CANADA LEARNING CODE

Don't Catch The Cold

By: Caitlin Davey

LEVEL	SUBJECTS	PROVINCES / TERRITORIES	TOOL
Grades 1-3	Science and Technology	Across Canada	Unplugged

Overview

The 'Don't Catch the Cold' activity compares biological viruses to technological viruses. Learners will explore the similarities and differences between these viruses.

Prep Work

- Plan to adjust the game as need be for your classroom environment. Alternatively a classic clapping game like "Stella Ella Ola" might work as a way to get learners started playing the game.

Lesson

Introduction

- After reviewing the immune system or body system, explain and define a computer system.
- Prompt learners by asking them what the parts of the computer are.
- Ask learners about some of the programs or things they might DO on a computer.
- Explain a computer operating system.
- Explain what a computer virus is.

Key Coding Concepts

- ✓ Debugging
- ✓ Virus
- ✓ Operating System
- ✓ System

Terminology

Debugging
Finding problems or 'bugs' in code and solving them

Virus
A computer virus is a piece of software that causes malfunction or issues on a computer machine. A computer virus can infect or transmit to other computers usually with the same operating system.

Operating system

Activity

1. Have learners sit in a circle.
2. Explain to learners that they will be playing a clapping game where there will be one learner who leads or sets the pattern of the game.
3. Instruct learners that there will be another learner who is trying to subtly break the pattern. They will be the virus.
4. The rest of the learners will, after a set amount of time, try and guess who the virus is and who the leader is.
5. Have learners close their eyes. Select one learner to be the leader and one learner to be the virus.
6. Have learners begin to clap their hands on their knees.
7. Watch as the learners try and see who is making/breaking the pattern.
8. After the game has gone on for about 5 minutes, see if learners can guess who played the leader and the virus.
9. Explain that when we try to solve a problem on the computer, we call it "debugging".

Assessment

What was fun about the game? Was it easy or hard to be the leader? How about the virus?

How are computer viruses different from viruses in our bodies? How might they be similar?

Listen to this episode of the podcast Brains On (https://www.brainson.org/shows/2014/06/12/how-do-you-catch-a-cold) to learn more about the common cold.

An operating system is the visuals of the computer you see when you use it. It supports the basic function of the computer like opening emails, saving files, displaying/saving photos.

System
A computer system is the complete computer made up of all its parts. This includes both hardware, the physical part of the computer (like the keys), and software, the visual part of the computer (what happens on the screen).

References

Creative Commons 144/365 by Anna Gutermuth