U.S. ARMY
EDGEWOOD CHEMICAL BIOLOGICAL CENTER
Public Affairs Office
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News Release
For Information: Don Kennedy, 410-436-7118 23 May 2012

Army's Edgewood Chemical Biological Center helps develop future engineers

BEL AIR, Md.— Electrical engineers from the U.S. Army Edgewood Chemical Biological Center (ECBC) helped 125 fifth-graders at Homestead Wakefield Elementary School translate science, technology, engineering and math (STEM) education into real-world engineering projects May 17.

Focused on making Engineering is Elementary's storybook *A Reminder for Emily* come alive for students, ECBC Electrical Engineer Mark Colgan – supported by his colleagues ECBC Electrical Engineer Jerry Huen and Computer Scientist Azra Malik – led a STEM lesson that was out of the ordinary.

This lesson was designed to reinforce the engineering design process, a technique that the three engineers use on a regular basis to complete customer projects at ECBC, the premier national resource for chemical and biological defense.

They kicked off the hands-on STEM experience by discussing different aspects of electrical engineering at home, in the working world and in the storybook. Then, ECBC engineers challenged students to solve the problem outlined in the storybook. The task required students to build an alarm circuit by applying the engineering design process.

In teams of five, students thought about a solution for the problem, planned and created circuit systems and improved their projects. Infusing creativity into the steps of the engineering design process helped students enhance the outcome of their projects.

"I loved designing and building our own alarm system," said fifth-grade student Ryan Greezicki. "This activity was such a fun way to learn about science and engineering."

"Sponsored by the National Defense Education Program, the Center's educational outreach efforts aim to inspire students about STEM career pathways by empowering them to conduct real-world science and engineering projects," said Community and Educational Outreach Program Manager Mary Doak. "As soon as students get their hands on STEM, their wheels start turning."

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Not only students benefited from this experience. One teacher that participated in this initiative embraced the instructional approach that ECBC's engineers took during this educational outreach event.

"ECBC has greatly helped to enrich our science program not only for my students, but also for myself," said fifth-grade teacher Dan Bohlman. "I plan to take some ideas from this initiative and use them to improve my instruction."

For more photos, please visit: http://bit.ly/JcTjzR.

For more information about ECBC, visit http://www.ecbc.army.mil/.

About ECBC

ECBC is the Army's principal research and development center for chemical and biological defense technology, engineering and field operations. ECBC has achieved major technological advances for the warfighter and for our national defense, with a long and distinguished history of providing the Armed Forces with quality systems and outstanding customer service. ECBC is a RDECOM laboratory located at the Edgewood Area of Aberdeen Proving Ground, Md. For more information about ECBC, please visit www.ecbc.army.mil or call 410-436-7118.

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