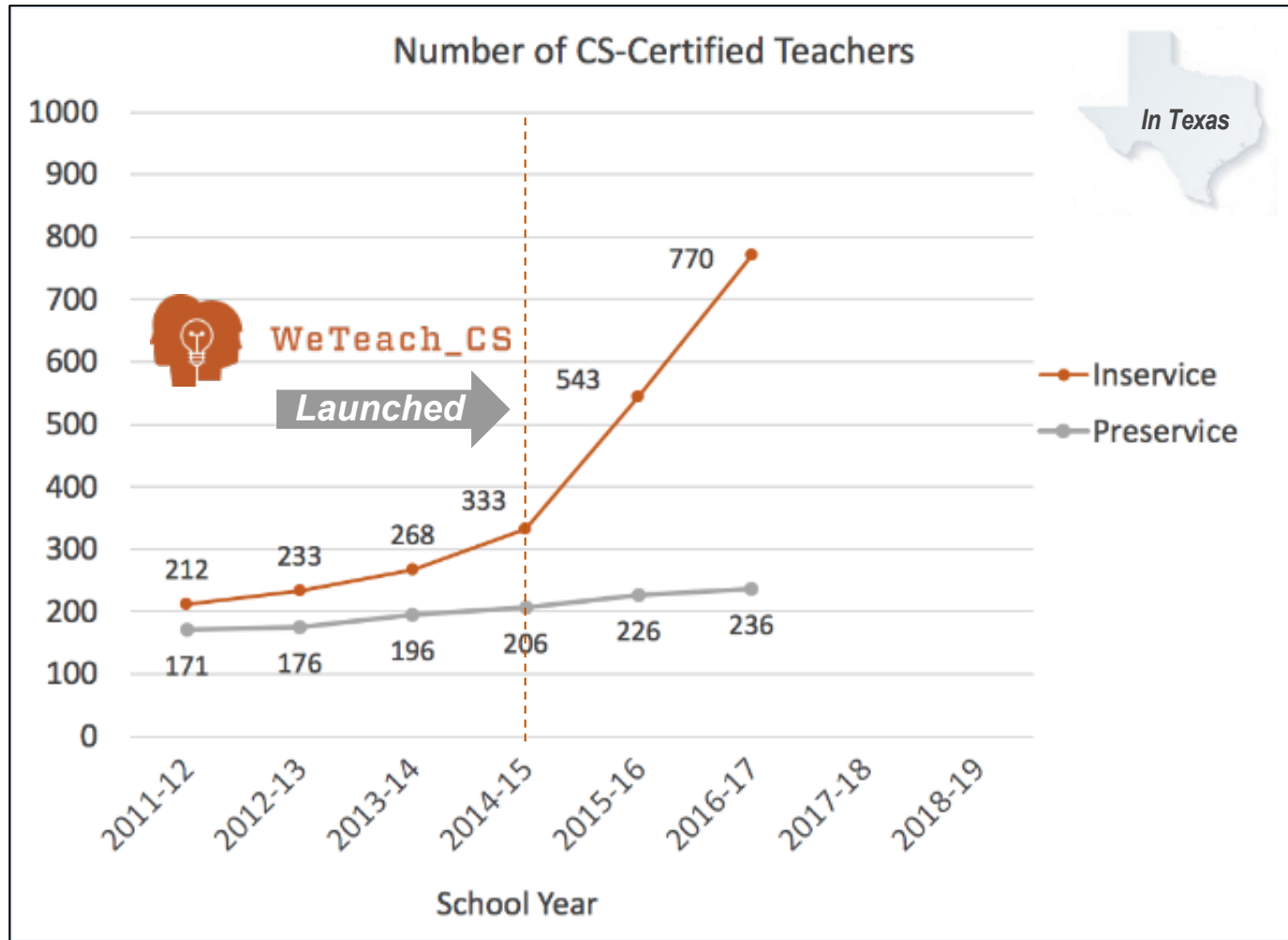
2016

2017

Counselor and
Administrator
Webinar
2020-21



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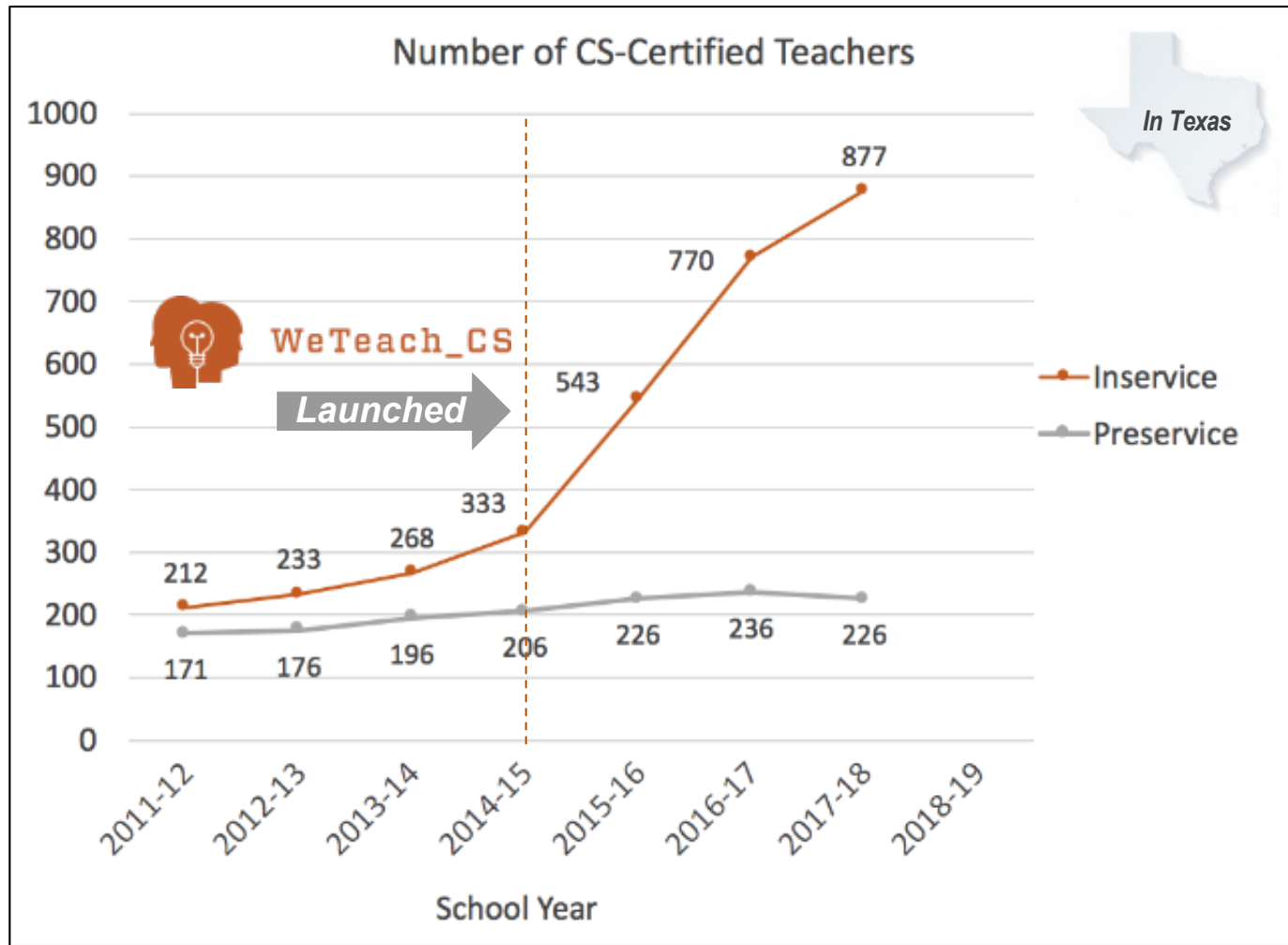
2017

