



GK-12 REGIONAL CONFERENCE

**Ohio University
Athens, OH**

STEAM (Science and Technology Enrichment for Appalachian Middle-Schoolers)

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The STEAM (Science and Technology Enrichment for Appalachian Middle-schoolers) project, funded by the NSF GK-12 program, aims to broaden graduate education for engineering students at Ohio University and improve learning in science courses for middle schoolers at surrounding middle schools. Each year, STEAM Graduate Fellows will work with school teachers to create and deliver engaging digital curricular content that can produce learning with engagement among students in grades six through eight. This project will help enhance partnership and enrich learning environments between Ohio University and the schools.

In this project, the Graduate Fellows and the participating school teachers will go through a week-long summer training session each year. They will form a learning community in which they can engage in mutually beneficial interactions while developing a sense of coherence and shared purpose, as well as sustaining interest and enthusiasm. The middle schoolers will engage in more effective learning in science courses by using and extending pre-constructed computer models to develop higher-order thinking skills of synthesis and evaluation as they apply new science concepts to simulated science investigations.

