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Classroom Theory and Real World Application Explored During Five-Day Camp

BOILING SPRINGS, N.C. – For over a dozen high school students from Thomas Jefferson Classical Academy (TJCA) in Mooresboro, N.C., one of the first weeks of their summer vacation has given them new insight into the practical application of scientific principles they have learned in the classroom. Through a grant from the Stonecutter Foundation (Spindale, N.C.), 14 teens participated in the first annual Science Academy, a brand new program designed to offer them enrichment in the subject of science.

"I think this academy caused the students to think about science beyond the classroom and opened their eyes to the many different careers in the science field," said Nick Longerbeam, biology teacher at TJCA. "We wanted to spark the students' interest in science and really get them to see what it can offer as a potential career instead of just a required course in school."

The Monday through Friday camp was structured with instructional time in the morning and field trips to local organizations in the afternoon. The students spent time in classroom sessions such as lab safety, physiology lab, forensics lab, and more. During the afternoon, attendees participated in simulations on campus and traveled to Rutherford Hospital (Rutherfordton), Rutherford County Sheriff's Office Forensics Department (Rutherfordton), and Cohesion Phenomics DNA lab in Spindale.

"We wanted to go beyond just the principles they would discuss during the regular school year. We wanted to have a lot of opportunity for application," said Jay Zimmer, Gardner-Webb University Instructor of Biology.

Students agreed that combining the classroom instructional time with field trips helped solidify the concepts they were discussing. Emily Robbins* of Forest City is a rising senior at TJCA. She described the academy as both interesting and challenging. "It was both educational and fun," Robbins shared. "There was not a dull

moment for the students because we all enjoy science. The experiments and data collections gave us a way to relate what we learned in the classroom. For me, going to the forensics lab in Spindale was the most interesting trip we took."

Longerbeam believes the academy really offered a unique opportunity for students to begin to bridge theoretical concepts with practical application. "We examined grip strength, muscle fatigue, larval stages of maggots, and blood spatter patterns just to name a few," he offered. "The most important aspect for students was seeing how science can be used in the real world."

The Stonecutter Foundation also sponsored a similar math academy for Rutherford County students in 2013 and 2014. Moving forward, university officials say that both camps will likely be offered each summer and they hope to expand the model to include Cleveland County students in the coming years.

The Stonecutter Foundation, a non-profit established in 1945, has invested in numerous Rutherford County community institutions such as the town library and Isothermal Community College. Since its inception, the foundation has made grants totaling \$7.7 million to the surrounding community.

Located in Boiling Springs, N.C., Gardner-Webb University's purpose is to advance the Kingdom of God through Christian higher education by preparing graduates for professional and personal success, instilling in them a deep commitment to service and leadership, and equipping them for well-rounded lives of lasting impact, Pro Deo et Humanitate (For God and Humanity).

*Photo Credit: Emily Robbins