2018

Counselor and
Administrator
Webinar
2020-21



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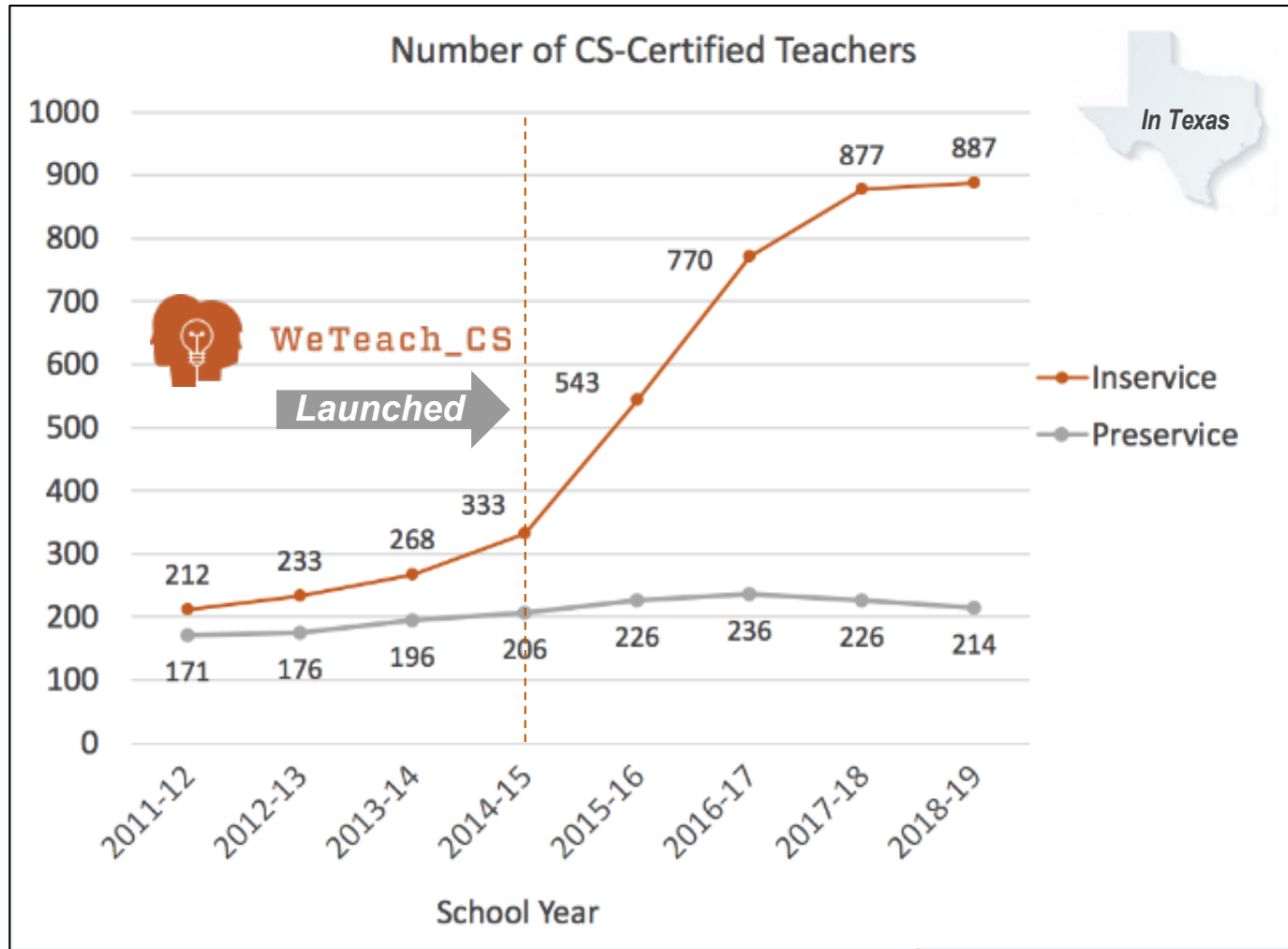
2018

2019

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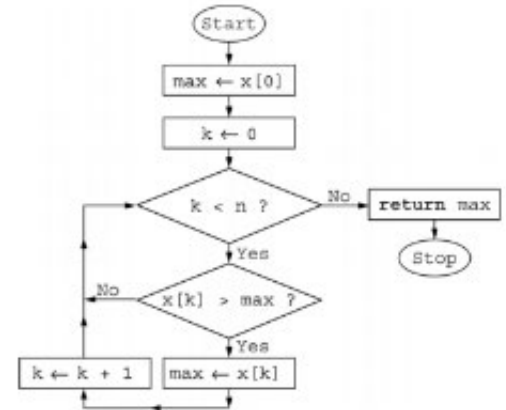
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Number of CS Certified Teachers In Texas who received the Certification Incentive Program (CIP) \$1,000 Stipend



**TEExES Computer Science
8-12 (241) Certification**



WeTeach_CS



Proven Strategies for Building Teacher Capacity

- Start with inservice teachers who are committed to the profession.
- Align PD to the specific content they need to master to pass the certification exam (TExES, Praxis, Pearson).
- Provide in-person prep sessions and study materials (WeTeach_CS Cert Prep)
- Develop self-paced online course that models effective pedagogy.
- Support teachers in cohorts who learn together.
- Provide incentives for teachers to add these skills.
- Scaffold PD to meet teacher needs.
- Connect teachers to the larger CSEd Community.





