Fostering an Inclusive Computing Culture

Building an inclusive and diverse computing culture requires strategies for incorporating perspectives from people of different genders, ethnicities, and abilities. Incorporating these perspectives involves understanding the personal, ethical, social, economic, and cultural contexts in which people operate. Considering the needs of diverse users during the design process is essential to producing inclusive computational products.

Students should...

1. **Consider own perspective and include unique perspective of others**
   
   Students should begin to differentiate their technology preferences from the technology preferences of others. They should seek diverse perspectives throughout the design process.

2. **Address the needs of diverse end users during the design process**
   
   Students should recognize that users of technology have different needs and preferences and that not everyone chooses to use, or is able to use, the same technology products.

3. **Employ self and peer-advocacy to address bias in design**

   After students have experience identifying and including diverse perspectives, they should begin to employ self and peer advocacy strategies, such as speaking for themselves or their classmates if their unique technology needs are not met.

Sample Student Task:

Students might compare a touchpad and a mouse to examine differences in usability and evaluate product accessibility for diverse users such as people with various disabilities. They may notice that allowing an end user to change font sizes and colors will make an interface usable for people with low vision. At the higher grades, students should be able to evaluate computational artifacts for accessibility and employ the EDP to improve existing products or create new ones.

Resources:

- Making Computer Science More Inclusive
- Assistive Technology Lesson Plan
- K-12 Computational Thinking Practices in Action

Source: K-12 Computer Science Framework