ScratchJr: Assessment – Circle the blocks

Summary

ScratchJr is a resource to assess students' understanding of the programming blocks in the ScratchJr iPad app.

Description

This guide outlines how to assess students' understanding of the programming blocks in the ScratchJr iPad app. This assessment guide involves 'reverse-engineering', in which students determine what visual programming blocks have been used to create a simple animation (program).

This assessment was originally designed to evaluate student learning in K–2 classrooms after finishing the ScratchJr **Animated genres** curriculum, but the method could be adapted to any ScratchJr curriculum.

This is an unplugged activity in which students record responses on a handout sheet. This activity could be adapted for younger audiences as a whole-class activity, with the teacher scaffolding students. Teachers will require access to a projector or tablet device to play the ScratchJr script.
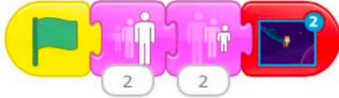
Year level bands

F–2, 3–4

Sample of the ScratchJr 'Circle the blocks' activity sheet

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Guidance for use

This assessment activity can be used after students have been exposed to introductory lessons on how to use the ScratchJr program, the types and functions of the blocks and having had experience in creating simple programs in ScratchJr.

Teachers can collect students' worksheets and mark correct and incorrect responses. This will help determine if students have an understanding of the correct function and use of the visual programming blocks, ability to identify correct script sequences, ability to correctly determine a sequence of blocks that solve a simple problem (an animation).

Some opportunities for extending or adapting this assessment resource are given below:

- Have students work in pairs or small groups to foster discussion and peer-to-peer learning.
- Instead of using the worksheet, have large cut-outs of the blocks and ask students or teams of students to reconstruct the script.
- For younger students, use this as a whole-class assessment activity, where students, with scaffolding and questioning from the teacher, decide on the appropriate script, or reconstruct the script together. The teacher can direct questions to individuals and invite students to explain why they have made certain decisions.
- Extend this activity by having students create their own script challenges for a peer. Have students provide feedback to one another.
- Teachers could use this framework for one-on-one individual assessment with a student. Teachers can ask students to explain why they selected certain scripts to match the animation, providing teachers with greater insight into misconceptions and student understandings.
- Extend this assessment activity to invite students to reconstruct the code using the ScratchJr App. Allow them the opportunity to test and de-bug their script.

Australian Curriculum Digital Technologies alignment
Years F–2
Follow, describe and represent a sequence of steps and decisions (algorithms) needed to solve simple problems (ACTDIP004)

Years 3–4
Define simple problems, and describe and follow a sequence of steps and decisions (algorithms) needed to solve them (ACTDIP010)

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