Foundations of CS for Teachers

- Self-paced, online course covering all competencies measured on TExES 241, Praxis 5652, and Pearson exams
- Additional live webinars & certification prep
- Access to over 700 practice questions addressing every subject area covered on the exam
- A comprehensive final, which mimics the actual 100 question CS 8-12 certification exam.
- Perpetual access to all instructional materials and videos in the course, even after course completion and authorization to use them for instruction in your own CS classroom.
- Over **500 Successful Teachers!**



**Open
Enrollment**



**7.0 Weeks
Self-Paced**



**6 Hours
per Week**



**40
CPE Hours**

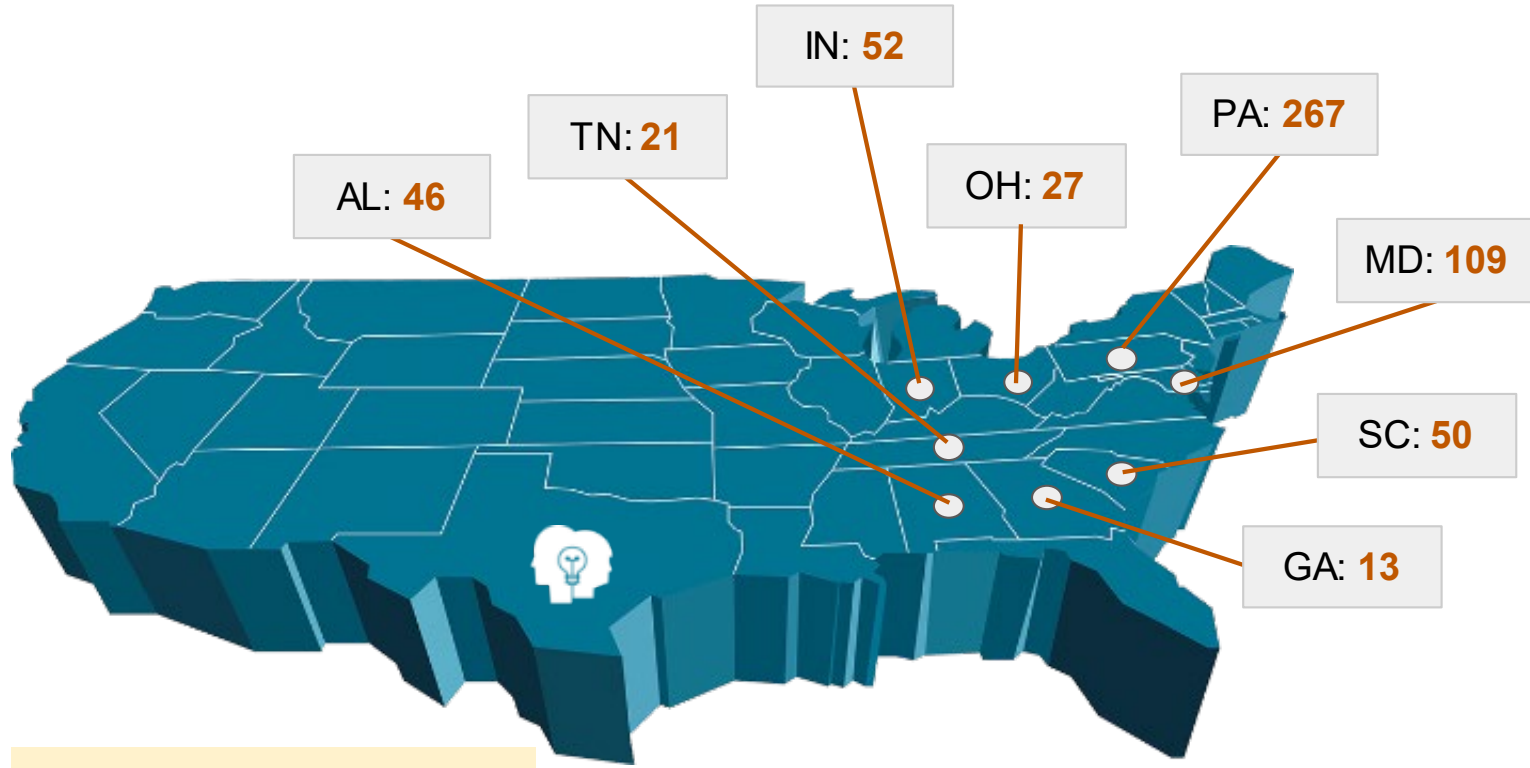
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WeTeach_CS

WeTeach_CS National Expansion since 2018

TI Talks
February 2021



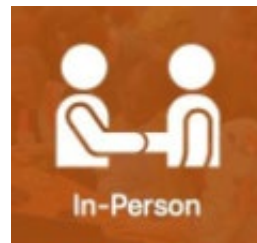
274 people outside of TX have taken the course as individuals.



WeTeach_CS

Virtual / In-Person Courses

- Introduction to Programming
- CS Jumpstart w/ TI
- Code.org CS Fundamentals



-
- WeTeach_AP®CSA
 - WeTeach_CS Certification Prep
 - How WeTeach_CS for HS
 - WeTeach_Java
 - WeTeach_Python

-
- WeTeach_Cybersecurity
 - Cybersecurity Fundamentals
 - Cybersecurity Webinars



WeTeach_CS

Summit 2021

June 30-July 2, 2021

WeTeachCS.org



WeTeach_CS

CS Jumpstart



June 21-23, 2021



- Introduction to Programming (Block-Based to Text)
- Python Programming With **TI-Nspire™ CX II**, Innovator, And Rover

(Easily integrates into Math & Science Classes)



WeTeach_CS



WeTeach_Java

Date TBA

Introductory programming class that provides teachers with **foundational knowledge** in Java programming.

