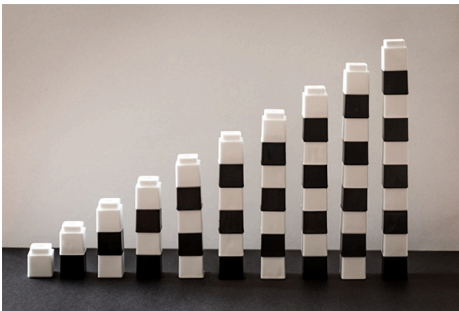


# Dr. Kaitlin Bundock's Research on Math Interventions for Students with Disabilities Receives CLD Must Read Award

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Students in Bundock's study used interlocking blocks to visualize and solve math problems involving slope and constant rate of change.

Dr. Kaitlin Bundock, assistant professor in Special Education and Rehabilitation Counseling in the Emma Eccles Jones College of Education and Human Services at USU, was recently awarded the 2021 [Council for Learning Disabilities](#) Must Read Award.

Every year, the Council for Learning Disabilities (CLD) recognizes outstanding work published in its journals with the Must Read Award. [Bundock's award-winning article](#) was included in *Learning Disability Quarterly* and outlines the results of a math learning intervention she tested with ninth grade students with learning disabilities. She will be recognized at the annual CLD conference in October.

"It's a huge honor," said Bundock. "The Council for Learning Disabilities is wonderful organization that does a lot within the United States and internationally, so it's a great honor to be recognized by them. I'm excited about attending the conference to present my research."

Bundock's project utilized interlocking blocks as learning tools to help students with disabilities (such as learning disabilities, autism, and attention-deficit/hyperactivity disorder) visualize rate of change word problems. Students used the blocks to represent their math problems, allowing them to understand the concepts of rate of change and slope more concretely. In addition to this method for

solving rate of change problems, students were taught a flexible problem-solving strategy to help them identify the problem, outline a process, and describe and defend how they came to their answer.

It's these additional self-assessment skills that Bundock says are becoming essential for success on state and national tests. "A lot of high-stakes test these days ask students to explain their thinking," she said. "It demonstrates a higher level of understanding if they can really describe why they know their answer is correct."



Dr. Kaitlin Bundock

All of the students who participated in the study showed significant improvement in identifying the slope of a graphed line and solving constant rate of change word problems, and Bundock hopes to continue to work on methods to improve student success for variable rate of change problems.

Bundock's research is informed by her own experiences teaching mathematics as a high school special educator teacher in Kona, Hawaii. While a large body of research on teaching fundamental concepts to students with disabilities has evolved over the past 20-30 years, research on middle and high school level interventions is still much less available, particularly in the area of mathematics education. "There just weren't that many resources for teaching higher level mathematics concepts to students with disabilities at the high school level," she said. "I decided I wanted to get my PhD so I could help identify

methods that already exist, but also work to develop different interventions that would be appropriate for higher level content.”

As she continues to build a network of researchers studying similar concepts, Bundock sees secondary math education as a vital area for expansion, both in terms of furthering the field of education and improving the lives of students with disabilities. Math skills can be a barrier to attending college or accessing certain career paths, and high-level math concepts are applicable in everything from construction to cooking.

Bundock hopes to continue to explore ways to help individuals with disabilities reach their potential. “I think oftentimes people assume that students with disabilities just aren’t going to improve past a certain level once they reach high school,” she said. “Research like mine can really demonstrate that it’s worth investing time and efforts to help these students improve. It’s combating a lot of biases about what students with disabilities can or can’t do.”