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

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.

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

51% 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)

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How TEALS supports your school

<table>
<thead>
<tr>
<th>Who’s doing the teaching?</th>
<th>Co-Teach model</th>
<th>Lab support model</th>
<th>Graduation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher</td>
<td>10 - &gt;80%</td>
<td>Teacher: 80 - &gt;99%</td>
<td>Teacher: 100%</td>
</tr>
<tr>
<td>Volunteer</td>
<td>90 - &gt;20%</td>
<td>Volunteer: 1- &gt; 20%</td>
<td></td>
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<table>
<thead>
<tr>
<th>Teacher’s role</th>
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</thead>
<tbody>
<tr>
<td>• Classroom and teaching team management</td>
</tr>
<tr>
<td>• Learning computer science</td>
</tr>
<tr>
<td>• Completing all assignments</td>
</tr>
<tr>
<td>• Leading lessons at their capacity</td>
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<tr>
<td>• Classroom and teaching team management</td>
</tr>
<tr>
<td>• Leading 80%+ of lessons</td>
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<tr>
<td>• Continue refining CS understanding</td>
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<table>
<thead>
<tr>
<th>Teacher’s role</th>
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<tbody>
<tr>
<td>• Teaching computer science independently of TEALS</td>
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</table>

| 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

“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

Smithville High School, Smithville TX
Diversity and inclusion

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

### Inclusive learning space

Creating learning environments that are accessible and welcoming of students’ identities, backgrounds, differences and perspectives without barriers or judgment.

### Diversity in enrollment

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.

### Inclusive instruction

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 Education at aka.ms/TEALS-Inclusive-Guide
TEALS supported curricula

<table>
<thead>
<tr>
<th>Description</th>
<th>Introduction to Computer Science</th>
<th>AP Computer Science Principles</th>
<th>AP Computer Science A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>A semester or full-year course that explores a variety of basic computational thinking and programming concepts through a project-based learning environment.</td>
<td>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.</td>
<td>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.</td>
</tr>
</tbody>
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Models Supported

- Co-Teach and Lab Support
- Lab Support
- Co-Teach and Lab Support

Where can I 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) |
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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TEAL S Program
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Synergy Quantum Academy, Los Angeles CA