

School: A.J. Whittenberg Elementary School of Engineering

School

Name of school: A. J. Whittenberg Elementary School of Engineering

Location of school: Greenville, South Carolina

Year opened: 2010

Number of teachers: 23

Grades of students: K-3rd (adding one grade/year through 5th grade)

Number of students: 420 (600 capacity)

School web address: www.greenville.k12.sc.us/ajw

Presenter name and email address: Ansel Sanders, wsanders@greenville.k12.sc.us

Brief description of the school:

A.J. Whittenberg Elementary School of Engineering is the most technologically advanced elementary school in Greenville County. The innovation is apparent in many ways – from its downtown location on the Reedy River, to the partnership with the Salvation Army's Kroc Center, to the learning emphasis as an engineering school.

A.J. Whittenberg will be the first elementary school in South Carolina with a school-wide engineering curriculum. The 88,232 square foot facility will feature a three-story atrium with the engineering labs visible from both the interior and exterior of the building. The labs will have software to give students hands-on experience in engineering technology. Students may create Lego robots or design and develop a product using computers. The interior walls of the labs will be mostly glass so the children can see the activity and be inspired to learn.

The facility will also be used as a learning tool. The school will pursue Leadership in Energy and Environmental Design (LEED) certification, based on use of the structure to teach students the importance of recycling, water conservation, and renewable resources.

A.J. Whittenberg Elementary will prove to be a treasure for Greenville County Schools, the City of Greenville, the State of South Carolina, and mostly, the children whose lives will be changed as a result of the facility. The school will truly set the standard for achieving innovation.

The school is named for A.J. Whittenberg, a pioneer for civil rights who is best known for his stand on the integration of Greenville County Schools.

• How do you define "partnership?"

"Partnership" entails multiple entities embracing a common vision, thus expanding the stakeholders in the vision's realization and success. Likewise, a partnership yields mutually beneficial relationships.

- **What does a good partnership model look like?**

A good partnership first involves a leader from each organization acting as the chief liaison between the organizations. These liaisons work for the benefit of their own organizations but also of building their partnerships. The liaison can then report back to his/her organization about the partnership's development and plan for collaboration. Such collaboration includes sharing expertise, volunteerism, sharing resources, and brainstorming.

- **What is required of each member of a partnership to make it successful?**

Clear, open, and regular communication. A firm understanding of the parameters of the partnership as well as the rationale behind the partnership. Buy-in from those involved in the partnership is also key to the partnership's development and sustainability.

Partner organizations to support STEM teaching and learning – STEM industry & business

Tell us a little bit about some of your partnerships that support STEM teaching and learning?

To provide the support and means to realize our ambitious vision, Whittenberg reaches out to local businesses and organizations to become stakeholders in the students' success. As our curriculum revolves around the engineering design process and hands-on STEM-oriented lessons, connections with STEM industries is appropriate. Likewise, Greenville has more engineers per capita than any other city in the United States. Michelin, GE Energy, BMW, and IBM are a few of the many companies that have headquarters in Greenville. Smaller and more technical businesses also support AJW. Furthermore, institutions of higher education, including Clemson's International Center of Automotive Research (the first graduate degree program for automotive engineering) has a close tie with our students and faculty. Sustained support from these organizations includes expertise and perspective, volunteerism, and funding. As a public school with limited funding, we rely on such financial support to sustain and expand the engineering program. We've created an Engineering Partner Program that helps guide partners to volunteer and mentorship opportunities occurring both on and off the AJW campus.