FARM ROCKS TO MOON ROCKS

Science is all around us. UNI Alumni and Iowa Academy of Science (IAS) Education Coordinator, Eve Halligan, is working hard to bring science into focus for students and adults. She is the bridge connecting educators to the IAS and students to the Junior Academy of Science.

Eve's path to IAS started when she was young girl on their family farm near Shell Rock. Always wanting to be outside, and finding fossils and other cool rocks in the rock pile in her yard, she became very familiar with the intense storms that would often pass through. Rather than letting the fear of these storms cripple her, she challenged her fear and decided she was going to study and understand the weather. By the time Eve was in Junior High at Waverly-Shell Rock Community Schools, she knew she wanted to go to college to study Atmospheric Science. Her parents and her physical science teacher, Mr. Verdon, inspired and encouraged her to pursue this dream.

The UNI Math and Science Symposium, a competition for high school students solidified Eve's path towards UNI. She won a scholarship in the Earth Science Department. Dr. Alan Czarnetzki was Eve's advisor. She shared that he is a wonderful educator, loves what he does and "represents all the attributes that I would aspire to or would encourage anyone else to." In her current position, Eve has been able to work with Dr. Czarnetzki through UNI’s IMPACT Program and is amazed at how much she can still learn from him.

After graduating with a bachelor's degree in Earth Science and a minor in Meteorology, Eve's career has been nothing short of amazing but not without its twists and turns. Her original plan was to work for the National Weather Service, being involved in formulating the daily forecasts. It was this constant change that Eve sought because she enjoys new challenges and the daily development of her own skills. To achieve this goal she sought additional coursework in Meteorology and Climatology at the University of Nebraska-Lincoln in the Geosciences Department.

An opportunity to work for the Bluebird Imaginarium as a Science Educator brought Eve and her family back to the Cedar Falls-Waterloo area. Here, she interacted with people of all ages. She had to be comfortable with the creeper-crawlies such as the snakes, tarantulas and cockroaches as the creature demonstrations were always very popular with visitors. She learned how to grab the attention of her audience as she presented the interactive science demonstrations. Her goal was to get the audience pulled into the experiments so that they would get curious, involved and ask questions. It was rewarding for Eve to see the excitement and enthusiasm of visitors. Her favorite part of the job was combustion experiments because she got to “blow stuff up.”

Moving to Houston, Texas to become the Education and Public Outreach coordinator at the non-profit Lunar and Planetary Institute (LPI) was next on Eve's career path. Originally formed to educate people about NASA, LPI is now primarily a research organization. Working alongside research scientists, one of Eve's tasks was to develop education materials connected to NASA’s Planetary Science Missions. For example, Explore, one of the professional development programs, was geared for librarians to have hands-on materials and modules of activities to share with the public.

Explore took Eve and about 40 librarians from across the country, and as far away as Alaska, to Florida for a week-long training event. The librarians were given VIP tours of the Kennedy Space Center, met scientists to learn and understand current missions, viewed the space shuttle Endeavor (see photo) as it was being decommissioned and to top it off, they were able to watch a rocket launch from VIP seating. Having completed numerous missions in the past 10 to 15 years, NASA's mission, here on earth, is to educate and share with the public what is going on “up there.” Eve was tasked to be the bridge between the science of our...
world and outer-space and the public, sharing “information in a way that the public can digest.”

In the late summer of 2014, Eve joined the Iowa Academy of Science as the Education Coordinator. She stated “It’s a small world and you learn this more the older you get.” Eve job shadowed former KWWL Chief Meteorologist Craig Johnson, one stormy day when she was in high school. Mr. Johnson is the currently the Executive Director of the IAS and Eve said “it’s an honor to be able to work alongside him now.”

The coordination of two large science initiatives in Iowa has been part of Eve’s focus at her position with IAS: Project WET and the GLOBE Program. Water Education for Teachers (WET) is an international, interdisciplinary, water science and education program for formal and non-formal educators of K-12 students (www.projectwet.org). The Global Learning and Observations to Benefit the Environment (GLOBE) Program is an international science and education program that provides students and the public worldwide with the opportunity to participate in data collection and the scientific process, and contribute meaningfully to our understanding of the Earth system and global environment (www.globe.gov). For example, anyone could have downloaded a Citizen Science App and submitted data and observations to GLOBE during the recent Eclipse. The aim of these programs is to enable people to learn science by actually doing science. Students and adults are then able to ask their own scientific questions and pursue their own investigations. Other tasks you may find Eve doing involve connecting students to mentors, applying for education grants and other funding, providing training and curriculum guides, going to schools to teach educators about the resources IAS can provide and encouraging students to join the Junior Academy of Science. Eve loves to visit schools, often sharing the moon rocks, and see kids and teachers get excited wanting to know more about the IAS and about science in general.

Eve’s advice to others is “Don’t be afraid to ask questions. It is one of the best skills that can be developed, like a muscle you have to work and get stronger. You have to ask questions so that you can learn to ask the deep and meaningful questions.” She goes on to say that people need to quit being afraid of being wrong or failing. Some of the greatest achievements have been from a failure of some kind and that is ok. Keep asking questions and pushing to know more. There is education beyond the classroom and the IAS is there to educate and help educators be the best that they can be.

Eve holds a Moon Rock collected from the Apollo 11 mission.