

# Level the Field in Computer Science with Girls Who Code

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# Today's Speakers



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Girls Who Code

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Afterschool Alliance



Afterschool Alliance



# Today's Agenda

1. Why Computer Science?
2. Girls Who Code Educational Approach
3. Student Outcomes & Opportunities
4. Our Afterschool Clubs
5. Audience Questions



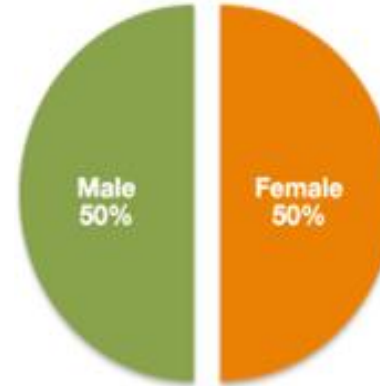
# Why Computer Science?



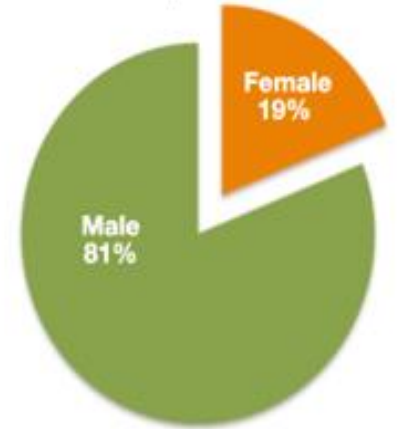
# Big Gender Disparities

- There has been lots of progress in other STEM fields
- Computer science and the tech industry still have a large gender gap.
- It is also a very quickly growing industry with varied applications.

