

# TEALS Program

Computer science in every high school



Build and grow computer science  
in your school with TEALS

# What is the TEALS Program?

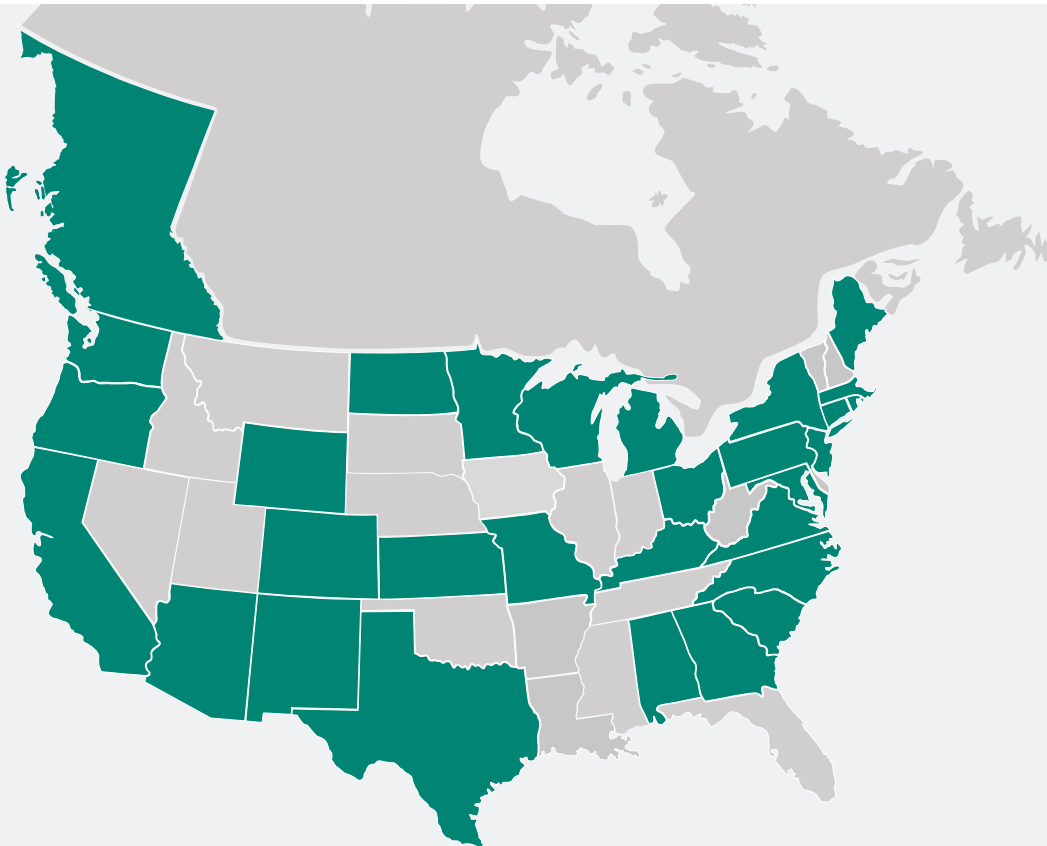


*Renaissance High School in Detroit, Michigan*

Microsoft Philanthropies TEALS (Technology Education and Literacy in Schools) Program pairs trained computer science (CS) professionals with high school teachers to help build CS teaching capacity.







- A **community** of teachers and volunteer industry professionals working together.
- Rigorous **curricula and resources** developed by CS educators and industry professionals.
- A **pathway for students** to learn CS.

TEALS supports schools in 29 states, Washington DC, and British Columbia, Canada




Learn more about bringing the TEALS Program to your school, visit  
[Microsoft.com/TEALS](https://Microsoft.com/TEALS)

# By the numbers

Schools	Students	Volunteers
 <b>625</b> TEALS schools	 <b>21,000</b> Students	 <b>750</b> Companies and organizations represented
 <b>921</b> CS classes	 <b>35%</b> Female	 <b>1,800</b> Tech volunteers

\*2019-2020 school year

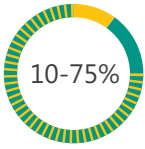
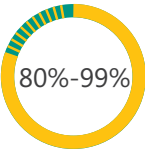

## Impact on students

	<b>75,000</b> students have learned CS through the program since its founding in 2009
	<b>40%</b> of students plan to major in CS in college
	<b>77%</b> of students believe that CS allows them to be creative

"TEALS provides an opportunity for our students that otherwise we could not offer to them due to our rural location. The program has opened up a completely new avenue for our students as a career, and our students are taking full advantage of it."

