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Final Project: Unit Plan
SEDC 73600 Curriculum Design
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Impacts of Artificial Intelligence and Machine Learning: How the A.I. BOTS in Our Lives Learn

Lesson 6: Retrain the A.I. Bot: A.I. in the Oceans and Zhorai (Vanessa):

Learning Target:

- Students will retrain and retest a machine learning model with incorrect and/or similar data without variety.
- Students will learn about how AI will learn with a different set of data.
- Students will learn AI can learn from images.
- Students will learn AI can learn from sounds (and/or verbal communication).

Standards:
K-1.CT.2 Computational Thinking - Data Analysis & Visualization
Identify different kinds of data that can be collected from everyday life.
2-3.IC.1 Impacts of Computing
Identify and analyze how computing technology has changed the way people live and work.

2-3.IC.3 Impacts of Computing
Discuss and explain how computing technology can be used in society and the world.

2-3.IC.5 Impacts of Computing
Identify and discuss how computers are programmed to make decisions without direct human input in daily life.
4-6.CT.1 Computational Thinking - Modeling & Simulation
Develop a computational model of a system that shows changes in output when there are changes in inputs.

Introduction/Hook: New Training for AI

Students will get a set of pictures (a data set of the same image). The students will turn and talk andl look at the data to describe what they see and label the pictures. The students will discuss how they think the AI will learn and what will the AI learn if that is the only data the AI has.

(I Do):

The teacher will display the same image on the smart board and ask the students what they recognize using the data they have. Next the teacher will display a similar image and ask the students to compare with the images they have. The teacher will display a third image of the same category but with different attributes and compare to the data set they have.

(We Do):

The teacher will revisit AI for Oceans #2 - Code.org to train the AI with a specific data. Make a prediction. How will we train the AI with a specific data? By identifying "fish" with a specific shape and number of fins. The teacher will train the AI with the students with a specific data of 50 or more images for "fish" until it shows what the AI learned and can identify "fish" on its own. We will examine and discuss the data set the AI provided that it considered "fish."

Independent Activity (You do): Data Set for AI

1. Students will partner up and each train the AI for Oceans with the wrong data set of 100 or more images for "fish." The students will compare and discuss the data set for "fish" the AI learned and can identify as "fish."
2. Students will revisit Zhorai, Zhorai, and work on Activity 2 and Activity 3. Instead of using images to train Zhorai, students will use verbal communication to teach Zhorai about fish. Like AI for Oceans, students will provide the wrong data about fish. Examine and discuss how Zhorai learned. Reminder: Hold onto the microphone to speak and when you are done speaking, let go of the mic after your sentence is highlighted blue.

Wrap-Up-Debrief/Reflection: How do you want to be assessed? Peer or Self Assessment

Conversation Talk about the activity with your peer (Peer Assessment)

- What did you learn about A.I. from this activity?
- What are you still confused about or have a question about?
- What did you enjoy about the activity?

Exit Ticket (Self-Assessment)
Choose one question to answer

- What did you learn about A.I.?
- What did you enjoy about this activity?
- List 3 examples of A.I. in your life and what makes it A.I.?

What do you still have a question about or are confused about?