Discover COMPUTATIONAL THINKING

Computational Thinking combines critical thinking skills with the power of computing.

These skills provide an important foundation for learning to code, but are fundamental for success in school and life – not just computer science.

THE SIX STEPS OF COMPUTATIONAL THINKING

To get started, have students think about solving a problem much like a computer would.

PATTERN RECOGNITION
Seek out similarities or patterns in the problem

ALGORITHMIC DESIGN
Create the steps to complete a task

MODELING
Develop representations of data or ideas

DECOMPOSITION
Break a problem down into smaller parts

ABSTRACTION
Focus on important ideas and leave out the unnecessary ones

ASSESSING
Use effective methods to test and evaluate

THE CLASSROOM AND BEYOND

Computational Thinking can be applied across all core areas. Try some of these activities with your students to help them identify the concepts in life outside the classroom.

ELA

WRITE AN OUTLINE FOR A STORY

Decomposition

SOCIAL STUDIES

IDENTIFY TRENDS IN POPULATION STATISTICS

Patterns

SCIENCE

DRAW THE KEY ELEMENTS OF AN ANIMAL

Abstraction

MATH

MAKE A CHART TO SUMMARIZE DATA

Modeling

By providing students with a foundation in Computational Thinking, you'll also help them learn to create innovative solutions for real-world challenges.

Learning.com