# Coding as Another Language - KIBO
## (CAL-KIBO)

DEVTECH RESEARCH GROUP

**Lesson 16: What If?**

**Lesson 16 Overview:** Lesson 16 introduces children to conditional situations in everyday life. Children will work in groups to plan and begin programming their "Silly Challenge" KIBO program.

**Powerful Ideas from Computer Science:** Control Structures, Representation, Algorithms, Hardware/Software, Design Process, Debugging

**Powerful Ideas from Literacy:** Literary Devices, Sequencing, Editing and Audience Awareness

## I. Warm Up: Four Corners

- Play the game four corners.
- One child (or the teacher) stands with eyes closed in the center of the room and everyone else goes to one of the four room corners. The person in the center points in a random direction and opens their eyes. Everybody in that corner is out. Continue until there is either one winner or 2-3 kids left

## II. Opening Tech Circle: Intro to Conditionals

- Reflect on the game. If the corner was pointed to, you were out. This is called a conditional, which is something that happens if and only if something else happens.
- Discuss everyday examples of conditionals.

## III. KIBO Time: If and End If & Creating the Program

- Introduce to children the If and End If Blocks. Explain to children that If statements allow KIBO to make a choice based on what it can sense (e.g., light, dark, near, far). Similar to Repeat and End Repeat Blocks, If and End If Blocks are like the front and back covers of a book.
- Additionally, based on their Design Journal, have children work in groups on their "Silly Challenge" KIBO program. Go around and take pictures to document each group's program.

## IV. Closing Tech Circle: What If?

- Have children go around a circle and say a compliment to a team member.

**Vocabulary:**

Conditional

**KIBO Blocks:**

If Block

End If Block