

Communicating with AI Activity Plan

Overview

In this activity, students explore how AI can recognize and respond to different communication systems. They will test AI models trained to recognize letters and sign language, then create and train their own communication system using Teachable Machine.

Recommended Grade Level(s): 6-8

Recommend Age Range: 9-12

Activity Length: 1 hour

Experience Level: Beginner

Technical Requirements

- Device Requirements
 - 1 computer per student during class (Mac, PC, Chromebook all work great!)
 - Online connectivity at a minimum of 10Mb/sec
 - Modern browsers on computers
 - Chrome
 - Firefox
 - or Safari Version 15.1 or higher
- Tool Access
 - [Teachable Machine](#)
 - Embedded AI sandbox activities provided in the Hour of AI lesson
 - This module requires a device with a working webcam (either built-in or external) to complete the interactive model exploration and training activities.
- Note on Student Accounts:
 - Students will complete the activity on the CodeHS platform. Students do not need to create an account or log in to access this activity, however they will not be able to save or return to their work later unless they are logged in to CodeHS. See optional instructions on how to set students up here:
codehs.com/hoai_account_setup

Activity Materials

Teacher Resources:

- [Lesson Plan](#)
- [Getting Started with CodeHS](#) video for first-time users

Student Activity:

- codehs.com/hourofai/communicating

Content Standards

- **CSTA 1B-AP-09:** Create programs that use variables to store and modify data.
- **CSTA 2-AP-10:** Use flowcharts and/or pseudocode to address complex problems as algorithms.
- **CSTA 2-AP-11:** Create clearly named variables that represent different data types and perform operations on their values.
- **CSTA 2-AP-14:** Create procedures with parameters to organize code and make it easier to reuse.
- **CSTA 3A-AP-16:** Design and iteratively develop computational artifacts for practical intent, personal expression, or to address a societal issue by using events to initiate instructions.

Teacher Instructions

- Before the Hour of AI:
 - Review the technical requirements for this activity and teacher lesson plan
 - (Optional) Set up your free teacher account if you plan to have students create accounts
- During the Hour of AI:
 - Direct students to codehs.com/hourofai/communicating
 - Allow students to work through Hour of AI at their own pace, providing encouragement and support when needed.
- After the Hour of AI:
 - Did you know that CodeHS offers K-12 AI curriculum, PD for teachers, and classroom tools? Go to codehs.com/ai to learn how you and your students can continue learning about AI.

Need Help?

Email support@codehs.com to get in touch with our support team!