- Simple output techniques to data types, operators, conditionals and loops.
- More complex data structures such as arrays and ArrayLists





WeTeach_Python

June 14-17, 2021

This class explores **advanced** concepts and strategies of programming in Python.

- Linux basics using raspberry pi's
- Data science / computational science with Jupyter Notebooks
- Introduction to High Performance Computing using mpi4py as Dask

Prior programming experience in Python is required for this course.



python™

How WeTeach_CS for High School

June 10-11, 2021



This course will get you ready to teach CS1.

- Lesson plans
- Student lessons
- Videos
- Study guides
- Practice activities
- Projects
- Labs / lab solutions
- Assessments



WeTeach_CS

How WeTeach_AP®CSA

June 21-24, 2021

This course is designed to teach the WeTeach_AP®CSA online curriculum and prepare students for the AP Computer Science A test.

- Language used: Java
- Online lessons and videos
- Labs using Repl.it



WeTeach_CS

It is highly recommended teachers have prior knowledge in computer science as well as **Java programming and** passed a certification instrument for computer science (Ex: TExES, Praxis, Pearson).



WeTeach_Java Espresso

Date TBA

This course explores **advanced** programming concepts in Java and computer science theory, including:

- Object Oriented Programming
- Searching
- Sorting
- Data Structures
- Binary Trees
- Recursion
- Boolean Algebra



WeTeach_Cybersecurity Webinars Spring 2021

TI Talks
February 2021

Spring 2021 Webinars

January 12, 2021
Wireless Lans



February 9, 2021
Cloud Security



March 9, 2021
Subnetting



April 13, 2021
Digital Forensics



**All Webinars:
6 - 7 pm CT**

Cybersecurity 101

Registration:
<https://utakeit.tacc.utexas.edu/cybersecurity-webinars-2020/>



WeTeach_Cyber



WeTeach_CS

Cybersecurity Fundamentals

July 20-21, 2021

WeTeach_CS has partnered with Cyber.org to offer a workshop based on the [Cyber.org curricula](#)

Participants will gain access to free Cybersecurity curricula by Cyber.org that is rigorous, relevant, and **aligned to the TEKS** for the new Introduction to Cybersecurity course. Additionally, participants will be led through a number of lessons in the curricula so they can make immediate and effective use of it upon return to their classrooms. During the workshop, teachers will be given temporary access and training on the **EPIC Cyber Range** so they may practice the hands-on components in a supportive setting.

This workshop is appropriate for high school educators that will be teaching Foundations of Cybersecurity and/or those interested in learning more about cybersecurity standards and the course.



WeTeach_Cyber

Registration:

<https://utakeit.tacc.utexas.edu/cybersecurity-fundamentals2021/>



WeTeach_CS

WeTeach_Cybersecurity

July 22-23, 2021

This course is a continuation of Cybersecurity Fundamentals discussing more advanced material. WeTeach_CS has partnered with Cyber.org to offer a workshop based on the [Cyber.org curricula](#). During the workshop, teachers will be given temporary access and training on the **EPIC Cyber Range** so they may practice the hands-on components in a supportive setting.

This workshop is appropriate for high school educators that will be teaching Foundations of Cybersecurity and/or those interested in learning more about cybersecurity standards and the course.



WeTeach_Cyber

Registration:

https://utakeit.tacc.u-texas.edu/WeTeach_cybersecurity2021/



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Women in Cybersecurity (WiCyS)

WiCyS is an international organization dedicated to bringing together women in cybersecurity from academia, research, and industry, to share knowledge, experience, networking, and mentoring.

Contact: info@wicys.org

Website: <https://www.wicys.org/initiatives/student-chapters/>

STUDENT CHAPTERS
Growing with Peers

Form a WiCyS Student Chapter and gain access to industry and academic leaders who are eager to help you succeed. Did we mention prioritized opportunities for WiCyS student chapter leaders to WiCyS initiatives?

[START A WICYS STUDENT CHAPTER](#) →



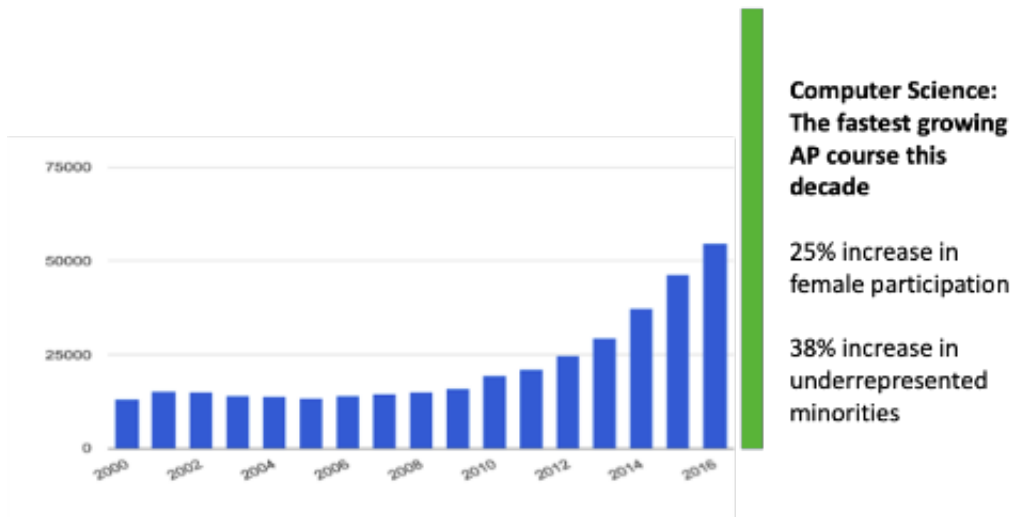
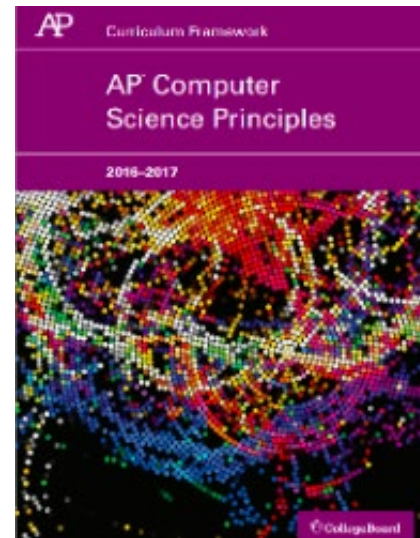
Benefits:

- Scholarships
- Internships
- Job Resources
- Mentors
- Leadership Skills
- Technical Skills
- Presentation Opportunities
- WiCyS Conference



AP CS Principles course

- Designed specifically to broaden participation in CS
- Numerous free curricula available
- No specific programming language required
- Project Based
- Encourages collaboration and creativity





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WeTeach CS For HS



- 100% Aligned to TEKS for CS I
- Completely online
- Optional student accounts
- Everything a teacher needs to teach a full year course including 180 days worth of lessons, labs, assessments, videos, & online IDE integration
- Scratch → Jeroo → Java



Purchase a 2020-21 teacher subscription and get the 2021-22 full year subscription for FREE!



