

RIT's CASTLE

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The Center for Advancing Scholarship to Transform LEarning

People

- Co-directors: Dina Newman, Ben Zwickl
- 5 additional core faculty members in STEM Education (Science, Math and Engineering), 8 postdoctoral researchers, 3 graduate students
- 14 additional affiliate members (faculty from COS, CET, COLA, NTID, GCCIS)

What do we study?

- **Conceptual understanding and assessment**
- **Problem solving and mathematics**
- **Computational and visual literacy**
- **Workforce development**
- **Inclusive practices**
- **Effectiveness of new learning methods/tools**

We can partner with you on research!

Some research ideas from our meeting

- How are AI tools used/viewed by students compared to human interactions?
- Do AI tools undermine deep thinking?
- What are faculty concerns? What are the challenges to uptake?
- Can they provide better individualized learning opportunities?
- How can they be used to find and address common difficulties/gaps?
- Can they be used to reduce anxiety (e.g. with math or coding)?
- How good is AI at explaining mathematical reasoning?
- How do conversations with AI chatbot, peer group learning and professor/TA tutoring compare to each other?
- How would students respond to metacognitive prompts from an AI tool?