

NATIONAL GOOGLE HANGOUT SUCCESSFUL

On Tuesday, December 3, Challenger Center for Space Science Education (Challenger Center), in partnership with Galactic Unite and Virgin Galactic, hosted a live Google Hangout at the Challenger Learning Center located in Downey, California's Columbia Memorial Space Center. The day of activities

included interaction with both Virgin Galactic Future Astronauts and Virgin Galactic representatives. The special guests participated in a chat with the students from the Columbia Memorial Space Center and four other Challenger Learning



Centers across the country, including UTC Challenger STEM Learning Center. UTC Challenger STEM Learning Center hosted a group of 6th graders from Ooltewah Middle School in the Google Hangout. The future Center mission at the Colombia Memorial Space Center, then talked with students about the importance of STEM education and the doors STEM education can open for their future, and answered questions about what it's like to be a future astronaut with Virgin

astronauts flew a Challenger

Galactic.











855 E 5th Street Chattanooga, TN 37403

MCKEE FOODS GIFTS UTC CHALLENGER \$10,000

The UTC Challenger STEM Learning Center is the recipient of a \$10,000 gift from the McKee Food Corporation in support of its Science, Technology, Engineering and Math (STEM) educational programs. The McKee family has been outstanding supporters of the Challenger Center since its inception in 1995. The Challenger Mission Control Center is named in honor of the late Ruth McKee and the McKee's have also supported the National Challenger Center in Washington D.C. over the years. June Scobee Rogers, the widow of the late Dick Scobee, Commander of the Challenger Space Shuttle, has been connected with the McKee family since leading the planning for the building of UTC Challenger Center in 1992. "When you say McKee Foods, everyone thinks of Little Debbie's, and their other quality food products. In the Tennessee Valley Region, we also think of a family and company that has always led the way in

giving back to their community." Ruth McKee once stated that she wished she could have spent more time as a teacher, her first profession. Soon after her death, the family began to look for a way to bring lasting honor to her memory. They generously agreed to fund the Mission Control classroom of the Challenger Center thereby allowing teachers and students to study together in a classroom that bears her name. Since 1995 over 100,000 students and teachers have visited the Challenger Center and flown missions to the Moon, Mars and Rendezvous with Comet Halley. Perry Storey, Director of the UTC Challenger STEM Learning Center indicated that this new donation will help with the advancement of the new Virtual Mission "Tennessee River In Crisis" which is now in development and will be launched next year for schools. "Mr. Ellsworth McKee was very excited to see how the Challenger

Center is advancing our great programs with technology, ensuring that we are meeting the educational needs of our school partners and continue challenging students with quality STEM programs." Storey stated that "this gift will help to complete the technical equipment and teacher training needs for the new V-Mission program." Dr. Valerie Rutledge, Dean of the College of Health, Education and Professional Studies for the University of Tennessee at Chattanooga noted that the McKee family and Corporation have been outstanding partners for many quality educational programs at UTC and this gift is another indication of how important investing in education is for this family and the Corporation. "Their philanthropy over the years has impacted thousands of individuals in ways that are life changing"



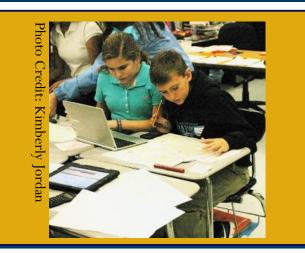
Left to Right: Mr. Perry Storey, Mr. Ellsworth McKee, and Dr June Scobee Rodgers

FICTION FANS GIVE \$3,000 TO UTC CHALLENGER

A local group of Science Fiction fans have provided a \$3,000 gift to help students experience the adventure of space missions at the Challenger STEM Learning Center. The Chattanooga Speculative Fiction Fans Inc. benefits educational institutions and related activities that focus specifically on educational services, schools other programs.

Perry Storey, Director of the Challenger Center would like to thank the CSFFI for their continued support to the center's unique mission of introducing young students to the wonder of space, and helping them realize that the Sky is the Limit when it comes to the future and to space travel. Since 1995 over 100,000 students and teachers have visited the Challenger Center and have flown missions to the Moon, Mars and Rendezvous with Comet Halley.





