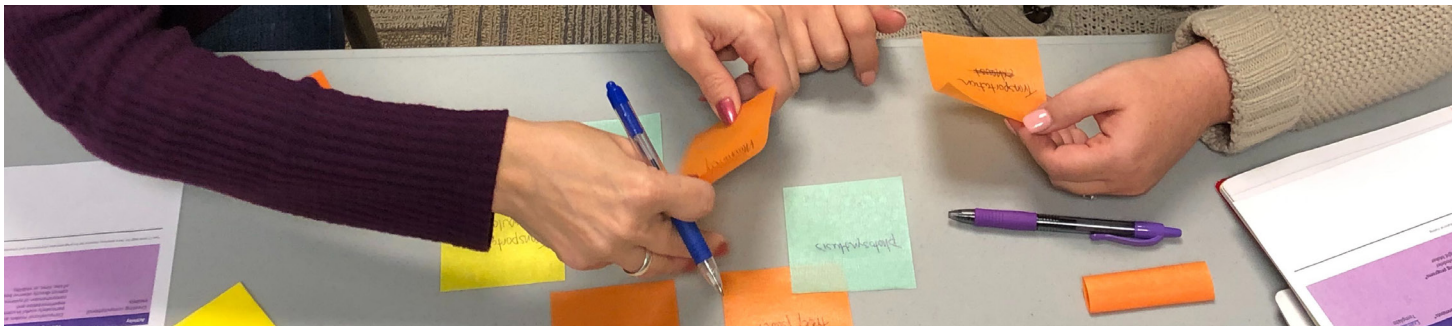
Computational Thinking for Elementary School

A professional learning cohort for elementary school teachers of all subjects and disciplines



Program Overview

Computational thinking is a set of overlapping problem solving skills that can be used in a variety of different settings. Through two in-person workshops, a virtual professional learning cohort experience, and additional coaching by Digital Promise, teachers will uncover the interdisciplinary nature of computational thinking as they develop cross-disciplinary units.

Contact us at learning@digitalpromise.org to learn more.

Earn Micro-credentials

This program supports educators to demonstrate their learning and receive recognition through earning the Integrating Computational Thinking into Curriculum micro-credential.

Workshop 1: Working with Data

Participants will collect, analyze, and visualize data that is meaningful to their students and communities to apply in interdisciplinary contexts at the elementary school level. Participants may find patterns in mathematics, conduct investigations in science, use data to make arguments in language arts, or explore different perspectives in social studies. Participants will work together to collect or identify data that is aligned with cross-disciplinary learning goals, and then apply developmentally appropriate practices for analyzing and communicating data to a particular audience.

Workshop 2: Creating Algorithms

An algorithm is a description of how to do something in a precise and repeatable way. In this session, participants will develop an algorithm to apply in interdisciplinary contexts at the elementary school level. For example, participants may develop algorithms to solve math problems, sort or categorize adjectives in language arts, or troubleshoot a design problem in science. If accessible to teachers and students, participants may use developmentally appropriate computational tools, such as tangible blocks (e.g. Codeapillar), block-based code (e.g. Scratch) or computational kits (e.g. LegoWeDo) to create algorithms.

Coaching and PLC: Implementing Computational Thinking

After each workshop, participants will meet monthly online as a cohort to discuss the new techniques they are implementing in their classrooms and receive feedback and support from both their fellow cohort members and their Digital Promise coach. They may also schedule additional time with their coach for individual support.

For more information on computational thinking visit:
digitalpromise.org/initiative/computational-thinking/

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