WeTeachCS: Effective Strategies
Inclusive and Effective teaching
Welcome!

Kate Woodward Young
katewoodwardyoung@gmail.com

- Kate holds a Masters in Instructional Technology with an emphasis on non-traditional programming options. In 1999, Kate authored the first Girl Scout software skills curriculum to give the girls "The Edge" today and tomorrow. She started teaching robotics and coaching all girls teams in 2000. Kate's outreach has been diverse encompassing rural, suburban and urban communities throughout Texas and nationally with a strong cross-cultural component especially working in the Latina, African American, as well as in gender specific and the LGBTQ communities.

- For 20+ years, Kate has been an advocate and trainer in STEM. The first STEM PD she led was in 1998, computer network development for teachers.
About the course

- This course is designed to support computer science teachers in implementing effective strategies for recruiting, retaining, and teaching students who are traditionally underrepresented in computer science.

By enrolling in this course, learners will have taken an important step in ensuring their computer science teaching and programming is equitable and inclusive for all students, regardless of their ethnicity, socioeconomic status, or gender preferences.

- This course was designed to support learner’s efforts, as a computer science teacher or related stakeholder, in developing the insight, resources, and skills to move computer science education into the forefront of their school and communities’ educational system. Further, they will gain an understanding of the factors influencing how and why we must reach the students that need computer science the most.

Today with less than 13% of minority students entering the computer science/technology field and only 24% of the computer science workforce being made up of women, we must look to our educators, on the frontlines, to help make computer science education and career paths a priority.

As learners move through the course, they will not only define equity, but also learn about how computer science and computational thinking can be a vehicle for
exploring issues of personal relevance and social justice for students in their school.
Why teach computer science?

- Assign each small group a stakeholder group -
  - Students Non CS TEachers Guidance Counselors
  - Administrators School Board Parents Business Community
- Give participants 3 to 5 minutes to brainstorm 3 positives and 3 negatives, encourage them to use short phrases or single words like - budget, etc.
What the heck is equity, inclusion and all that stuff

- Equity -- the quality of being fair and impartial.
- Inclusion - the action or state of including or of being included within a group or structure.
- Social Justice - justice in terms of the distribution of wealth, opportunities, and privileges within a society.
And then there is the teacher

• What do I bring to the tech table? Biases, beliefs & complete bunk – self assessment tool 7 – 10 min.
• What does bias/inequity look like – PP/discussion 5 min.

