Virtual Professional Development

Computer Science Pedagogy And Instructional Strategies

Overview

Schools, parents, and lawmakers agree that technological fluency is essential for students' success. Despite this fact, computer science education is still relatively new in K-12 spaces. What are the best practices when teaching computer science? How do we provide a space where all students see themselves as computer scientists?

In this session, we will dive into the tenants of computer science pedagogy. As participants in various learning experiences, you will dissect ways to make computer science approachable and engaging. You will leave the session with a self-created lesson supporting learning for a diverse student-body.

Learning Outcomes

This 3-hour virtual professional development session is designed to support teachers as they

- Use known frameworks for teaching and learning to design and implement high-quality CS instruction.
- Incorporate elements of choice to foster self-directed learning, increase motivation, and develop interest in CS.

Outline

- Make introductions and set expectations for the session
- Experience computer science lesson frameworks and models as a learner
- Discover the main philosophies underpinning computer science pedagogy
- Participate in and evaluate unplugged and coding teaching strategies
- Apply new learning to plan a computer science lesson in context

What To Expect from Our Virtual PD

Each virtual PD session gives teachers the best of both worlds: the active and collaborative learning of traditional face-to-face sessions, with the convenience afforded by online offerings. A variety of formats and strategies engage participants in making the learning their own. For example, participants may share their thoughts and ideas in interactive polls, chats, or collaborative digital tools. Working in small groups or the 'alone zone', participants construct meaning from their shared experiences. Most importantly, they will always have time to consider - and even plan for - how they will take what they have learned back to their classroom.