

Professional Development for High School Teachers: Enhancing Your Classroom with Computational Thinking

What Is Computational Thinking?

- Computational thinking is a set of tools or strategies for solving complex problems. It is a high-level thought process that views problem-solving through a computational lens.
- It begins with learning to see opportunities to compute something, and it develops to include such considerations as appropriate ways to represent data, making simplifications and approximations, and computational efficiency.
- It relates to mathematical thinking in its use of abstraction, decomposition, and modeling, but it is directly cognizant of the ability to compute and the benefits of doing so.

You are probably already using computational thinking in the courses you teach. This course will help you to recognize it and illuminate it for your students.



What Is This Professional Development Course?

- It is an online course that will introduce you to the basic ideas of computational thinking and help you to integrate it into the classes you teach.
- It is being developed by the DIMACS Center at Rutgers University with support from the National Science Foundation.
- The course begins with an in-person pre-course workshop June 20, 2020, at Utah State University, Logan, UT. The online course immediately follows and runs from June 20-July 19, 2020.
- Participating teachers receive a professional development certificate from Rutgers, free admission to the course, and \$1000.00 for completing the course and implementing some of the activities in their classrooms.



More Information: Please contact Neal Legler at neal.legler@usu.edu or Carl Anderberg at canderberg@helenaschools.org for admission to the course. Please note that attending the pre-course workshop is mandatory. It will provide important information about the course and how to use the online platform. **For more information or to apply online, visit: <https://CTPOnline.org>**