"A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world."

UK Government National Curriculum ambition for computer science

CODING IS MORE THAN JUST CODE, IT IS COMPUTATIONAL THINKING!

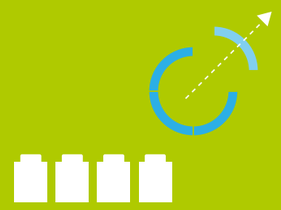
Computational thinking is a way of approaching and solving complex problems, it consists of a set of skills:

LEGO® Education
WeDo 2.0

1.

DECOMPOSITION

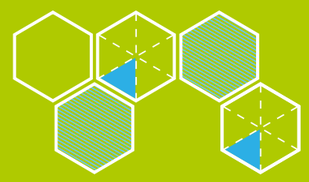
Breaking down a problem into smaller parts.



2.

GENERALISATION

Recognising patterns to identify possible solutions.



3.

ALGORITHMIC THINKING

Defining a sequence of steps to solve the problem.

This skill is central in coding

4.

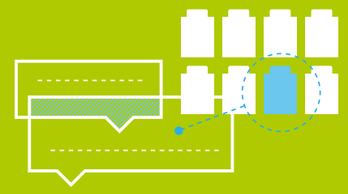
EVALUATION

Identifying improvements and refining ideas.

5.

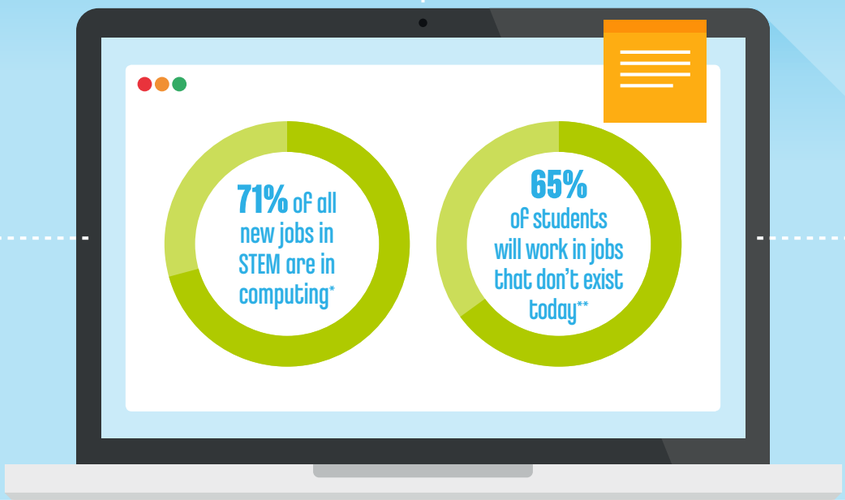
ABSTRACTION

Conceptualising and communicating the problem or solution.



How does computational thinking help close the skills gap?

The world will continue to change at an incredible pace and to thrive in the future every student needs the skills to be able to adapt to different situations and to excel in jobs that haven't even been invented yet. Computational thinking gives every student the set of skills to solve complex challenges with confidence.



There's more to coding than just code

To truly harness the power of technology, children first need to learn how to think through complex problems and define possible solutions in a way that a computer can understand, test and implement for them.

Coding is simply the means by which we instruct and control technology. The critical skill is the way of thinking - computational thinking. It's an approach to problem solving that can help students in all STEM subjects and beyond.

LEGO Education WeDo 2.0 helps Elementary students to develop computational thinking by encouraging them to explore, create, test and share solutions to engaging challenges that fulfil STEM curriculum requirements. To find out more visit: www.LEGOeducation.com

* World Economic Forum, The Future Jobs Report ** Bureau of Labor Statistics, National Centre For Education Statistics

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