Coding as Another Language - KIBO
(CAL-KIBO)

DEVTECH RESEARCH GROUP

**Lesson 14:
I Spy...**

Lesson 14 Overview: In Lesson 14, children will use the Repeat Blocks with Until parameters and explore the Distance and Light Sensors.

Powerful Ideas from Computer Science: Control Structures, Algorithms, Representation, Hardware/Software
Powerful Ideas from Literacy: Literary Devices, Tools of Communication and Language, Alphabet and Letter-Sound Correspondence

I. Warm Up: Different Lighting

- Play a classroom game of I Spy. Go around the classroom, and have children take turns saying "I spy something that begins with the letter __."

II. Opening Tech Circle: Senses and Sensors

- Remind children that just as humans have different senses to take in information from our environment, robots have sensors to do the same, like the Sound Sensor.
- Today, they will learn how KIBO is able to "see" light and dark using a new KIBO part: the Light sensor!

III. KIBO Time: The Light Sensor & Free Play

- Show children the Light Sensor module. Then Show the Repeat and End Repeat blocks and the new Until Light/Until Dark parameter cards. Create two example programs together, one which uses the Until Light parameter and the other with the Until Dark parameter.
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- In groups, children will create programs using the Light and Distance Sensors.

IV. Closing Tech Circle: Sharing Our Programs

- Have each group share the program they created during Free play. Peers can ask questions about others' projects or provide compliments.

KIBO Module:

Light Sensor

Distance Sensor

KIBO Blocks:

Until Parameters