

Lesson 2: Outcomes

Introduction

During this lesson learners will be taught that a sequence of commands has an outcome. They will predict the outcomes of real life scenarios and a range of small programs in ScratchJr. Learners will then match programs that produce the same outcome when run and then use a set of blocks to create programs that produce different outcomes when run.

Learning objectives

To explain that a sequence of commands has an outcome

- I can predict the outcome of a sequence of commands
- I can match two sequences with the same outcome
- I can change the outcome of a sequence of commands

Key vocabulary

Sequence, command, outcome, predict, program, blocks




Ask the children 'If you mix butter, flour, eggs and sugar together, place it in a baking tray and then cook it in the oven what do you think the outcome will be?' Allow time for the learners to think, pair and share their ideas. Tell the learners that the outcome would be a cake.

In Scratch Jr when we set a sequence, there is always an outcome, however, we can always change the outcome by changing a block or adding to the sequence.




The task this week is to create a program using your chosen sprite and background. Create at least 3 different sequences, where your sprite goes to a different location. Once you have experimented with different outcomes, consider the length of the programs you created. Were the short ones better than long ones or the other way around? Are long sequences in computing always better?

Sometimes, you can have different programs that produce the same outcome. This is where you can use your maths knowledge. 10 pieces of code is the same as 5 pieces together with another 5 pieces. ($1 \times 10 = 10$ and $2 \times 5 = 10$). But, which would be easier to read?

Have a look at these sequences:


1. 
2. 
3. 

These programs produce the same outcome.

1. 
2. 
3. 

Question: Which program do you think is better and why?

These programs produce the same outcome.

1. 
2. 
3. 

Question: Which program do you think is better and why?

Long programs can be tricky to read as there are lots of blocks. Also, longer pieces of code can sometimes be hard to fit into the coding window. So, when you construct your program, consider your sequence carefully.