VIRTUAL MISSION TAKES PLACE IN LEBANON, TENNESSEE

Virtual missions are making waves! On Tuesday, November 26th students from Margie Hawkins' class at Winfree Bryant Middle School in Lebanon, Tennessee participated in a virtual mission sponsored by UTC Challenger STEM Learning Center. They spent their time broken up into several different teams that had to analyze data about erosion around dams and high-populations areas, as well as making in the moment decisions with how to deal with the impending crises. A UTC Challenger mission commander helped students on a video feed, leading the mission and insuring that the virtual mission was going as planned. The class was divided up into four teams, hydro, engineering, geology, and rapid response. The geology team was in charge of looking at possible areas

of erosion along the river where the waters might rise. The engineering team was tasked with being responsible for the dams in the areas and their water flows, keeping track of flood levels along the Tennessee River. One of the students in Miss Hawkins' class, Claudia Aucoin had this to say about the virtual mission, "as Safety Manager for the Hydro Team, I learned how stressful it is to be a leader, I now have an idea of how much work these people put into this job. I feel like I will be more successful in my career when I grow older due to the fact that I had this experience!" In addition, Margie Hawkins said ""This is exactly the direction education should be moving in: real-life STEM adventures integrating the use of all subject-area talents. This program is Common Core as it was meant to be."

MCKEE LEARNING LUNCH A SUCCESS

Over 50 individuals attended the first Learning Lunch held at the Challenger Center. The speaker was Dr. James L. Herman, Director of the Tennessee Center for the Study and Treatment of Dyslexia at Middle Tennessee State University. This was the first in series of learning lunches, which are designed to bring focus groups together to deal with topics important to education and learning. Dr. James Tucker, Mckee Chair of Excellence in Learning and Professor of Educational Psychology at UTC, coordinates these learning lunch programs.

MICRONAUT COORDINATOR VISITS NEW YORK CHALLENGER CENTER

Recently the Micronauts coordinator at UTC Challenger STEM Learning Center, Racheal DeFriese traveled to Allegany, New York to introduce second grade kids to the wonders of science. On January 8th, the Dressar-Rand Challenger Center opened its doors to students younger than normally served. Second grade students from Portville Central School were welcomed during the trial run of the Micronauts program at Dressar-Rand Challenger Center. They currently plan to implement the Micronauts program during the 2014-2015 school year, which is exactly why Racheal DeFriese was there. She was asked to guide the students and help train them in the curriculum with the flight commanders there.

The Micronauts program has been very successful at UTC Challenger STEM Learning Center, with many programs done in the past year, serving many children aged 4 to 10. The curriculum was purchased by Dressar-Rand Challenger Center from the UTC Challenger STEM Learning Center, where it was created in 2005. Dressar-Rand is the eighth center of the forty Challenger Centers in the global network to implement the Micronaut program.

I asked Rachel what she envisions as the future of the Micronauts program and she said she "sees every center, in the Challenger Network, conducting the program. This way the network will be able to reach out to all children, from Pre-K to high school." I went on to ask her what kind of reaction she typically gets from the Micronauts program from Micronaut aged kids, Pre-K to 4th grade (ages 4-10) and she said "primarily excitement because there are no set science standards for lower grades in elementary schools. This is the bare minimum of science exposure that they will get all year." On what she's learned about the program that could be carried into regular Challenger programs Rachel said, "Not all students are on the same reading level and I learned how to differentiate my lessons for that reason." And finally she was asked how can the schools benefit from the Micronaut programs "Schools can use the program either as an introduction or enhancement to help meet the next generations science and common core standards."

The Micronauts program is aimed at students as young as kindergarten and as old as fourth grade, with the plan of introducing students to science at a young age.



In this instance the students from Portville Central School used "real world equipment" like telescopes, microscopes, and scales. "They learned about refracting and reflecting using mirrors and lenses," said Mrs. DeFriese. Who went on to say, "This is going to be a really great asset to the community because teachers are going to be able to come in and dedicate their whole day to science." It was required that the flight directors at Dressar-Rand participate in a three day training which was not as easy as one might think, with more test runs planned before the program is open to the public for the 2014-2015 school year.



The University of Tennessee at Chattanooga is an equal employment opportunity/affirmative action/Title VI/Title IX/Section 504/ADA/ADEA institution.



Over the past few months, several campus partner groups have taken advantage of the Challenger Center and its programs. Some of the groups and activities are as follows; Center for Career Education staff retreat, Multicultural Committee, Upward Bound Students, SGA Retreat planning, Children's Center staff planning retreat, PanHellenic Multicultural Retreat, McKee Center Learning Lunch, Dean of Students–student retreats, College of business and classes. More retreats and programs are now being planned for the spring and summer. Contact Perry Storey, Director of the Challenger Center, if your campus group is interested learning about more about programs offered at the Challenger Center.

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COSMIC SPACE QUEST Summer Camp 2014 * * * * * * * * * * * *

UTC Challenger STEM Learning Center



June 9 - August 1 423-425-2191 www.utc.edu/ challengercenter



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