**Nicki Slaggle,**  
Teacher at Seymour High School, TX

# How TEALS supports your school

	Co-Teach model	Lab support model	Alumni program
Who's doing the teaching?	 <p>10-75% Teacher</p> <p>Volunteers 90-25%</p>	 <p>80%-99% Teacher</p> <p>Volunteers 20-1%</p>	 <p>100% Teacher</p>
Teacher's role in the classroom	<ul style="list-style-type: none"> <li>Classroom and teaching team management</li> <li>Learning computer science</li> <li>Completing all assignments</li> <li>Leading lessons at capacity</li> </ul>	<ul style="list-style-type: none"> <li>Classroom and teaching team management</li> <li>Leading 80%+ of lessons</li> <li>Continue refining CS understanding</li> </ul>	<ul style="list-style-type: none"> <li>Teaching computer science independently of TEALS</li> </ul>
Volunteer engagement in the classroom	4-5 days a week	2-5 days a week	Online community of expert volunteers

## Diversity and Inclusion

TEALS provides resources and strategies to partner with schools to provide an inclusive learning space, enroll a diverse set of students, and leverage inclusive teaching practices.

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 take into account the context of youth in terms of interests, identities, cultural and linguistic practices, and histories.

# Curriculum

	Introduction to Computer Science	AP Computer Science principles	AP Computer Science A
Description	A semester or full-year course that explores a variety of basic computational thinking and programming concepts through a project-based learning environment.	A full-year course covering the fundamentals of computing including creativity, programming and global impact. All curriculum providers cover the same major areas of study.	A full-year course focused on object-oriented programming and problem solving in Java. Equivalent to a first-semester, college level course in computer science.
Models supported	Co-Teach and lab support	Lab support	Co-Teach and lab support
Curriculum providers	<ul style="list-style-type: none"> <li>TEALS Program</li> <li>CMU CS Academy</li> </ul>	<ul style="list-style-type: none"> <li>Code.org</li> <li>Beauty and Joy of Computing</li> <li>Mobile CSP</li> <li>Project Lead the Way</li> <li>UTeach</li> </ul>	<ul style="list-style-type: none"> <li>TEALS Program</li> <li>TEALS partner providers</li> </ul>
Teacher professional development	Curriculum training and TEALS training	Varies by curriculum provider and TEALS training	Java course completion and TEALS training
Technical requirements	Web Based—Windows (PC), Mac, or Chromebook	Varies by curriculum provider	Windows (PC) or Mac
AP exam format	Not applicable	A performance project that students complete in class and multiple choice questions (written exam)	Multiple-choice and free-response questions (written exam)
Where can I learn more?	<a href="http://aka.ms/TEALSintro">http://aka.ms/TEALSintro</a>	<a href="http://aka.ms/APCSPprinciples">http://aka.ms/APCSPprinciples</a>	<a href="http://aka.ms/APCSA">http://aka.ms/APCSA</a>

“I would not be having the success I am currently having with teaching this content without TEALS.”

**AP CS A teacher,**  
Washington



Chelan High School in rural Washington state

# Remote teaching

TEALS Rural and Distance program has reached students that have the least access to expertise in computer science since 2012. Leveraging a proven virtual classroom 150+ courses will be supported remotely this year.



*Thomas Jefferson High School in Los Angeles, California*

## What types of schools:

- Schools in rural areas
- Communities with limited local technology professionals
- Inner-city schools in metro areas where commutes impact volunteer availability

## How to prepare:

- 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

## How it works:

- Students and teacher log into virtual classroom
- Volunteers lead interactive instruction during the class period
- During lab time, volunteers meet 1:1 with students

# Partnership requirements

Potential school costs	<ul style="list-style-type: none"> <li>• Costs to onboard volunteers (e.g. background check)</li> <li>• Curricular resources</li> <li>• Remote teaching equipment (as applicable)</li> </ul>
Class meeting time	First period of the day
TEALS volunteer recruitment	Engage with the local community and your school's or district's network to share this volunteer opportunity
Data sharing	<ul style="list-style-type: none"> <li>• TEALS classroom demographics</li> <li>• Student and teacher course experience survey</li> <li>• AP scores (if applicable)</li> </ul>
Recruit classroom teacher	<ul style="list-style-type: none"> <li>• 2+ years teaching experience</li> <li>• Attends required curriculum training and TEALS training</li> <li>• Commits to becoming a CS champion in the school</li> </ul>
Identify school staff partners	<ul style="list-style-type: none"> <li>• School administration contact</li> <li>• District contact (as applicable)</li> <li>• IT liaison (as applicable)</li> </ul>

## Going forward

Application Nov-Feb	Onboarding Feb-May
<ul style="list-style-type: none"> <li>• Select curriculum and recruit teacher</li> <li>• Submit application to TEALS               <ul style="list-style-type: none"> <li>– Requires:                   <ul style="list-style-type: none"> <li>• Teacher contact</li> <li>• School administration contact</li> </ul> </li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• TEALS interview</li> <li>• Schedule CS class during 1<sup>st</sup> period of day</li> <li>• Recruit and enroll students</li> <li>• Recruit volunteers through school community and network</li> </ul>



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