SOLO taxonomy: Problem-solving processes (5-6)

DIGITAL TECHNOLOGIES HUB

We are creating an online game				
SOLO LEVEL	One	Many	Relate	Extend
SOLO VERB	*Identify isolated skills*	*Describe and combine serial skills*	*Integrate skills*	*Evaluate skills*
DECLARATIVE KNOWLEDGE Knowing about (talking or writing about) the programming code Creating a digital solution using visual programming language Success criteria	I can **DEFINE** a problem identifying functional and data requirements I can **IDENTIFY** **…** the use of isolated visual programming skills when programming For example, the use of: ☐ an if/then statement ☐ loops or repetition ☐ user input	I can **DESCRIBE** … the use of isolated and combined visual programming skills when programming For example, the use of loops when: ☐ incorporating repeat instructions ☐ allowing for varied user input ☐ selecting options (for example, in a quiz)	AND I can **EXPLAIN** my programming choices – when programming a digital solution such as an animation, quiz, choose your own adventure story or controlling a robotic device	AND I can **EVALUATE** the effectiveness of my digital solution in meeting its functional requirements for: ☐ meeting its intended purpose ☐ user input.
FUNCTIONING KNOWLEDGE Knowing how to … Creating a digital solution using visual	I can interpret an algorithm presented as a flow chart	I can create an algorithm that I use to plan out a program for a digital solution.	I can independently and confidently create a digital solution using a visual programming language	AND I can seek and act on feedback to improve the effectiveness of my programming choices as I go.

| programming language

Success criteria | I can use a visual programming language **IF** I copy programming examples created by someone else | I can create a paper prototype of my design to show screen transitions

I can independently program a digital solution using a visual programming language

BUT I am not sure about my programming and I struggle to debug any errors that occur | AND I can debug as I build (correct my own code) | |
|---|---|---|---|---|
| **Digital technologies**

Way of thinking | Design thinking | **Computational thinking**

Design thinking | **Computational thinking** | **Systems thinking** |

As learning progresses, it becomes more complex. SOLO stands for the Structure of the Observed Learning Outcome. It is a means of classifying learning outcomes in terms of their complexity. It can help differentiate a task to enable students to operate at their level and provide learning tasks that are progressively more challenging.

For more about SOLO Taxonomy refer to these websites

John Biggs Solo Taxonomy

HookED: Solo Taxonomy