

Text to Speech

45 minutes

Dynamic Digital Projects

WHAT THIS LESSON DOES

This lesson guides students through the process of using the Text to Speech feature in Scratch. Students will learn how to make characters speak, alter their voices and accents, and create a dialogue between two characters. The lesson is hands-on, with students actively coding throughout.

WHAT STUDENTS SHOULD BE ABLE TO DO

- Understand and utilise the Text to Speech extension in Scratch.
- Create and modify Scratch projects with speaking characters.
- Experiment with different voices and accents using the Text to Speech extension.
- Develop a conversation between two characters using different voices and accents.
- Apply coding skills to create more complex and interesting conversations in Scratch projects.

BEFORE THE LESSON

- Open the Scratch website on your own device and confirm it loads through the school filter and that the Text to Speech extension appears in the extensions list.
- Each pupil needs a device with working sound. Text to Speech plays audio, so headphones are strongly advised or thirty sprites talking at once will be chaos.
- Check volume is up but not maxed, and decide whether pupils save to a Scratch account or leave work open in the browser.

Text to Speech

HOW THE LESSON RUNS

Introduction to Text to Speech
Create a new Scratch project
Add a sprite
Add the Text to Speech extension
Speak 'hello'
Say something different
Change the voice
Change the accent
Add a second sprite
Wrap up

TEACHING MOVES

- 4. Add the Text to Speech extension. Show the extensions button at the bottom-left of the blocks palette on the board. Text to Speech is not there by default, so many pupils will hunt for speak blocks and not find them until this step is done.
- 5. Speak 'hello'. Have everyone test with headphones on before you let it play aloud. Say clearly that clicking the sprite runs the code, so nothing happens until they click.
- 7. Change the voice. Get pupils to try all five voices, kitten included, then predict which voice they will use before clicking. Point out set voice must sit above speak to take effect.
- 8. Change the accent. Stress the key point in the note: set language changes the accent, not the words. The English text stays English, just spoken with a different accent.
- 9. Add a second sprite. Model that each sprite carries its own script, and pupils click each sprite in turn to run the conversation. Give differing voices so the two characters are clearly distinct.

WHAT TO WATCH FOR

- Pupils place set voice or set language below the speak block and hear no change, assuming the block is broken. Show that blocks run top to bottom, so the voice and language must be set before the sprite speaks. Have them read their stack aloud in order.
- Pupils expect set language to translate the words into another language, not just apply an accent. Play the same English sentence with two accents so they hear the words are identical. Name what the block does: it changes how English sounds, nothing more.
- Pupils add the second sprite's script to the first sprite, so only one character ever speaks. Remind them to click the sprite they want on the sprite pane before adding code, and to check the name shown above the code area.

DIFFERENTIATION

- Emerging: Give the exact hello block from step 5 and let them succeed with one working speak before changing anything. Pair them with a partner who has the extension loaded so they are not stuck at the extensions step.
- Developing: Have them explain aloud why set voice must sit above speak before moving on to accents. Ask them to write a two-line conversation on paper first, then code it.
- Proficient: Challenge them to build a three or four line back-and-forth conversation across two sprites, timing the clicks. Ask them to give each character a distinct personality through voice, accent and word choice.