- 100% College Board aligned
- Completely online
- Optional student accounts
- Everything a teacher needs to teach a full year course including 180 days worth of lessons, labs, assessments, videos
- Integrated w/ online IDE

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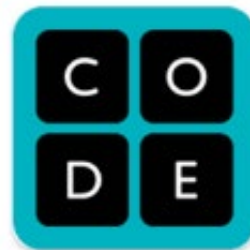
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Slide 71

K12 COMPUTER SCIENCE FRAMEWORK



Association for
Computing Machinery



CYBER.ORG



NATIONAL
MATH + SCIENCE
INITIATIVE

<https://k12cs.org>

EPIC STEM Evaluation Services

Strategic Planning Services to Expand CS K-12 Pathways:

- Identify where you are, where you want to go, and how to get there
- Assess strengths, resources and opportunities for building capacity and pathways
- Facilitate **CSforAll SCRIPT** workshops to collaboratively envision, plan, implement and assess inclusive CS K-12 pathways



csforall.org



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TEALS Program

Microsoft | TEALS Program

TI Talks
February 2021

Application (Oct-Feb)



Select curriculum & recruit teacher

Submit Application to TEALS

- Requires
 - Classroom Teacher
 - District Contact
 - School Administration Contact

Onboarding (Jan-May)



TEALS Interview

Schedule CS class during 1st period of day

Recruit & enroll students

Recruit volunteers through school community & network



Brooklyn College Academy, Brooklyn NY

Learn More: Microsoft.com/TEALS
Apply online: aka.ms/TEALS-School-Application



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Proven Strategies for Diverse Student Recruitment

- DO: Recruit in clusters - clubs, sports, besties
- DO: Extend a personal invitation - particularly effective for girls
- DO: Focus on student interests, not inputs
 - DON'T ask "What do you want to be when you grow up?" Ask "What problems do you want to solve?"
 - DON'T predicate success in CS with success in math
- DO: Use current students to help you recruit
- DO: Engage parents
- DO: Create policies for equity and diversity



Math Pathways are Highly Predictive of Subsequent CS Course Taking

EPIC team research indicates the **strongest predictor** of enrollment in high school CS was completion of **Algebra I in Grade 8.**

Factor	Change in Odds
Algebra I before HS	102%  compared to Alg I after Grade 8
Female students	72%  compared to males
URM students	36%  compared to White or Asian students
Free/Reduced Meals	12%  compared to non-eligible students
G/T students	77%  compared to non-G/T

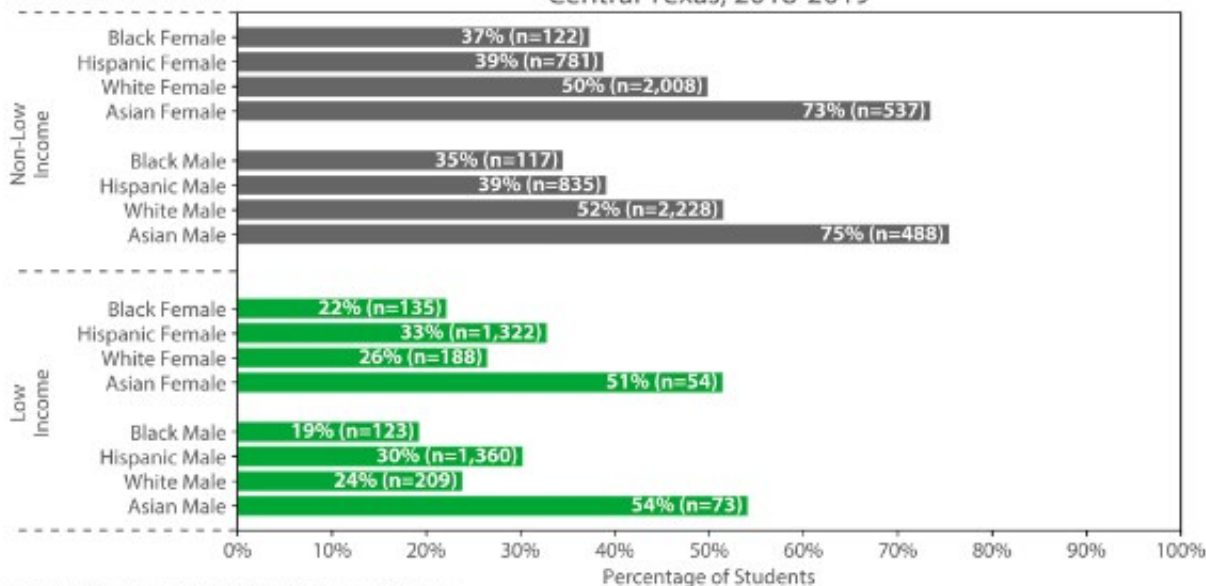


What are your district's policies around who gets into advanced math pathways?

