

Direct Instruction Summary

Intro to Ozobot Blockly 01: Basic Training



1. Introduction

Introduce the vocabulary.

Code: instructions written in a programming language.

Program: a complete set of instructions written in code that the computer executes to achieve a particular objective.

Pieces of code are combined to create programs.

Ozobot Blockly is a block-based editor, which allows students to create programs for Ozobot using blocks that are selected, dragged, dropped, and connected together like puzzle pieces. Programs written with Ozobot Blockly can be sent to Evo wirelessly via Bluetooth, and Ozobot can run the program.

2. Ozobot Blockly Levels

The left-side panel in Ozobot Blockly holds the blocks for programming. There are 5 levels that increase in complexity from 1, pre-reader, to 5, master. As you go up in level, the number of block categories increases.

Students will work in Level 2 for this lesson.

3. Side Bar and Workspace

There are 5 block categories in Level 2, Movement, Light Effects, Timing, Loops, and Sounds. Each category programs the bot to perform different actions. Explore the blocks within each category.

To the right of the category panel is the workspace. This is where blocks will be configured into programs for Ozobot to run. Model adding blocks to the workspace.

4. Copy, Undo, and Redo Icons

Review the 4 icons at the bottom of the workspace.

Trash can: drag and drop single or groups of blocks to delete, click the trash can to delete everything on the workspace.

Copy: select single or groups of blocks to duplicate.

Undo: undoes the previous action.

Redo: restores the previous undo action.

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5. Deleting Blocks

Five ways to delete blocks:

- 1) Drag blocks to the trash can
- 2) Drag blocks to the left side category panel
- 3) Select blocks and click delete on the keyboard
- 4) Select blocks and right click over them
- 5) Click on the trash can to delete everything (there is a confirmation pop-up)

6. Constructing and Adjusting Your Program

Explore the blocks in each category. Add blocks to the workspace in two ways: clicking on the block in the category panel, or dragging the block to the workspace.

Adjust drop-down menus as desired.

Level 2 contains blocks with drop-down menus, Levels 3, 4, and 5 contain blocks that require input for some categories.

7. Running Your Program

Connect your Evo to Ozobot Blockly by clicking on the bot icon labeled Programs. Follow the instructions for connecting. Once connected, click Run Program.

Discuss if the bot did what was expected? If not, explore to find out why.

8. Add More to Your Program

Allow students to add other blocks to their program, predict what the bot will do, and run the program.

9. Check for Understanding

Check that students know how to:

- Navigate through Ozobot Blockly's Levels
- Connect and program movement, light effect, sound, and timing blocks
- Delete unneeded blocks
- Run a program using Bluetooth