

Lesson Plan:

- Creating Interacting Codes using Inputs and Outputs

Lesson Objectives:

- Students will create a MakeCode that will interact with the user.
- Students will interact with their partner in pair programming to complete the project.
- Students will be able to explain their design process and then create a flowchart.

Essential Question(s):

- In your own opinion, do you believe that all careers need computer science?
- How does computer science impact your personal life?

Standards:

- PLTW Standard 1.6-8.H – Technology is closely linked to creativity, which has resulted in innovation.
- KY Technology Standard ID2. Use a variety of technologies within a design process to create new, useful and imaginative solutions.

VA:Cr2.3.6

Design or redesign objects, places, or systems that meet the identified needs of diverse users

Above is an art standard that I could relate to this lesson that I teach each semester in my class. The only physical objects that we use for this lesson are the Microbits (programmable device) and the objects the students use to create a sequence (speaker, lights, words on a display screen). I believe the standard above will allow the students to take the project a step further and have them design and create an interacting object that will reflect their understanding of the input and output devices that we have been learning about.