

Improving student learning through understanding reasoning and problem solving practices

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Thursday, February 23
4-5pm in ASB 210

A reception will follow the lecture

Abstract:

Classroom practices affect student behavior, and by extension, their learning. Through studying how students discuss clicker questions in active learning classrooms, we have found that students struggle to use reasoning when answering in-class questions. However, student use of reasoning increases when they are cued by their instructors, by peer Learning Assistants, or when under pressure of accountability. Can students transfer their in-class, question-solving practices to individual assessment opportunities that require sound reasoning? We have begun to study how students independently solve complex problems through think-aloud interviews and written documentation of their problem-solving processes, in the hopes of understanding how to better help them become life-long problem-solvers.



Dr. Knight is an Associate Professor of Molecular, Cellular, and Developmental Biology at the University of Colorado. She has a Ph.D. in Neuroscience and worked as a researcher in developmental biology and genetics before turning to science education. Her work now focuses on transforming biology curriculum through developing and using active learning materials and concept assessments, studying best practices of in-class peer discussion, and understanding how students engage in complex problem solving, particularly in genetics.



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