

Your Voice is Power Mapping (Secondary)

Overview & Mapping – Programme of Study (Computing)

Lesson	Lesson Objectives	Programme of Study for Computing statements
1	<ul style="list-style-type: none"> Mix music using Python or JavaScript. They will explore some of the basic features to play a sound from a library and use input() subroutines to set the temp of the sounds that they have selected. Whilst coding this user interaction, they will learn about in-built functions to assist with activities later in the lesson series where they will use APIs 	3.2, 3.3, 3.7, 3.6, 3.8, 3.9)
2	<ul style="list-style-type: none"> Explore layers of injustice using the OUTKAST framework by listening to lyrics from the song 'Entrepreneur' by Pharrell Williams. They will understand the importance of entrepreneurship and how it can promote social justice. Taking the idea of layers, they will understand how to organise their music making use of lists where they will understand how to use indexes to output items within the list. They will generate a larger list of samples where they will use Python to find their best combination of instruments through trial and error. 	3.1, 3.2, 3.3, 3.4, 3.7
3	<p>Explore selection in Python through the use of if, else and elif statements.</p> <ul style="list-style-type: none"> They will relate this practical application to the decision-making of young people through youth activism, standing up against racism and advocating social justice. They will code a jukebox style application in EarSketch where pathways are created through their program with if statements to enable the user to select sound samples that they wish to play. 	3.3, 3.4
4	<ul style="list-style-type: none"> Explore the use of for loops to reduce the amount of repeating code when playing multiple samples in parallel. They will continue to develop their message in their music through looking deeper at awareness, analysis and action and use comments and print statements to portray these messages in their code. They will also make use of their existing knowledge of arguments and they begin to code their own for loops to output sample items which they will have stored in a list or multiple lists. 	3.3, 3.4, 3.5

CURRICULUM MAPPING | Your Voice is Power (Secondary)

5	<ul style="list-style-type: none"> Develop their understanding of how a song is structured and modularise their code by including examples for an intro, chorus and verse. They will experiment with interleaving different sound samples to increase the effect of the instruments that they have selected. To support with the development of their music, they will cover additional content with a focus on making best use of the DAW visualisation through layering to support debugging. 	3.3, 3.4
6	<ul style="list-style-type: none"> Develop their own custom functions to modularise their code further and to handle multiple instances of their music including the chorus. They will combine their knowledge of iteration, lists and functions to create their final digital artifact. At the end of this lesson, students will share their work with peers for reflection, feedback and to celebrate the multiple messages that the class are sharing through music. 	3.1, 3.3,

Overview & Mapping – Teach Computing Curriculum Year 9 Programming Unit

Label	Teach Computing Curriculum Statement	Covered in Your Voice is Power	YVIP Specific
PS	Use an IDE to write and execute a Python program.	Lesson 1, Lesson 2, Lesson 3, Lesson 4, Lesson 5, Lesson 6	
PS	Locate and correct common syntax errors.	Lesson 1, Lesson 2, Lesson 3, Lesson 4, Lesson 5, Lesson 6	
CS	Call functions and use the results they return in expressions.	Lesson 1, Lesson 2, Lesson 3, Lesson 4, Lesson 5, Lesson 6	
PS	Use variables to keep track of information.	Lesson 1, Lesson 2, Lesson 3, Lesson 4, Lesson 5, Lesson 6	
PS	Trace through branches and loops and sketch state.	Lesson 3, Lesson 4, Lesson 6	

CURRICULUM MAPPING | Your Voice is Power (Secondary)

CS	Use selection (if) to control the flow of program execution.	Lesson 3	
DTAS	Create lists and access individual elements	Lesson 2, Lesson 4	
PS	Trace through programs that manipulate lists.	Lesson 4	
DTAS	Perform common operations on lists.	Lesson 2, Lesson 4	
DTAS	Access individual string elements (characters).	N/A	
CS	Use iteration (while) to control the flow of program execution.	N/A	
DTAS	Perform common operations on strings.	N/A	
PS	Use variables to keep track of counts.	Lesson 4	
PS	Trace through programs that iterate over sequences using for.	Lesson 4, Lesson 5, Lesson 6	
CS	Use iteration (for) to iterate over lists.	Lesson 4	
PS	Use variables to keep track of sums.	N/A	
PS	Combine features to develop solutions to meaningful problems.	Lesson 1, Lesson 2, Lesson 3, Lesson 4, Lesson 5, Lesson 6	
CS	Use iteration (for) to iterate over strings.	N/A	
		Lesson 1, Lesson 2, Lesson 3, Lesson 4, Lesson 5, Lesson 6	Use code to represent and modify sounds in a computer.
		Lesson 1, Lesson 2, Lesson 3, Lesson 4, Lesson 5, Lesson 6	Manipulate the tempo of a music score using Python.

CURRICULUM MAPPING | Your Voice is Power (Secondary)

		Lesson 1, Lesson 2, Lesson 3, Lesson 4, Lesson 5, Lesson 6	Apply a structure to an output using code.
		Lesson 6	Create Custom functions and call them to perform a specific purpose.

PS = Programming Skills

CS = Control Structures

DTAS = Data Types and Structures