

Unit 0: Coding Unplugged

Activity 1: What is a Computer Scientist to a Young Adult?

Objective:

Students will begin to think about and discuss what a scientist looks like and the teacher will help them to overcome stereotypes and preconceived notions.

Preparation and Materials:

- Copy paper
- Colored Sticker Dots (every 5 people get a different color)
- Pencils and colors

Timeframe:

1 class period

Student Learning Targets:

I understand that anyone can be a scientist.

Project Goals:

- Understand that there is no one “type” of person that makes a computer scientist.
- Understand that as CS students, THEY are computer scientists, too!

Lesson:

1. Have students fold their paper in half.
2. Have students fold their paper in half one more time. When they unfold it completely, they should have 4 equal squares.
3. Tell the students they have 5 minutes to SILENTLY and INDIVIDUALLY draw in the upper left hand square. They are not to discuss or show their paper to anyone else. Then ask them to draw an emoji that represents a scientist. Include any details they think of from hearing the word scientist.
4. When the 5 minutes is up, group them into 5 equal groups and give each person in the group a different color sticker dot. They are to silently place their sticker on the one they like the most. Give them 2 minutes.
5. After the two minutes, have the groups discuss why they chose the ones they chose and what about those images made them think they were good representations of a scientist.
6. Tell each person to get their papers back and as a class discuss one thing that stood out in each group on the scientist emoji that received the most votes.
7. Show the video [Change The Face of Computer Science](#) from Code.org website. (3 minutes)
8. Now give students 3 minutes and have them silently draw what they think a scientist emoji looks like in the second block.
9. Have them go through the voting process again in the same groups and the small group discussion on what they like about those emojis.
10. Have them go back and draw in bottom left square but they have to include one aspect from the emoji with the most votes in their group (hair, hat, glasses, color, etc)

11. Then have them vote as a group.
12. Have the class read this article [*There Are Too Few Women in Computer Science and Engineering*](#) together and then draw one more time in the last square.
13. Vote as a group for the last time.
14. Put the winning emoji from each group on display and have all students vote on the top emoji for the class.
15. Have a whole class discussion on what they thought of when they heard the word “Scientist” at the beginning of class versus now. How did their image change, what is included now versus at the beginning of class. Discuss how anyone! Can be a scientist no matter background, ethnicity, gender, etc.
16. Scan the emoji into teacher 's computer and can use it as the class mascot for the year. Put in the upper corner of all assignments.
17. At the end of the year or maybe end of the term, discuss if the emoji is still relevant or if it should be updated.