



## **Engaging Youth in Climate Change Issues with Family Science Day Activities**

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Dickinson State University organizes four Family Science Day events each fall during the months of September, October, November, and December. Activities are geared toward elementary-aged children to increase student engagement in the sciences. Offered on Saturday afternoons, each event focuses on a different science-related theme. Families can attend these events free of charge, and the kids participate in a large variety of hands-on activities that center around the event's theme.

This year, the November event focused on climate change, including an emphasis on the roles soil plays in the climate system. The timing of this topic was carefully chosen. 2015 has been declared the International Year of Soil by the United Nations, and the Soil Science Society of America theme for the month of November was Soils and Climate. This public outreach event was an amazing opportunity to help the youth in our community learn about climate change in a fun, interactive environment. Climate changes in the past, present, and future were emphasized. Activities including the Farming Game, painting with soils, taking Jello "cores", creating a cloud in a jar, and making a glacier in a bag helped children learn how science is a process of discovery that allows them to better understand the world they live in. In addition to the hands-on activities, a planetarium show focused on climate change was also offered during the event, surrounding the kids and their parents in a fully immersive, 360-degree show that allowed them to personally observe phenomena that are otherwise difficult to visualize.

All of the activities at the Family Science Day event were staffed by university students, and this proved to be a very valuable experience for them as well. Some of the students who helped are majoring in a science field, and for them, the experience taught public communication. They learned to break complicated concepts down into simpler terms that young kids could understand. Education students who participated learned how to communicate science concepts to children, and students in other majors who helped with this event gained experiences that reinforced various concepts they had learned in their general education science courses.