

Workshop 4: Let's talk!

Grade level: 3-9

Duration: 60 minutes

Learning objectives

- Learn the concept and practice of if-then statements, and enrich concept and practice of variables.
 - Learn how to use sensing and operations blocks

Materials:

- At least one computer per two students
- Access to Scratch
- Projector

Warm up [5 min.]

Objective: learn the difference between open ended and closed questions

Ask two students to ask each other questions. Class identifies which questions are open (could have multiple answers) and which ones are closed (have simple yes or no answers).

Activities [45 min.]

Choose and prototype a chatbot [10 min.]

Objective: create a sequence that can take multiple paths.

Choose a sprite and a background. On a piece of paper, write a short sequence that commands chatbot to ask a name and respond to closed questions that require yes or no answers. There should be a response created for each answer.



Program chatbot [10 min.]

Students construct first part of program with an ask block.



Once the program is run, information entered in the box is the **answer**. Students can use use the **join** block to program a personalized response.



Word variables [10 min.]

We can use variables for words as well as numbers!

Students create a new variable called name and set it to answer.



Students replace answer in the join block with the name block



if-then [15 min.]

Students programme their sprite to ask the closed question with the help of these blocks.



```
ask join having a good day join name ? and wait
```

Students programme their sprite to respond to yes or no questions, with the aid of these blocks:

```
answer say Oh no! for 2 secs if then else
```

A good sequence will look like this:

```
when clicked

ask What's your name? and wait

set name to answer

say join HI name for 2 secs

ask join having a good day join name? and wait

if answer = yes then

say Great! for 2 secs

else

say Oh no! for 2 secs
```

Integration [5 min.]

Students share strategies, discoveries, challenges and successes.

Practice



Students can continue their chatbots by extending the conversation, changing backgrounds, or costumes depending on response. If-else blocks can also be used to create quizzes and lists. They can also continue with the Code Club Canada Chatbot project. https://codeclubprojects.org/en-GB/scratch/chatbot/