Do The Robot

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Duration: 15 min

LEVEL	SUBJECTS	PROVINCES / TERRITORIES	TOOL
Everyone	Social Science Physical Education	Across Canada	Unplugged

Overview

A basic "unplugged" challenge to get students thinking about simple instructions and sequences, or in coding terms, creating algorithms.

Prep Work

- Sample activities for the pairs to complete i.e. tying a shoe, opening a door, doing the macarena

Lesson

- In groups of two, assign one learner to be the programmer and one to be the robot. Assign each pair an activity like tying a shoe or opening a door.
- These activities could be pulled from a hat, assigned, or chosen by the students
- Ask the programmer to explain to their partner (the robot) how to perform the steps needed to complete their activity using words only!

Key Coding Concepts

- ✓ Algorithms
- ✓ Sequences

Terminology

Term

Algorithms

A step-by-step set of operations to be performed to help solve a problem

Sequences

Identifying a series of steps for a task. Computers and Scratch read and perform commands in order from top to bottom

- Switch pairs
- After the activity, use this as an opportunity to talk about the importance of simple, clear instructions and sequences.

Extension

- Congratulate learners for creating their first algorithms!
- Have students perform their coding sequence in front of the class.
- Which was harder being the programmer or the robot?
- Have the class guess what the pair may have missed as they were explaining the steps.
- Choose some code to review as a group - do students recognize any patterns?
- Any ways they could simplify their algorithms?