

STORIES FOR ADVOCACY

GPS Technology Connects Community

As told by Wynn Smith, NC Department of Public Instruction to Suzie Boss

Timber Drive Elementary School is located in Garner, North Carolina. Once a farming community with a strong local identity, Garner is rapidly evolving into a suburb of Raleigh. Although the school does not have an abundance of technology, teachers make good use of available resources to design innovative units that engage learners.

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Recently, the school's fourth-grade teachers collaborated with media and technology staff to design a community project. The occasion was the city's upcoming centennial celebration. The media coordinator envisioned using technology in conjunction with a local field trip that would help students develop a stronger sense of place.

First, the school wrote a successful grant that paid for the purchase of handheld GPS equipment. In preparation for the field trip, teachers led hands-on activities on the school grounds to train students in the use of GPS devices. Evening sessions were offered to train parent volunteers in the use of the technology.

On the day of the field trip, students first toured historical locations in the community by bus. Then, they went to a local park where parents were waiting to facilitate activity stations. At the geocaching station, for example, students learned that items pertinent to Garner history had been strategically hidden around the park. Using GPS devices, they worked in teams to locate these artifacts and record information about them. Another station focused on topography. Students studied maps and identified specific locations and landforms. They used pedometers to track distances and speed. Yet another station included a display of enlarged photos depicting scenes of Garner, past and present. Students analyzed these images and noted how buildings and institutions had changed over the past century.

The community history field trip was the springboard for additional learning activities back at school. Fourth-graders wrote detailed stories about events from local history and created a database to further analyze the information they had gathered at the park. Teachers saw a surge in higher-order thinking as students analyzed trends and evaluated data. Teamwork and communication skills also improved as students worked together on authentic tasks.

An unexpected result was the increase in parent involvement. Many parents had never set foot in the school until they showed up for technology training in the use of GPS equipment. After the field trip, parents and teachers had stronger connections and ongoing conversations. Many parents said they were excited about making geocaching a new family hobby. In many ways, the use of technology proved to be a powerful catalyst for connecting students, parents, school, and the larger community.

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