An ongoing challenge of teaching STEM classes is engaging students with one another and with the instructor. Many of us are exploring cooperative learning or other forms of active engagement to encourage students to be active and responsible participants in their own learning as well as in the learning of other students. *But, how do we structure these experiences in our classrooms, many of which have fixed seating, to ensure that they are most effective and achieve our aims (i.e., student learning)?*

This session emphasizes the instructor’s role in designing and implementing individual and group strategies in connection with active and cooperative learning. These strategies are research-based, and include positive interdependence, individual and group accountability, face-to-face interaction, teamwork skills, and group processing. Examples will be provided to help the participants select, design, and revise cooperative learning and problem-based learning materials. The workshop is hand-on, interactive, and focused on helping participants select, prepare, and structure cooperative and problem-based learning materials and strategies for their classes. Participants will learn how to overcome the challenges and barriers to implementing active and cooperative learning.

Session Objectives:

Participants will be able to describe:

- Key Elements of Cooperative Learning, especially interdependence and accountability
- Approaches for implementing cooperative learning in STEM classes

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