

Lesson plan template

makeblock

Cross curricular links: Developing skills to script block based programs	Age group: 9/10	Duration: 1 hour
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<p>Objectives: students should be able to:</p> <ul style="list-style-type: none"> ● understand what AI is ● follow instructions to edit a block based program ● Execute a script of code that involves AI (voice recognition)
<p>Resources:</p> <ul style="list-style-type: none"> ● Desktop or laptop computers ● AI powerpoint presentation ● mblock (browser based version or downloaded version)

Duration 10-20 mins	<p>Mini lesson (introduction): <i>(whole class)</i></p> <p>Brainstorm with students what AI is. Record their responses.</p> <p>Watch this short video that explains AI in less than 2 minutes</p> <p>https://www.youtube.com/watch?v=fvtrRGmv7aU</p> <p><i>(this video is optional and can be either left out or substituted with another)</i></p> <p>Together with you students, define what AI is.</p> <p>Explain to students that AI is controlled by a program: a script of instructions that tells it what to do.</p> <p><i>(Optional: together develop a set of step by step instructions to guide a robot to make a cup of tea)</i></p>
Duration	<p>Main activity: <i>(Students can work individually or collaboratively in pairs)</i></p> <p>Using the Artificial Intelligence and programming powerpoint, allow students to work step by step at their own pace to edit the word recognition program to become a voice recognition program</p> <p><i>(Optional)</i></p> <p>The following points within the powerpoint can be demonstrated in advance if</p>

	<p>students have no experience with block based programming:</p> <ul style="list-style-type: none">➤ Getting started➤ Creating a variable➤ Editing wait time➤ Deleting a block➤ Adding a new block➤ Replacing a block
Duration	<p>Conclusion:</p> <p>Allow students to 'test' each others edited script by running the script and saying the 5 programmed words.</p> <p>They should look for:</p> <ul style="list-style-type: none">- Does the result variable register what the computer 'thought' you said?- Are the correct pictures (sprites) appearing when the computer recognises the word correctly?

Notes:

Opportunity to reflect:

Discuss with the students what they found challenging with regards to editing the program

-What would they do differently?

Can students think of any other simple AI projects that they could create?