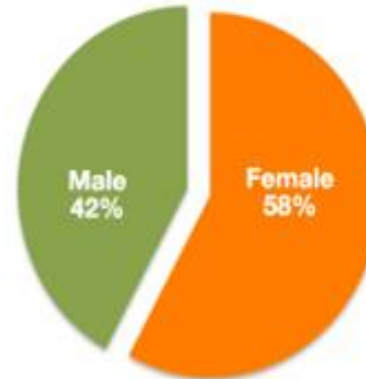
AP Statistics



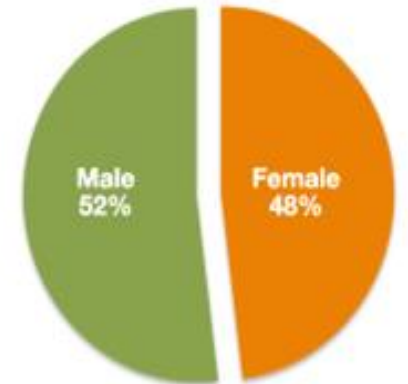
AP Computer Science



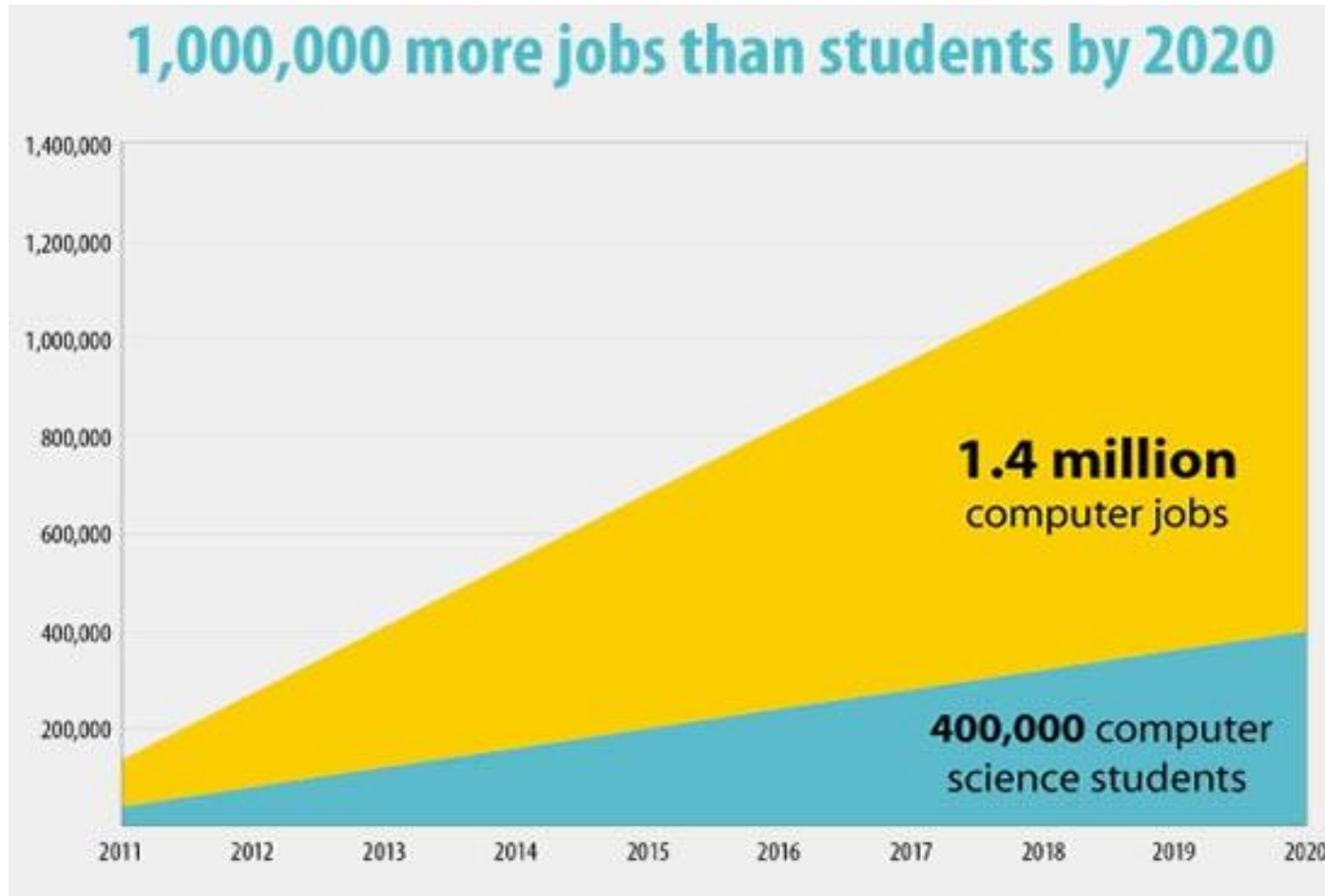
AP Biology



AP Calculus AB



# Promising Job Opportunities



The Department of Labor estimates there will be 1 million unfilled jobs in computing by 2020.

# Our Educational Approach

# Educational Approach



Sisterhood



Community Impact



Computational Thinking



# Student Impact

# Student Impact



Network & Opportunities



Community Involvement



Problem Solving & Risk Taking



[www.youtube.com/watch?v=GgdtteFMVQ0](https://www.youtube.com/watch?v=GgdtteFMVQ0)

# Girls Who Code Clubs

Computer Science After School

# Girls Who Code Clubs

**Most Clubs meet weekly for 2 hours per session.**

**Two roles:**

- 1. Sponsor** = host representative + administrative contact
- 2. Facilitator** = attends weekly sessions, must pass or provide a background check



# Girls Who Code Clubs

## We provide:

- Curriculum & session outlines
- Training
- Network of CS educators





# Girls Who Code Clubs

## You provide:

- Meeting space
- Computers
- Internet
- Facilitator
- Members (students)

# Curriculum Overview

## CS Impact Project

- Community-focused problem solving
- Collaborative
- Innovation cycle

## GWC Core4

- Loops, variables, conditionals, & functions
- Variety of platforms & topics
- Student choice




# Year-at-a-Glance

LAUNCH	1. DESIGN	2. BUILD	3. TEST	CELEBRATE!
2 SESSIONS	5-7 SESSIONS	10-14 SESSIONS	1-4 SESSIONS	2 SESSIONS
<ul style="list-style-type: none"><li>+ Girls begin building sisterhood, get a taste of the Core4 computer science concepts, and learn about the CS Impact Project.</li></ul>	<ul style="list-style-type: none"><li>+ As a group, Clubs girls research their community, define an issue and plan the CS Impact Project.</li><li>+ Girls also set goals for their CS Impact Project and each student's success.</li></ul>	<ul style="list-style-type: none"><li>+ Girls work individually to learn the Core4 computer science concepts they'll need to build their CS Impact Project.</li><li>+ They learn these concepts through lessons that vary in difficulty, programming language, and interest such as music, art, game design, and storytelling.</li><li>+ At the same time, girls identify individual responsibilities for the CS Impact Project and work together to build the project.</li></ul>	<ul style="list-style-type: none"><li>+ Girls test their project by sharing it with their community and identifying whether or not they met their goals.</li></ul>	<ul style="list-style-type: none"><li>+ Girls celebrate their accomplishments and share their appreciations for each other.</li></ul>

