**ICMA Community Partnership Nomination**

**City of Oelwein**

**Problem Assessment:**

The community realized it would not be able to attract nor justify hiring specialized instructors to serve a relatively small number of students. A collaborative approach was needed.

The community partnered among the City of Oelwein, the local K-12 school system, the local community college and the Greater Oelwein Charitable Foundation to construct, equip and staff a new 12,000 square foot educational facility. Thus was created the Regional Academy for Math and Science (RAMS).

The RAMS serves high school, adults, and adult students from a variety of schools and communities with in our region. Northeast Iowa Community College courses in the areas of Science, Technology, Engineering and Math (STEM) are the central focus. The new center also plays an important part in high school and middle school curriculum for many regional K-12 students, at-risk through talented and gifted.

This project is already impacting our community. It plays a significant part in our area as small rural Iowa schools find it harder to attract specialized teachers to serve a declining enrollment. The RAMS is providing area students with the opportunity to learn from highly qualified teachers that have a passion for teaching in the areas of math and science.

The RAMS Mission is four-fold:

* Strengthen the coursework offered in Iowa’s rural high schools
* Increase the number of high school and middle school students interested in math, science, and technology
* Train community members with skills needed by area businesses in math and science related fields
* Provide advanced degree coursework for K-12 teachers of math, science, engineering and technology

**Program Implementation and Costs:**

RAMS is having a significant impact on Northeast Iowa. Rural Iowa needs high schools that can work together to offer students the same opportunities that students in urban parts of the state enjoy. RAMS is a concept that opens doors for many Northeast Iowa students.

The facility includes two science labs, a computer lab, a PLTW lab, an ICN room and three traditional classrooms. RAMS includes a rigorous and relevant curriculum in Science, Technology, Engineering, and Math (STEM). The school focuses on these areas to provide a challenging curriculum for students and to encourage them to achieve higher levels. Partnering with the Regents universities to offer summer and evening course work for teacher education is also planned.

Over $1.6 million from federal, state, local and private sources funded the construction project. The City of Oelwein, the Northeast Iowa Charitable Foundation, Greater Oelwein Charitable Foundation, Northeast Iowa Community College and Oelwein Chamber and Area Development were among the organizations that contributed to construction of the facility and support RAMS programs and services.

**Tangible Results, Measurable Outcomes:**

The Regional Academy for Math and Science opened in the fall of 2008. The center is a state of the art facility. Using technology as a tool for teaching is key to building interest in our students as well as preparing them for the future jobs (that may not yet even exist). RAMS is a show place for our younger students to help get them excited about learning in the areas of math and science.

The development of the Regional Academy for Math and Science is a tool that will spark systemic change in our school system and is an important device used by dedicated teachers to help talented children of all levels of socioeconomic status, dream and experience a future in math and science.

This project is a significant aid in economic development for our community. Prospective businesses are interested in moving to a community with strong schools and a college connection. The Regional Academy for Math and Science emphasizes expanding technology for job training and placement.

Committed to offering advanced math and science course work to area high school and adult learners, RAMS offered twenty-one STEM courses during the 2008-09 school year. STEM course work includes classes in science, technology, engineering and math. As a part of the STEM initiative, Project Lead the Way (PLTW) classes are offered at RAMS. These pre-engineering classes; Principles of Engineering and Introduction to Engineering, have enrollment from multiple area high schools.

Complementing the STEM courses, general education courses are offered to high school and adult learners. Thirteen general education courses were offered at RAMS during the 2008-09 school year. Enrollment during the first year was 327 credit students.

Twenty eight college courses were offered during the Fall 09 and Spring 2010 term, with 17 additional classes being offered during Summer of 2010. Not only was Digital Electronics added to the PLTW curriculum in the Fall of 2009, the number of participating high schools doubled.

Included in the educational scope of RAMS, summer science camps are offered to area middle school students. One camp was offered in the summer of 2009. Due to the popularity of the inaugural physics summer camp, three camps are being planned for this summer. In-services and trainings are also offered to area middle and high school math and science teachers.

Business and Industry training is also an integral part of RAMS. Training has been delivered to new business employees as well as to displaced area workers. Classes ranging from OSHA to leadership skills, to keyboarding have been offered.

Since the RAMS was built, a 10,000 square foot Tech Spec facility has been built in the Technology Park, and four new businesses have located in Oelwein. These are comprised of an industrial molding manufacturer, bioscience/pharmaceutical manufacturer, a distribution center and an “efficient energy” manufacturer. We believe this community business growth is encouraged by opportunities at RAMS.

**Lessons Learned:**

As we look back on the creation of the Regional Academy for Math and Science, we realize that the success we are seeing is due to the shared planning and creativity that were demonstrated by the collaborative approach. We were able to identify the needs of our region and provide ways to meet them.

The partnerships created through RAMS have been the key to the successes we have experienced. We could not have accomplished it alone.