Coding as Another Language - KIBO
(CAL-KIBO)

DEVTECH RESEARCH GROUP

Lesson 18: Ready, Set, Go!

Lesson 18 Overview: In Lesson 18, children will finalize their "Silly Race" program and decorate their robotic creations using arts and crafts. The lesson will end with the "Silly Race"!

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

Powerful Ideas from Literacy: Literary Devices

I. Warm Up: Silly Time!

- Using the Freeze Dance Music or your preferred classroom music, play Freeze Dance. Freeze Dance is a great game to get children moving and engage their creativity. When the music plays, children dance and when the music *pauses,* they must freeze, and do something silly! As the teacher, control the music and press pause periodically to make children freeze.

II. Opening Tech Circle: Adding to Our Programs

- Explain to children that today they will finish working on their "Silly Rules Race" programs, including decorating KIBO.

III. KIBO Time: Revisiting the Program & Decoration Time

- Children can continue programming their "Silly Challenge" program. Encourage children to incorporate a nested loop or statement in their program.
- Have children use crafting materials to decorate each of their KIBOs. Allow children as much creativity as possible in doing this—anything is encouraged as long as every child gets a chance to decorate!
- As children work on their final projects, go around and take pictures of children's KIBO programs and decorated KIBOs.

IV. Closing Tech Circle: Ready, Set, Go!

- When groups are done with their programs, have each group place their KIBO at the starting line, and say, "Ready, Set, Go!" After the class says "Go," all children should clap so that their programs start! Once all KIBO programs have run, cheer together as a class!
- Now, have each group run their program one at a time and have the other groups guess what their rule was (e.g., "make the most turns," "spin around the most," "have the most colors")!