# General Session Agenda

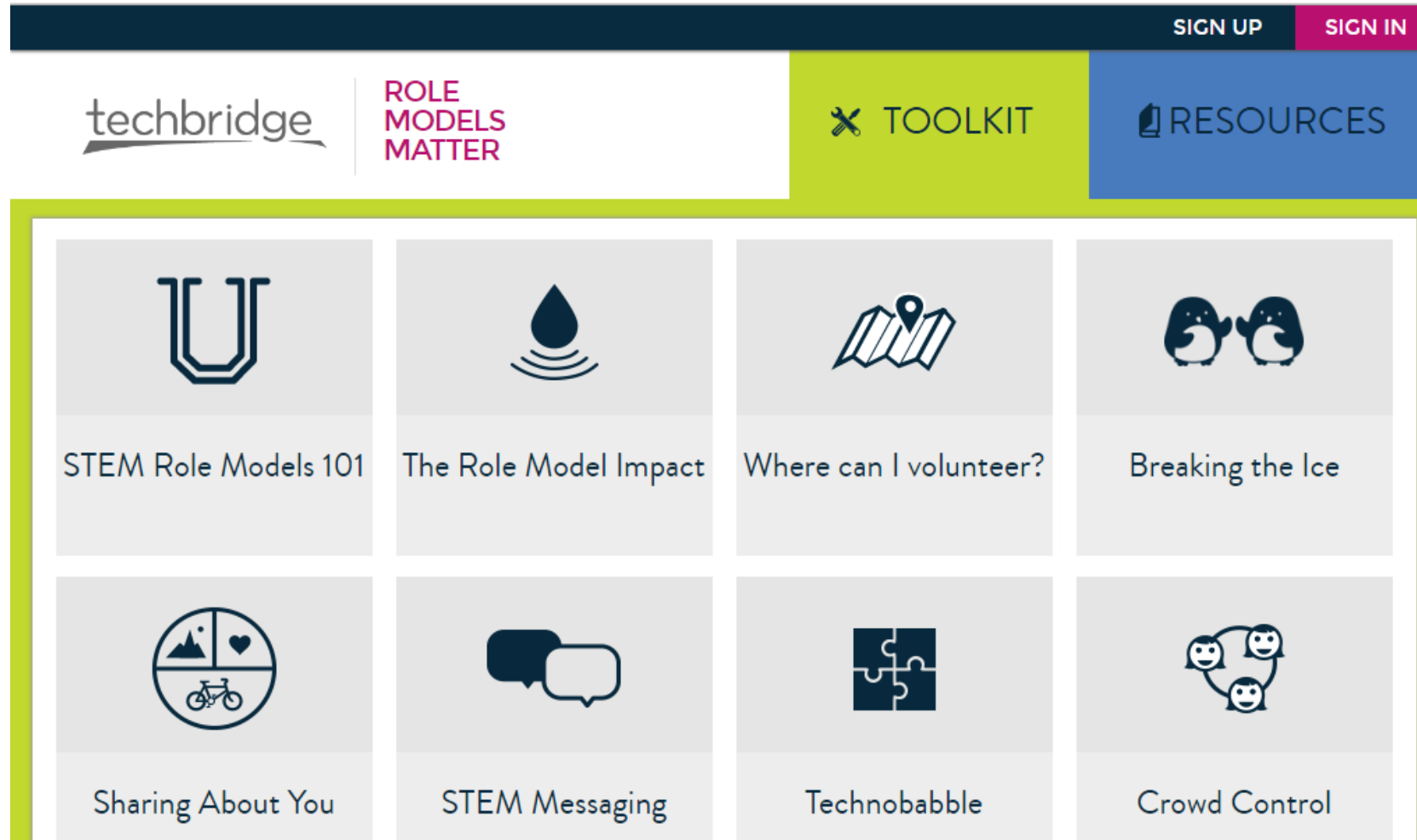
1. Building Sisterhood (15-20 min)
2. Activity/Activities (60-90 min)
3. Debrief/Reflection (15 min)

