Creativity is thinking up new things.

Innovation is doing new things.

CISSTEM is an intellectual playground where scientists can collaborate, experiment, evaluate, explore, and grow innovative STEM activities.

Can Kindergarteners Do Fractions?

CISSTEM researchers are collaboratively investigating how very young children come to understand fractional concepts. They are interviewing and assessing children ages three to five to investigate the mathematical prowess that emerges prior to formal classroom instruction. These results could dramatically inform the way mathematics is taught in this country. S302K NSF

Project WetKids: Immersion across the Gulf

ProjectWetKids.net has been funded by the National Science Foundation over the past six years. This out-of-school STEM program provides teachers, students, and families on the Gulf Coast wetlands, estuary, and watershed experiences. Our focus is on increasing STEM content knowledge and exposing students to STEM career fields. S900K NSF, GOMA

Pioneering Mars: Turning the Red Planet Green with Earth’s Smallest Settlers.

Researchers are mimicking Martian conditions on earth and the International Space Station to grow algae with the long range vision of turning the red planet green. High school teachers and students in AL and MS are working with scientists at USA and USM to monitor, measure, and analyze data. Classroom materials will be shared via the ISS Live! More project details can be found at Pioneeringmars.org S278K NASA

Weather Spider: Constructing a Web of STEM Understanding

Meteorologists in CHILI: The Center for Hurricane Intensity and Landfall Investigation and CISSTEM researchers are collaboratively developing mobile applications to increase STEM understanding of weather data collection, equipment, model creation, analyses, and predictions. Twenty partners across the Gulf Coast region will partner to develop and share weather models through gamification for K-12 students, teachers, and citizen scientists. $2.5M Under Review

The future of interdisciplinary STEM research and innovation...