TEALS Program



Build and grow computer science in your school with TEALS



Computer science in every high school

Computer science (CS) skills prepare students for in-demand roles and open pathways to economic opportunity. But the students who need these skills most, are the least likely to have access to rigorous CS courses.

Partner with the TEALS Program

TEALS (Technology Education and Literacy in Schools) is a Microsoft Philanthropies program that helps high schools develop and grow inclusive and sustainable CS programs. The TEALS Program:

- Builds the capacity of teachers by pairing skilled industry volunteers with high school teachers, to team-teach computer science. Volunteers support teachers as they learn to teach CS independently over time.
- Engages students who previously didn't have access to CS education, increasing the likelihood that they'll continue their CS education and be more prepared for future employment.

TEALS Program provides

- A community of teachers and volunteer industry professionals working together
- Rigorous curricula and resources developed by CS educators and industry professionals
- A pathway for all students and teachers to learn CS content
- Resources and training to develop diverse and inclusive CS classrooms
- Personalized support from a dedicated Regional Manager
- Remote or in-person volunteer support



Brooklyn College Academy, Brooklyn NY

Learn more about bringing the TEALS Program to your school at Microsoft.com/TEALS

For ten years, TEALS has provided nearly 85,000 students with access to computer science.



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CS completely transformed my enthusiasm for my career in education. Every day, I wake up excited not only to teach, but to learn alongside my students.

> - Bow Brannon III. Austin, TX, TEALS teacher

Impact on students

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of TEALS students plan to study CS in college.



86%

of TEALS students believe that CS allows them to be creative.



≈ 72%

of TEALS students believe people like themselves can be computer scientists.

*2019-20 TEALS student end of year survey

The TEALS program serves 10,000 students at 455 high schools in the United States and in British Columbia, Canada.

(During the 2020-2021 school year)



Learn more about bringing the TEALS Program to your school at Microsoft.com/TEALS

How TEALS supports your school

	Co-Teach model	Lab support model	Graduation
Who's doing the teaching?	Teacher: 10 ->80% Volunteer: 90 ->20%	Teacher: 80->99% Volunteer: 1->20%	Teacher: 100%
Teacher's role	 Classroom and teaching team management Learning computer science Completing all assignments Leading lessons at their capacity 	 Classroom and teaching team management Leading 80%+ of lessons Continue refining CS understanding 	 Teaching computer science independently of TEALS
Volunteer team engagement	4-5 days a week	2-5 days a week	Online community of expert volunteers

Remote instruction

TEALS offers options for remote or in-person volunteer support. Using remote instruction, TEALS volunteers participate using video conferencing software that is chosen by the school. The remote option helps engage volunteers with long commutes to schools and is a great choice for communities with limited local technology professionals.



What your schools needs to teach remote:

- Sufficient bandwidth, headsets, and webcams to connect students with volunteers
- TEALS training for teachers and their teaching teams to prepare for remote instruction
- Enlist a partner IT liaison for initial installation and ongoing support

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I tell my students, 'I'm not an expert. I'm learning computer science with you!' My TEALS class is one big collaboration—and it's fun.

> – Elaine May, Warwick, RI, TEALS teacher

Diversity and inclusion

TEALS provides partner schools with strategies and resources to help increase equitable participation in highquality computer science education. TEALS works with schools to create an action plan and make progress towards the following diversity and inclusion outcomes:



Millennium High School, New York NY

Inclusive learning space	Diversity in enrollment	Inclusive instruction			
Creating learning environments that are accessible and welcoming of students' identities, backgrounds, differences and perspectives without barriers or judgment.	Ensuring CS courses and programs have student enrollment rates that reflect the demographics of the larger school or community population, particularly in terms of race, ethnicity, gender and disability status.	Instructional practices and learning experiences that actively consider the context of youth in terms of interests, identities, cultural and linguistic practices, and histories.			
EXAMPLES OF SCHOOL COMMITMENTS					
 Incorporate inclusive signals such as posters of role models from different backgrounds or displaying computer science in a creative way 	 Create awareness of CS at your school by discussing how CS relates to other subjects or host a session to debunk CS myths 	• Emphasize student engagement with peer and buddy programming and providing students the choice to help choose projects			
EXAMPLES OF TEALS RESOURCES					
 Provides poster examples for teachers and administration to place around the classroom and school 	 Provides examples of CS "Culture Day" lessons incorporating volunteers to share with class and larger school population 	 Provides lesson plans that include opportunities for groupwork as well as multiple project options 			
Learn more by reading our Guide to Inclusive Computer Science					

Learn more by reading our **Guide to Inclusive Computer Science** Education at <u>aka.ms/TEALS-Inclusive-Guide</u>

TEALS supported curricula

	Introduction to	AP Computer	AP Computer
	Computer Science	Science Principles	Science A
Description	A semester or full-year	A full-year course covering	A full-year course focused
	course that explores a	the fundamentals of	on object-oriented
	variety of basic	computing, including	programming and
	computational thinking	creativity, programming,	problem solving in Java.
	and programming	and global impact.	Equivalent to a first-
	concepts through a	All curriculum providers	semester, college level
	project-based learning	cover the same major	course in computer
	environment.	areas of study.	science.
Models Supported	Co-Teach and Lab Support	Lab Support	Co-Teach and Lab Support
Where can l learn more?	aka.ms/TEALSintro	aka.ms/APCSPrinciples	aka.ms/APCSA

Partnership requirements

Potential school costs	 Costs incurred by volunteers (e.g. background check) Curricular resources (if using a partner curriculum provider that charges a cost) Remote teaching equipment (as applicable) 	
Class meeting time	First period of the day	
Diversity, Equity, and Inclusion	Schools must fill out a copy of the Diversity and Inclusion Planning Guide	
TEALS volunteer recruitment	 Engage with the local community and your school's/district's network to share this volunteer opportunity 	
Data sharing	 TEALS classroom demographics Student and teacher course experience survey AP scores (if applicable) 	
Recruit classroom teacher	 2+ years teaching experience Attends required curriculum training and TEALS training Commits to becoming a CS champion in the school 	
Identify school staff partners	 School administration contact District contact (as applicable) IT liaison (as applicable) 	

TEALS Program calendar





I learned so many things from my CS class I wouldn't have gotten from books or on my own. Our TEALS volunteers were actual programmers who shared what they were working on at work and even questions they ask during interviews. It was like I got real world experience in class.

> – Saad Rafiq, Austin, TX, TEALS student

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