HANDS-ON MINDS-ON INDUSTRIAL PRACTICES

Name of Submitter: Noa Stuchiner **Submitter Email: nstuchiner@chccs.k12.nc.us**

Presentation Title: Modeling Energy in K–12 Science

In this hands-on session, participants will engage in three grade-banded modeling tasks — elementary, middle, and high school — using everyday electrical phenomena as the anchor. From flickering hallway lights to slow phone chargers, educators will build, draw, and revise physical and mathematical models to uncover the invisible flow of energy in circuits. Participants will explore how students make sense of energy using low-cost materials and N.C. -aligned SEPs like developing models and using math to explain real-world events. All attendees will leave with ready-to-use activities, student modeling tools, and a budget-friendly circuit modeling kit that brings energy concepts to life across K-12.

Presentation Target:

Middle School

Presenter(s):

1. Noa Stuchiner, Director of Elementary Math and Science, Chapel Hill-Carrboro City Schools
2. Valerie Sellars, Secondary Science District Lead, Chapel Hill-Carrboro City Schools