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Geomentors Inspire a New Generation of GIS Users

Geomentors are people who give their time and skill to inspire and help others develop GIS skills that will enable them to better serve their communities. Geomentors tend to beget more geomentors. During the ESRI UC Plenary, Eric Cromwell, Coordinator of Accelerated Learning Programs at Harford County Public Schools, Bel Air, Maryland, explained how a local engineer/GIS user showed him how to use GIS in the classroom to study local birds. Once she gave him a copy of ArcGIS Explorer and a county dataset, Cromwell was hooked. This was the spark that ignited a program. Cromwell began using GIS in his environmental science classes.

Cromwell then was able to mentor Jacqueline Smith, the science department chair at Joppatowne High School, Joppa, Maryland. She had seen a GIS project and, even though she didn't know how to use the software herself, was so enthused that she incorporated a GIS component into the school's career path program. Cromwell visited Smith and offered his services to Geomentor her and the class. With this support, Smith felt confident to begin a GIS class of 16 students. They used the STARS Curriculum from Digital Quest and ArcGIS software. Cromwell visits the class once a week to do technical troubleshooting and provide GIS knowledge guidance. Cromwell, Smith and two of students from the high school class, Joey Hightower and Matt Kelly, described their GIS adventures to the plenary audience of more than 12,500 people.

"The cool thing is the enthusiasm students have to work on their projects," noted Smith. "They would get passes out of their scheduled classes to come to my room and work-not because they were behind, but because they wanted to do more-they wanted to get ahead. Students often will work past the end of the school day."

Joey and Matt described their development as GIS users learning basic skills of layout creation, buffering, and changing coordinate systems. Soon they were creating their own shapefiles of crimes in their county. Matt entered the map in the Towson University GIS Conference and won first place. Their next project employed ArcGIS Spatial Analyst to compare cost-weighted and straight line distances. They performed surface analysis to show different views of elevation in the local area.

The end of the year project goal was to analyze the local elementary districts, anticipate population growth, and recommend the best location for a new elementary school in their town. Students presented their findings to the local council. This project was the students' last step toward earning their Spatial Technology and Remote Sensing certification through Digital Quest. This certification is recognized by NASA and the U.S. Department of Labor.

Cromwell challenged the many GIS experts in the audience to become Geomentors at schools and for services in their communities. Without the chance encounter with the engineer who introduced Cromwell to GIS 13 years ago, there would be no GIS program

in the local high school today. "Imagine what we could do if we were intentional about reaching out to teachers," concluded Cromwell. "Believe in the kids and that they can use these tools. Also, find a teacher who is willing to turn kids loose with GIS software. Let's make every day a GIS Day."