

Lesson 4: Hello Around the World

Lesson 4 Overview: Lesson 4 introduces programming languages as languages used to communicate with computers and robots, and helps children recognize the KIBO programming language.

Powerful Ideas from Computer Science: Hardware/Software, Representation

Powerful Ideas from Literacy: Tools of Communication and Language, Phonological Awareness

I. Warm Up: Hello World

- Make a list of all the languages children have heard. Then, add to the list after watching a video.

II. Opening Tech Circle: What Is a Language

- Discuss what a language is, why we need it and what happens when we don't understand it. Explain that computers and robots also use languages.

III. KIBO Time: A New Language

- Lead a child-centered discussion around how robots are programmed by humans through a set of instructions. Explain that KIBO reads instructions on the programming blocks' barcodes.
- Point out similarities and differences between KIBO's language and our language(s).

IV. Unplugged Time: KIBO's Language

- Engage in a guessing game with children. Go through each motion card, cover the block, and have children guess what KIBO will do by acting out the motion.

V. Closing Tech Circle: Goodbye Around the World

- Add KIBO to the bottom of the list of languages you made at the beginning of class.
- As a group, choose one language that you want to say goodbye in and teach the children how to say goodbye in that language.

Vocabulary:

Instruction

Languages

Program

Programming languages