

ROCKET KIDS: Two Rivers Community School Students' Race to the Moon

Written by Season Devereux
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From Sputnik to spacewalk, the Two Rivers middle school students have followed it all. Last Wednesday evening at the Boone Armory, they exhibited their scale models of the many rockets and space artifacts that led to the day Neal Armstrong could step out on a moonscape.

The students' journey began in August with a day-long rocket kick-off to their expedition. In Math class they began reading the memoir *Rocket Boys* by Homer Hickam, Jr. which chronicles his experiences as a young boy growing up in West Virginia and wanting to be a rocket scientist. In Humanities, they viewed a gallery of photos from the late 1950s to the late 1960s to help them understand the times, and in Science class they made straw rockets. All of these activities were to generate students' curiosity and get them on the road to space.

The rockets, satellites and spacecraft on display for parents and the community were varied and extremely interesting. As the crowd walked around and looked at scale model artifacts, notebooks of researched information and documentation panels of the projects, students explained their own models and learning with great excitement. Claire Bowling showed diagrams of her Zond 7KL-1 spacecraft and explained the mathematic process of scaling down the original to build her small model. This process addressed math standards students had to learn in all three middle school grades.

Zoa Archer empathetically related that the men who flew her Apollo 10 rocket, "flew around the moon so close, just 8 miles up, but they couldn't land on the moon!" She obviously felt disappointment for those astronauts.

There were rockets that had been used for research long before man flew into space, and satellites that helped us learn about space before and after manned flights. Alex Webb's Pioneer 6 is, he reports, is the oldest satellite still going. It was last heard from on Dec. 8, 2000, fifty-five years after its launch on Dec. 16, 1965. Perhaps it is headed to a galaxy far, far away! In order to get to these great models, students just like NASA scientist, experimented with multiple rockets and did extensive research. In addition to the straw rockets they made on the first day, they made and flew Balloon Rockets, Baking Soda Rockets, and Water Bottle Rockets to learn about force and motion (6th grade), energy transfer and transformation (7th grade), and properties of how matter changes in open and closed containers (8th grade). All of these scientific concepts are part of the grade level standards students must meet in North Carolina. They also visited the Dark Sky Observatory run by ASU and the Astronomy Lab on the ASU campus. In preparation for constructing their own models, students all did research on the time period of the Space Race as well as their own particular rocket, satellite or space vehicle. By doing so, they were meeting Language Arts and Social Studies standards as well.

The expedition also included art. There were beautiful interpretive pieces representing the moon. In addition to being lovely, these works illustrated that students had met a learning target in art: "I can create a mixed media collage series featuring the moon." There was another art display which was part of a fund raiser that the students are doing to donate money so that visually disabled students can attend Space Camp in Huntsville, Alabama. Visitors to the exhibit on Wednesday could literally paint the moon whatever color they wanted by donating to the Space Camp fund and adding to a painting already begun.

The Expeditionary model that Two Rivers uses integrates classes like math, science, social studies and language arts into interesting and fun learning expeditions. This exhibit of student work was a good example of students meeting standards in all content areas while having a great time learning something they find interesting.

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Leeann Cronk, the middle school math teacher and driving force behind this project, said that she was really proud of all the students and thankful to the parents and supervisors who had helped make the study and exhibit possible. She also summed up something that many of the Rocket Kids from Two Rivers were demonstrating with their enthusiasm, the Race to the Moon was “a fascinating period of our country’s history.”