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Algebra 1 Completion by 8th Grade Varies Greatly by Race, Income and Gender

Algebra 1 Completion by 8th Grade
Central Texas, 2018-2019



Source: E³ Alliance analysis of PEWS data at the UT Austin Education Research Center



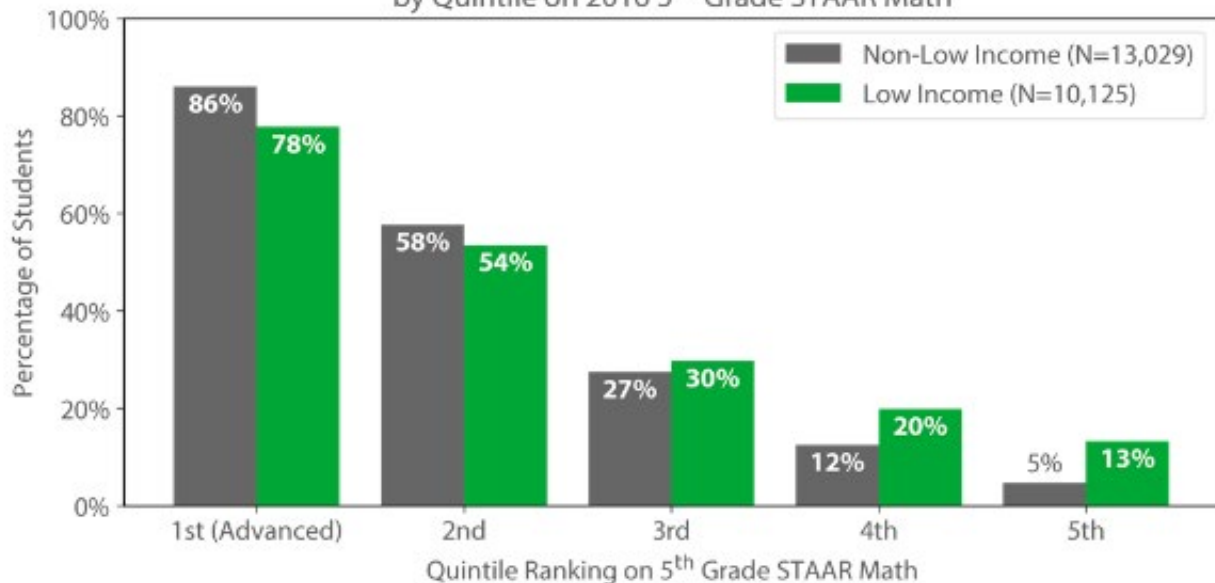
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Where are the highly capable (top 40% in Grade 5) low-income students?

78% of Highest Scoring Low Income 5th Graders Were in Algebra I by 8th Grade

Percentage of Central Texas Students Who Completed Algebra 1 by 8th Grade by Quintile on 2016 5th Grade STAAR Math



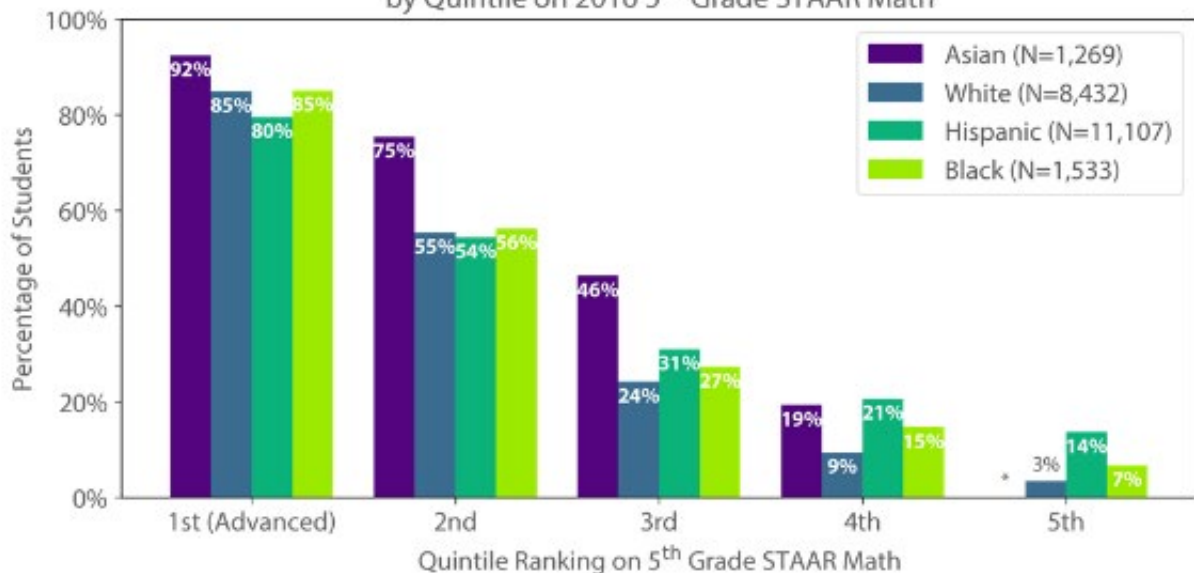
Source: E³ Alliance analysis of PBMS data at the UT Austin Education Research Center

Why aren't high achieving Black and Brown students enrolled in advanced math?

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4/5 of Highest Achieving Hispanic Students Were in Algebra I by 8th Grade

Percentage of Central Texas Students Who Completed Algebra 1 by 8th Grade
by Quintile on 2016 5th Grade STAAR Math



* Insufficient data
Source: E³ Alliance analysis of PHMS data at the UT Austin Education Research Center



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Slide 78



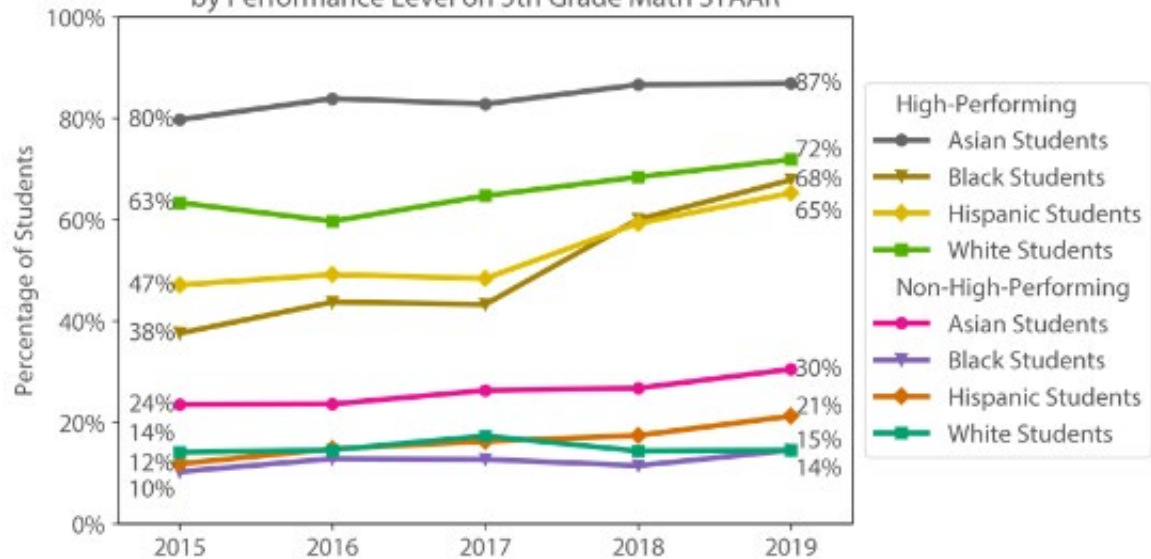
© 2020 E³ Alliance

Opt-out policies in MS for high achievers rather than Opt-in leads to notable improvements in diversity in early Algebra