## AGENDA

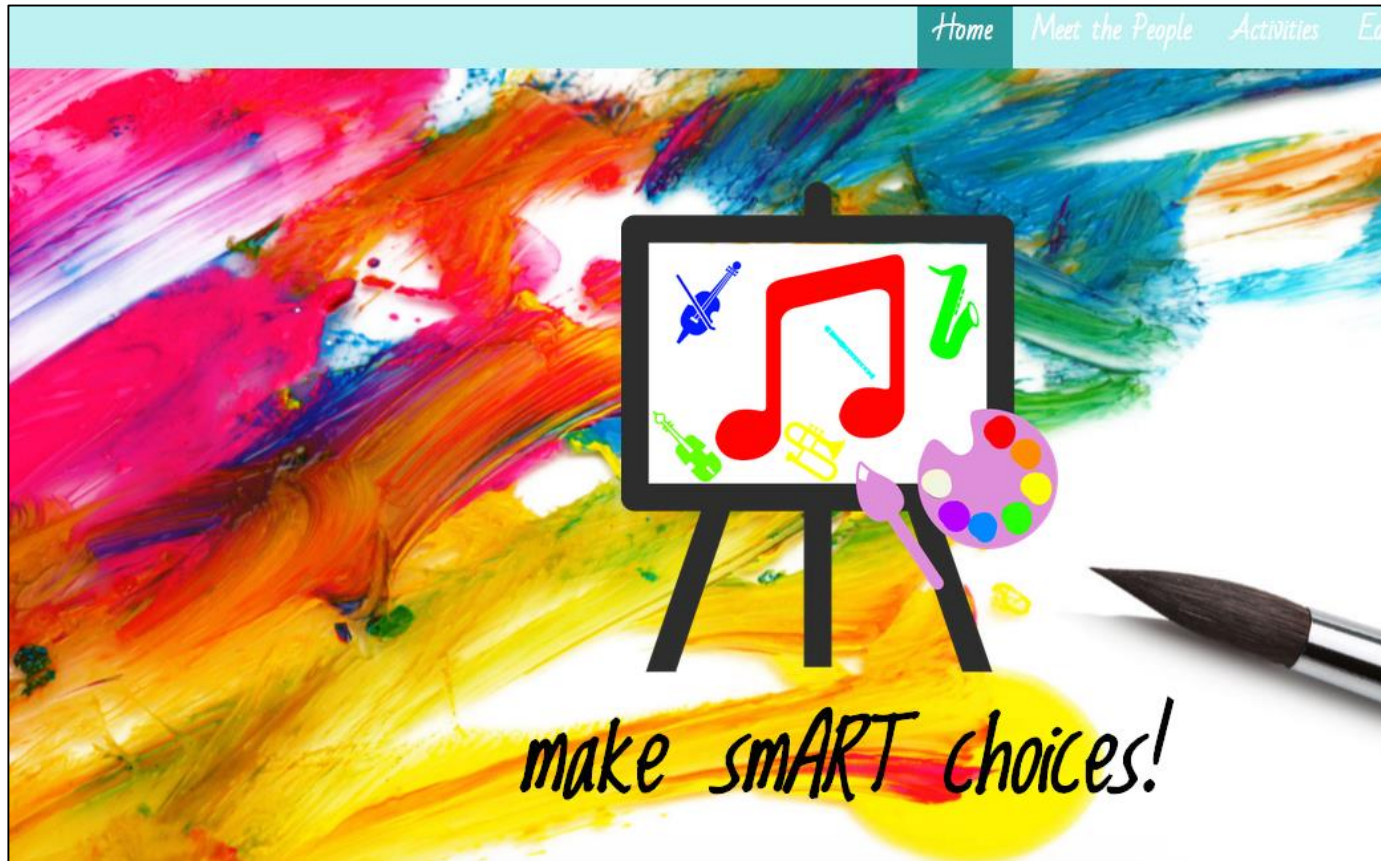
-  Build Sisterhood: Coe Leta Stafford (15 min)
-  Activity: Prepare and Conduct an Expert Interview (90 min)
-  Debrief & Reflect (15 min)



# Using Tech Professionals as Role Models





# Sample CS Impact Project



## Teens Who Care

"Teens Who Make A Difference In Their Community"



**Home**

- Volunteering
- Resources
- Volunteer Game
- How it all started: The Animation
- Videos
- About us

**Volunteering**

Volunteering can impact your life. You learn new things and can have a lot of fun doing so. Volunteering doesn't necessarily have to be going to the local animal shelter; it can be showing up at your neighbor's house and saying you will cut their grass for them, or even watching your friend's dog while they are out of town. Volunteering is everywhere, if you don't want to start out volunteering at your animal shelter or other places, just start out small. Small things can make a BIG difference.





# Audience Questions

A photograph of two young women sitting at a desk, looking at a laptop. The woman on the left is smiling and looking down at the screen. The woman on the right is looking at the screen with a focused expression. The background is slightly blurred, showing some text on a wall. A large yellow banner is overlaid across the middle of the image.

[girlswhocode.com/apply](https://girlswhocode.com/apply)

girls who  
CODE

# Thanks for attending!

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**Girls Who Code**

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