How can young students' interest and achievement in mathematics be improved? Dr. Jessica Shumway, assistant professor in USU's School of Teacher Education and Leadership, speculates that one way could be to strengthen students' “number sense.”

“Number sense” describes one’s understanding of number relationships and ability to manage numerical situations.

Research has shown that number sense gained early in life can predict mathematical achievement later. A strong number sense foundation is a critical component to children developing an interest in STEM fields.

Shumway’s work is being funded through a Grant-Writing Experience through Mentorship (GEM) seed grant, a unique format that allows Shumway to develop her grant-writing skills while collaborating with a skilled mentor. Dr. David Geary, professor of psychology at the University of Missouri-Columbia, will be Shumway’s advisor and collaborator.

Their research through this grant will focus on the way different teaching methods influence a child’s number sense development. Shumway’s long-term goal is to gain a better understanding of which classroom practices are most effective.