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Increase in Alg 1 Completion Among High and Non-High-Performing Students of Color

Percentage of Central Texas Students Who Completed Algebra 1 by 8th Grade by Performance Level on 5th Grade Math STAAR



Source: E³ Alliance analysis of PEIMS data at the UT Austin Education Research Center

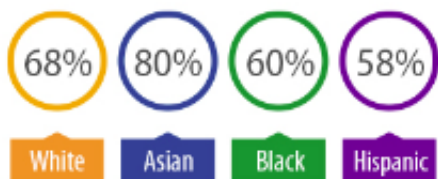


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Even the **HIGHEST PERFORMING** Black and Hispanic students are less likely to take Algebra 1 by 8th grade than White or Asian students



Copyright E3 Alliance 2019

MATH



Students with **one year of math beyond Algebra 2** were **TWICE** as likely to get a college degree or certificate

Race/ethnicity gaps in **8th grade Algebra 1** have remained unchanged over the past five years



White & Asian Students are **TWICE** as likely to take Algebra 1 in 8th grade than Black & Hispanic students



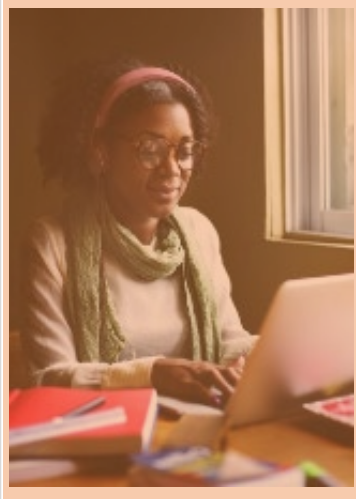
Half as many **low-income students** take Algebra 1 by 8th grade as their **non-low income** peers

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www.ncwit.org/c4c

The NCWIT Counselors for Computing (C4C) program provides information and resources that help counselors join the front line of the computing conversation.



We bring people and programs together with professional development, knowledge, and resources to give all students access to transformative computing careers.



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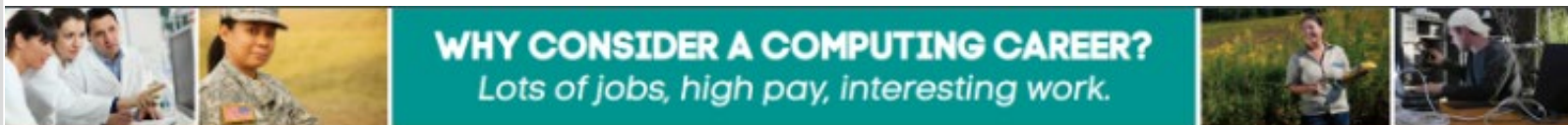
Free Resources available from NCWIT
C4C (Counselors for Computing) Initiative include:

- Informational webinar
- Information sheets
- Pathways to Computing Careers Cards (Military, Community College & 4 Yr.)
- Lesson Plans....and more!

www.ncwit.org/c4c



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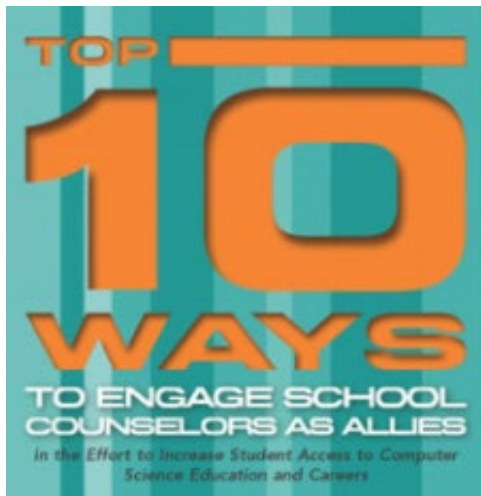


Intersecting Pathways to a Computing Career



Share with colleagues:

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[Top 10 Ways to Engage School Counselors as Allies in the Effort to Increase Student Access to Computer Science Education and Careers](#)

School counselors are eager to direct students to viable education and career opportunities. Consider these key points for collaboration as you plan to meet with counselors to discuss ways their professional responsibilities align with your goals to increase student access to computing.

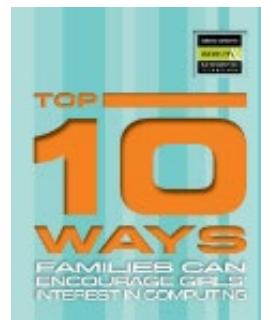
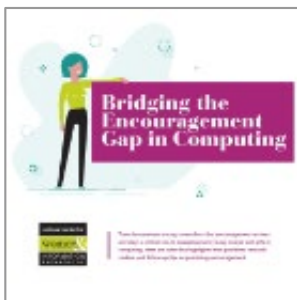
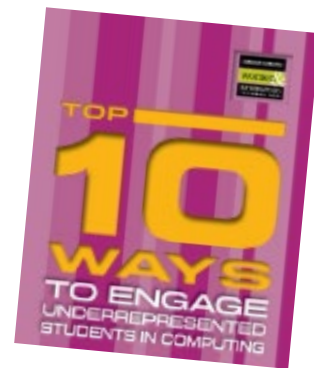


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Share with colleagues:

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- [Bridging the Encouragement Gap in Computing](#)
- [NCWIT Tips: 8 Ways to Give Students More Effective Feedback Using a Growth Mindset](#)
- [Top 10 Ways Families Can Encourage Girls' Interest in Computing](#)
- [Top 10 Ways to Engage Underrepresented Students in Computing](#)
- [Top 10 Ways of Recruiting High School Women into Your Computing Classes](#)



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Resources for Students

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Why Should Young People Consider Careers in Computing and Information Technology?