Equity does not mean the same for everyone, it means equality in access, a leveling of the playing field by providing people with opportunity without stereotypes, judgement, or biases. When we allow misconceptions to dictate our educational agenda we cannot hope to fully embrace the individual needs, interests, and abilities of our students. Think for a moment what biases or beliefs affect your school, environment, and community.
<table>
<thead>
<tr>
<th>Test Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race (Black - White) (LAT)</td>
<td>This LAT measures the ability to distinguish faces of European and African origin. It indicates if novel Americans have an automatic preference for white over black.</td>
</tr>
<tr>
<td>Gender (Female - Male) (LAT)</td>
<td>This LAT often reveals a relative sex bias in free recall and automatic responses to naked females and males.</td>
</tr>
<tr>
<td>Socioeconomic (Caucasian - African) (LAT)</td>
<td>This LAT measures the ability to distinguish words and symbols representing upper and lower socioeconomic status. It often reveals an automatic preference for symbols related to upper socioeconomic status.</td>
</tr>
<tr>
<td>Age (Young - Old) (LAT)</td>
<td>The LAT measures the ability to distinguish old from young faces. This test often indicates that Americans have automatic preferences for young over old.</td>
</tr>
<tr>
<td>Weight (Thin - Fat) (LAT)</td>
<td>This LAT measures the ability to draw a distinction between people who are thin and fat, not just by appearance, but also by the tendency to perceive thin people as more attractive and fat people as more unattractive.</td>
</tr>
<tr>
<td>Disability (Disabled - Able) (LAT)</td>
<td>This LAT measures the ability to recognize symbols representing disabled and disabled individuals.</td>
</tr>
<tr>
<td>Arab-Muslim (Arab-Muslim - Non-Arab-Muslim) (LAT)</td>
<td>This LAT measures the ability to distinguish faces that are similar to belonging to Arab-Muslim versus people of other nationalities or religions.</td>
</tr>
<tr>
<td>Gender (Lettuce - Tomato) (LAT)</td>
<td>This LAT often reveals a preference for lemons and tomatoes and between men and women.</td>
</tr>
<tr>
<td>Presidential Popularity (LAT)</td>
<td>This LAT measures the ability to recognize photos of President Trump and rate them on various political scales.</td>
</tr>
<tr>
<td>Religious (Religious) (LAT)</td>
<td>This LAT measures the ability to distinguish between different religious terms from various nationalities.</td>
</tr>
<tr>
<td>Western (Light Skin - Dark Skin) (LAT)</td>
<td>This LAT measures the ability to recognize light- and dark-skinned faces. It often reveals an automatic preference for light-skinned relatives to dark-skinned individuals.</td>
</tr>
<tr>
<td>Ethnic (Ethnic) (LAT)</td>
<td>This LAT measures the ability to recognize faces among different ethnic groups and automatically manner.</td>
</tr>
<tr>
<td>American Caucasian (American Caucasian - European American) (LAT)</td>
<td>This LAT measures the ability to recognize faces among different ethnic groups and automatically manner.</td>
</tr>
<tr>
<td>Weapons (Weapons - Harmful Objects) (LAT)</td>
<td>This LAT measures the ability to recognize weapons and harmful objects across different ethnic groups and automatically manner.</td>
</tr>
</tbody>
</table>
What does bias/inequity look like
What has worked for you?

TIPS
● Once you identify the type of students who are not in your program.
● Go find them
● Are they in other AP classes -- that is low hanging fruit
● Do they need a “step” to your class -- club, hour of code,
● The 3 F’s -- Friends, Family, Food
Retention

● Retention
● The Geena Davis Institute on Women in Media “If she can see it, She can be it.” The website www.seejane.org
● When designing an “GI” lesson plan – remember that “GI Jane” is more than seeing and believing. It has as much to do with WHY vs “Y”. She wants you to engage with her on why she should learn this skill. Not “how”.
Giving Girls The Edge

www.facebook.com/GivingGirlsTheEdge

• Facebook group for STEM initiatives and resources for Girls
Class starts 3/19 – Sign up today

https://utakeit.stemcenter.utexas.edu/effective-strategies-r01w2018/

Strategies for Effective and Inclusive CS Teaching (Winter 2018)

Teachers will get the tools, skills, and strategies to create equitable computer science programs. Modeled after the traditional classroom, we will bring context around social justice.

Equiv - $149

About this Course

The purpose of this course is to support your efforts, as a computer science teacher or related educator, to diversify the student resource and skill exposure to ensure equity and inclusion in your computer science teaching. The course will be taught online and will provide a platform for you to explore and understand the role of equity and inclusivity in the classroom. The course will also provide you with strategies to create an inclusive learning environment.

Since the course emphasizes active learning and social justice, the course includes a combination of online courses and activities, interactive discussion boards, and live and online meetings for in-person discussion with your peers. The course includes classroom observations and practical implementations, which provide the learning experience and ensure your ability to apply the concepts and techniques throughout the course. Each participant will complete the course by producing a working action plan to culminate the learning experience.

Course Dates

Feb 18, 2018

63 miles

4 hours

4408 CEU

Equiv $149
NOTE FROM: Dr. Carol Fletcher

If you are interested in participating in a google grant to increase your female student participation in CS.

carol.fletcher@utexas.edu

We Teach CS has helped Texas increase under represented populations in the last 5 years.