

Summer Technology Institute

Instructional Technology Programs

August 2 - 4, 2022

Strand 4

Computational Thinking for Collaborative Problem Solving



Jeff Bailey

Technology Teacher
Mountain Valley High School
Farmington, ME

jeffrey.bailey@maine.edu

@JBailey8 



Dan Ryder

Learning Facilitator
CRCS Overman
Skowhegan, ME

Daniel.ryder1@maine.edu

@WickedDecent 

Strand Description

How might learners explore computational thinking in the service of solving community based problems? In this strand, participants will learn the essential components of computational thinking as well as strategies for applying those skills to human centered design challenges in our communities. This strand will be a true fusion of computational thinking, design thinking and project based learning.

Strand Outcomes

Participants will leave with a plan to solve a problem relevant to their own work that will draw on principles of Computational Thinking and work through the phases of Design Thinking. They will create a visual representation and pitch that solution to their peers.

Presenters Biographies

Jeff Bailey

Jeff Bailey is a technology teacher at Mountain Valley High School. He teaches Computer Science, CAD, architectural design and engineering, and serves as the co-advisor of the Civil Rights Team. He spent ten years as an English teacher at MVHS before switching to technology. Jeff holds a Bachelor's of Science in secondary education from the University of Maine at Farmington and a Master's of Science in Educational Technology from the University of Maine. Jeff is also an adjunct instructor in the UMaine Graduate Education program, focusing on Computer Science and

Computational Thinking. He was also the 2014 Oxford County Teacher of the Year and Lawrence O'Toole Award recipient. He lives in Jay Maine with his wife and daughter. He stays busy helping with his daughter's robotics team, running table top and role playing games and working on matters of equity and anti-racism in his school and community.

Dan Ryder

Idea wrangler, design thinker and head scratcher, Dan Ryder serves as a learning facilitator at CRCS Overman, a project-based, unapologetically learner-centered public charter school in rural Skowhegan, Maine. His daily work integrates best practices of human-centered design, restorative practices, social emotional learning and makerspaces. He's the co-author of [INTENTION: Critical Creativity in the Classroom \(Blend Learning, 2019\)](#) and writer of [PANELS & PERSPECTIVES: Creating Comics in the EFL Classroom \(US Dept of State, 2019\)](#). He can be found on social media [@WickedDecent](#) and at www.DanRyder207.com