MEANINGFUL WORK
Computing and Information Technology (IT) professionals work on creative teams to develop innovative products that save lives, solve health problems, improve the environment, and keep us connected. Computing and IT professionals develop innovative systems and keep computers and networks operating. These jobs are available in nearly every industry, including art, science, healthcare, and education.

JOB SECURITY AND HIGH SALARIES THROUGH A VARIETY OF EDUCATION PATHWAYS
The U.S. Bureau of Labor Statistics predicts that computing and IT jobs will be among the fastest growing and highest paying over the next decade. In May 2020, the median salary for computer and IT occupations was \$86,320 — roughly \$47,000 higher than the median net salary for all jobs! Plus, education offers three high-demand pathways through a range of educational pathways, including military experience, associate's and bachelor's degrees, as well as two-year, four-year, and graduate degrees.

FLEXIBILITY AND A VARIETY OF CAREER OPTIONS
Many computing and information technology fields offer a variety of career options, making it easier to balance your education with the need for career-related experience. Including:

- COMPUTER AND INFORMATION RESEARCH SCIENTIST
- COMPUTER NETWORK ARCHITECT
- COMPUTER PROGRAMMER
- COMPUTER SUPPORT SPECIALIST
- DATA ANALYST
- PROJECT MANAGER
- INFORMATION SECURITY ANALYST
- SOFTWARE DEVELOPER
- WEB DEVELOPER

Join the Council for Computing (C4C) Campaign to get information and free pathways resources for advising young people — www.ncwit.org/c4c

[Why Should Young People Consider Careers in Computing and Information Technology?](http://www.ncwit.org/youngwomen)

What should you tell a young person about IT careers? How can they prepare now for a career in IT?

The web version has clickable links that bring to the Bureau of Labor Statistics where folks can learn more. This makes for a great asynchronous learning career lesson - ideal in our times of remote learning!

www.ncwit.org/youngwomen

CS + X: COMPUTER SCIENCE IS EVERYWHERE!

Art and Design // Telecommunications // Business Operations // Education // Software Development // Medical Technology // National Security // Alternative Energy // Video Production // Automation and AI // Music Technology // Media Forensics // Game Design

What do these have in common? All depend on people with computing know-how to design and test useful products that satisfy real needs.

Worldwide, economists predict that the number of computing and information technology jobs will grow much faster than other fields over the next ten years.

Individuals with associate's, bachelor's, and graduate degrees in computing earn some of the highest starting salaries.

Plentiful, High-Paying Jobs in Every Industry...

Which Computing Pathway IS RIGHT FOR ME?

[Which computing pathway is right for me?](http://www.ncwit.org/pace)

This resource explains how computing interests and talents line up with different undergraduate courses of study and the careers that follow. www.ncwit.org/pace



Pathway cards:

- [Community College Pathway to IT and Computing Careers](http://www.ncwit.org/pace)
- [Military Pathway to IT and Computing Careers](http://www.ncwit.org/pace)
- [University Pathway to IT and Computing Careers](http://www.ncwit.org/pace)



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Easiest Recruitment Tool Ever!

- Hour of Code!
 - hourofcode.com
 - Gives students a taste of computer science
 - Can be leveraged to encourage students to sign up for courses





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Featuring Hour of Code™ puzzles from Code.org®

Especially
Even During Covid, Give
Your Entire School a Great
Family Learning Experience.



FREE for
ALL K-5
Schools!

- Live-streaming event free for any elementary school
- More details and registration at CSisElementary.org

Questions?



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EPIC Listserv

Learn About CS-Related News and Events:

- Upcoming PD workshops and online courses
- Grant opportunities
- Policy Updates
- CS Conferences
- Award and Contest Opportunities
- Teaching Positions
- Funding for CS



<http://bit.ly/EPIClist>



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February 2021



Thank you!

www.tacc.utexas.edu/epic



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Supporting Educational Partnerships



Pareesa Schulte

Education Technology Consultant

Texas ESCs 4, 10-13, 15, 18-20, Arizona,
New Mexico

505.803.6963 | pschulte@ti.com

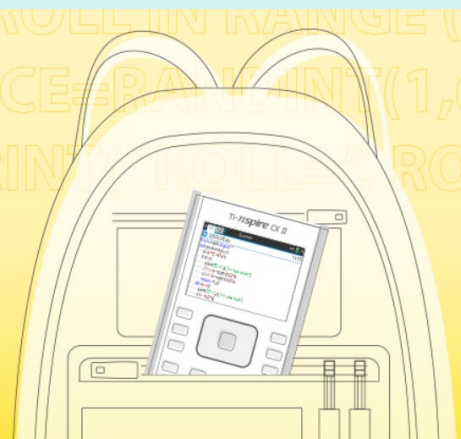




TI Codes Python: TI-Nspire™ CX II technology

Introduce students to physical computing and put coding in motion with short activities.

Note: These lessons require the use of TI-Nspire™ CX II technology with OS 5.2 and above.



10 Minutes
of Code

Python with
TI-Nspire™ CX II technology »

10 Minutes
of Code

Python with
TI-Innovator™ technology »

Teachers'
Lounge

Learn more about
TI Codes Python »



Professional Learning

Individualized Coaching

VIRTUAL - CS Jumpstart (June 2021)



https://utakeit.tacc.utexas.edu/CS_Jumpstart_Jun2021/



Begin With the End in Mind: Tapping Into Partner Strengths To Expand College Access

March 4, 2021 | 1 - 2:30 p.m. Eastern time/Noon - 1:30 p.m. Central time

Traci O. Aucoin, the Lafayette Parish School System GEAR UP Project Director, will focus on seeking and prioritizing partnerships and building intentional relationships within those partnerships.

[See details](#) ▶

[Register now](#) ▶

Thank You

Carol L. Fletcher, Ph.D.

Pareesa Schulte



Virtual Conference

#T3IC



Daily events

- » Find handouts shared by presenters on session overview pages
- » All sessions will be available on demand through May 31
- » Share your feedback in the session survey — daily prize drawings!
- » T³IC Challenge: Answer trivia questions, get on the leaderboard — daily prize drawings!
- » Continue the conversation in Slack
- » Visit the Exhibit Hall | 10 a.m. – 4 p.m. Central time



Coming up

Next Saturday, Feb. 20:

- » Keynote Dan Finkel | 10 – 11 a.m. Central time
- » Birds of a Feather sessions | 3 – 3:30 p.m. Central time
 - CAS, Coding and Computer Science, Statistics, STEM and Engineering