



Unbox your Code Jumper

Out-of-the-Box ideas for getting started with STEM

Robin Lowell
i2e
Accessibility Advocate



Learning Objectives

- The participant will:
 - Identify the components of the Code Jumper kit.
 - Build multiple Code Jumper programs using different pods.
 - Experience creating a program using the Code Jumper curriculum.
 - Discuss the basics of coding using Code Jumper.





Challenges

- Code Jumper may be intimidating for teachers with little experience with coding and STEM.
- Popular classroom coding tools are inaccessible to students with visual impairment.
- Students need equitable access to coding instruction in the classroom.





Code Jumper

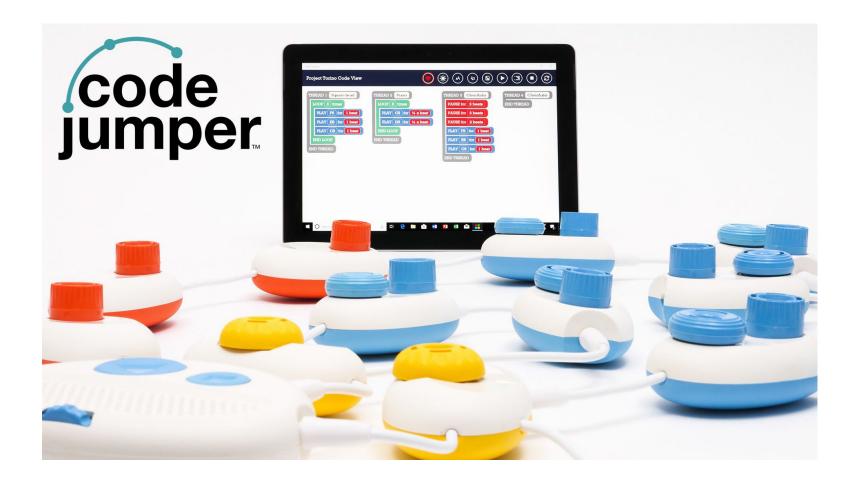


Robin Lowell Senior Manager Accessibility, i2e TVSI





Code Jumper (cont.)



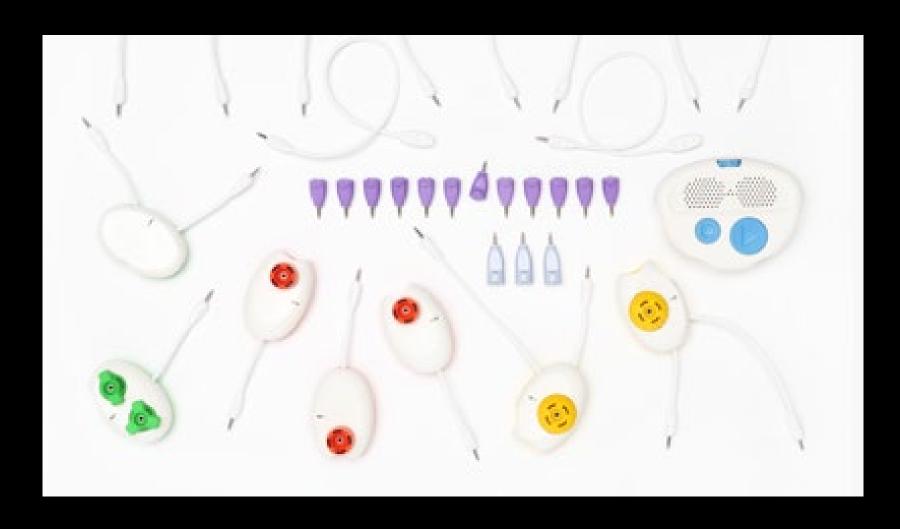


Why is Coding Important?





Let's Get Coding!





