Coding as Another Language - KIBO
(CAL-KIBO)

DEV TECH RESEARCH GROUP

Lesson 11: Spot That Bug!

Lesson 11 Overview: In Lesson 11, children are introduced to the concept of debugging, learn to identify errors, or "bugs," in KIBO programming and written text, and strategies to correct these bugs.

Powerful Ideas from Computer Science: Design Process, Debugging
Powerful Ideas from Literacy: Writing Process, Editing and Audience Awareness, Phonological Awareness, Alphabet and Letter-Sound Correspondence

I. Warm Up: Design Process Song

- Remind the children of the *Design Process Song* and sing it again as a class!

II. Opening Tech Circle: Test, Debug, and Improve & What Is Debugging?

- Show the design process chart again and remind children of the steps for programming KIBO: Ask, Imagine, Plan, Create, Test and Improve, Share! Explain that we will be learning about how to Test and Improve! Tell children that we need to test our programs to see if they follow our plan, and if they don't, we need to improve!
- When programs don't follow the plan, we call that a BUG, and improving is called debugging. As a class, create a list of strategies for finding bugs in programs using the Strategy List Anchor Chart

III. Word Time: D-E-B-U-G

- Guide children through the strategies associated with each letter of the DEBUG Anchor Chart.

IV. KIBO Time: Find That Bug

- Recreate some Buggy Programs and explain to children what your plan was. Then show the children the program and point out a few things that aren't working like you wanted them to. Have children take turns raising their hand and debugging things in your program.

V. Closing Tech Circle: Celebrating the Process

- As a class, come up with a celebratory cheer or special high-five whenever a child solves a problem. Cheer for each child in the class to celebrate their debugging work today.

Vocabulary:

Bug

Debugging