



# OKLAHOMA EPSCoR UPDATE

Promoting Innovative Research



OK NSF Established Program to Stimulate Competitive Research | December 2021

## The University of Tulsa Holds 4th Annual Native American STEM Competition and Teacher Conference

On November 22, 2021, over 1,000 middle school and high school students from across the state participated in a one-day competition during the 4th Annual Native American Science, Technology, Engineering, and Mathematics (STEM) Competition, which was concurrently held with a Teacher Conference at The University of Tulsa.

School teams, composed of five students each, competed against other school teams in diverse and engaging STEM activities, including cryptography, math and car design challenges, an egg drop engineering project, and more. Each team was comprised of a majority of Native American students. These teams were nominated by a teacher, who was onsite at the concurrent Teacher's conference.



The annual program was presented by Dr. David Brown, Associate Professor of Education at The University of Tulsa, and was funded by the Oklahoma Established Program to Stimulate Competitive Research (EPSCoR), the National Science Foundation, and The University of Tulsa.

"Our major goal is to increase STEM participation among under-represented groups with emphasis on Native Americans in the K-12 demographic," Brown said.

"This education program will help prepare our students to pursue STEM-related degrees," he added.

STEM and climate or meteorological awareness, inspire creativity, and engage the cultural sensitivity of participants. As a component of participation, students must present a digital journal, highlighting their experiences, to their schools after the event. Awards were given to the

winning teams in each division.

The teachers who brought students to the event participated in a concurrent conference that addressed teaching STEM to underrepresented minorities and provided tools to successfully implement STEM in today's classroom. A post-event teacher workshop will explore the conference's impact on students in the classroom. Participating teachers may receive Graduate credit.



**Students participating in: A) Egg Drop, B) Math Toss, and C&D) Slingshot Challenges.**

Student teams competed in one of three divisions: All-girls teams, all-boys team, and co-ed teams. A variety of interactive, hands-on challenges (e.g., scavenger hunt, cryptography, engineering challenge) as well as a scientific poster competition increase

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