Program 1: Basic Program Building

- Hub
- 4 Play pods





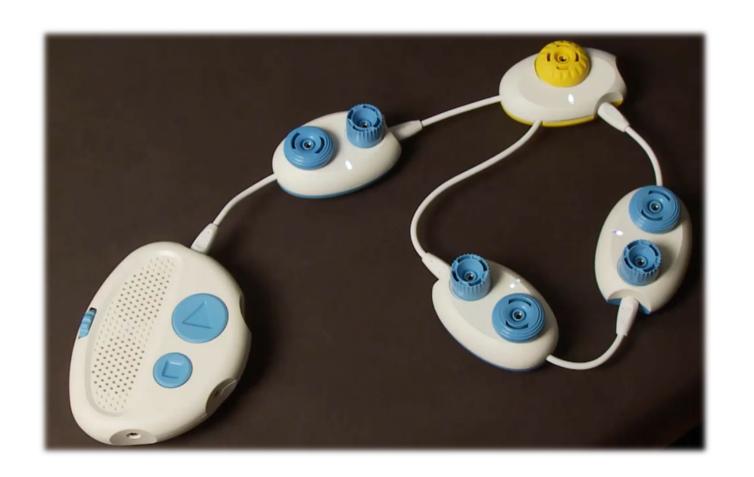
WHAT IS YOUR IMPRESSION OF BUILDING YOUR FIRST PROGRAM WITH CODE JUMPER?





Program 2: Loops and Sequence

- Hub
- 8 Play pods
- 1 Loop pod





WHERE DO WE SEE LOOPS AND SEQUENCES IN OUR EVERYDAY LIVES?





Program 3: Selection and Plugs

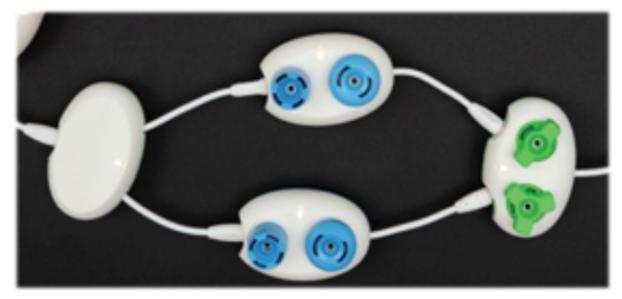
An IF/ELSE statement: If-else: to check and see if some expression is true, and if it is do something, otherwise do something else. Defining a statement that evaluates true or false.

Selection: A structure in computer programming where, if a question is asked, the program decides what to do next based upon the answer. This is sometimes referred to as an if-then-else statement.



Program 3: Selection and Plugs (cont.)

- Hub
- 5 Play pods
- Selection pod
- Merge pod
- Plugs:Random, 2, 7







AS YOUR PROGRAMS GROW IN COMPLEXITY, HOW ARE YOU EFFECTIVELY ORGANIZING YOUR WORKSPACE?





What are other resources to find out more about coding?

www.code.org

www.k12.cs.org

www.csteachers.org

www.csforall.org



Core Practices of Computer Science k12cs.org

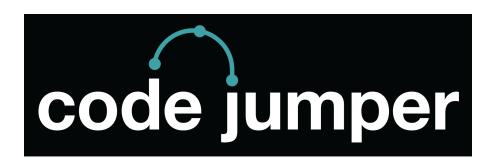




- 1. Fostering an inclusive computing culture
- 2. Collaborating around computing
- 3. Recognizing and defining computational problems
- 4. Developing and using abstractions
- 5. Creating computational artifacts
- 6. Testing and refining computational artifacts
- 7. Communicating about computing



Questions/FAQ's



- Available on Federal Quota Funds
- You can find more information and the curriculum at codejumper.com
- Available for Windows 10 devices and Android



Code Jumper



Quota:

Non-Quota:





Discoveries

- Computer science is an important part of every student's education.
- Anyone can teach coding with Code Jumper.
- Code Jumper uses natural language to introduce coding concepts.
- Code Jumper adheres to Core Practices of Computer Science.



