



Bonjour little fish

Scratch lesson plan – Code Playground



Lesson overview

In this lesson, students will create an interactive language-learning project in Scratch called "Bonjour little fish." This project uses the Text to Speech and Translate extensions to help students explore language translation and voice synthesis. By the end of the lesson, students will understand how to incorporate Scratch extensions into their projects and develop creative, interactive tools.

Time	Key learning outcomes	Resources
45 mins	<ul style="list-style-type: none">Learn to add and use Scratch extensions like Text to Speech and TranslateProgram sprites to interact dynamically with user input and provide spoken translationsExplore creative possibilities by animating sprites and customising backdrops.	<ul style="list-style-type: none">Laptops or desktop computersAccess to Scratch website - https://scratch.mit.edu.

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Introduction

“Today, we’ll build a Scratch project called ‘Bonjour little fish.’ You’ll learn how to use the Translate and Text to Speech extensions to create a language-learning tool where fish can speak and translate text.”

“Tools like Google Translate and voice assistants use similar principles to what we’re building today. You’ll see how programming makes it possible.”

The activity in this project uses the translate and text to speech extensions to create the programme. You may need to monitor the young people to ensure that they are using the completed programme to translate appropriate phrases

Hold a class discussion on the topic of translations. Talk about where it can be helpful to have a translator but also cases of lost in translation. You could play a game where a message is whispered into the ear of one person who passes it around the class. How much has the message changed by the time it makes it round?

Scratch practical

Ask the children to log into Scratch and follow the workbook instructions. Show the bonjour little fish video as a guided lesson pausing regularly when the pupils need to catch up.

- Children should be able to follow along with the workbook or the guided lesson video
- By the end of the lesson children should be able to create a working program showcasing the Bonjour little fish activity.



Activity – Bonjour little fish

The bonjour little fish project uses the text to speech and the translate extensions. There is a wide range of potential languages available in the extension, you can choose a language based on what is taught in your school or pick whichever you like. You could tie it in to countries where pupils are from or have visited on holiday.

Class question:

“What could we use a translator program for?”

Encourage the pupils to customise their own backdrops and sprites to make their project unique.

Scratch practical

Using the video and workbooks support the children to follow the instructions and complete the coding project. Have them think of other ways to enhance the project if they have extra time.

Activity wrap up

Prepare to share your project with the class.

“What languages could you add to make the project more fun or useful?”

Encourage customisation

- Animate the fish to make them swim or react when speaking
- Add a feature where users choose a language before typing
- Create a scoring system to encourage users to type translations correctly.



Code snippets

Puffer fish

```

when clicked
  set voice to squeak
  speak What's your name
  ask What's your name? and wait
  speak join Hello answer
  speak My name is Puffy
  wait .2 seconds
  speak Click on my friends to see which language they speak
  say Click on my friends to see which language they speak for 2 seconds
  
```

Fish

```

when clicked
  switch costume to Fish-a
  set voice to alto
  forever
    if touching mouse-pointer ? then
      if mouse down? then
        speak hello
        speak What would you like me to say?
        ask What would like me to say? and wait
        speak answer
      
```

Translation

```

when clicked
  switch costume to Fish-a
  set voice to alto
  forever
    if touching mouse-pointer ? then
      if mouse down? then
        speak hello
        speak What would you like me to say?
        ask What would like me to say? and wait
        speak answer
        speak translate hello to Spanish
        speak What would you like me to translate?
        ask What would like me to translate? and wait
        speak translate answer to Spanish
  
```

Backdrop

```

when clicked
  set color effect to 2
  forever
    change color effect by 0.2
  
```

Summary

The following information is an example of what a child at an expected level would be able to demonstrate when completing these activities with additional examples to demonstrate how this would vary for a child with emerging or exceeding achievements.

Assessment guidance

Differentiation – Lower ability/ASN

- Provide a printed or digital guide with step-by-step screenshots of the code blocks
- Focus on setting up and testing a single sprite before adding translations
- Allow paired work for additional support.

Differentiation – Higher ability/extension

- Challenge students to create new characters or customise their fish with animations
- Explore how to use variables to store user preferences or selected languages
- Encourage students to add a timer or scoring system for interactive learning.

Plenary

“What did you learn about using Scratch extensions?”

“How does the Translate extension work with Text to Speech?”

“How could this project help someone learn new languages?”

Assessment questions

- What are Scratch extensions, and how do they enhance a project?
- How does the Translate extension work in this project?
- How could you customise the fish to make them more interactive?
- What other types of projects could you create using Text to Speech?