Grant Information

*Project Title*  
Modeling Instruction Academy

*Program Focus Area*  
EDUCATION - PRIMARY AND SECONDARY

Intended Outcomes: Primary and Secondary Education

**Impact Report**  
* indicates required field

*Report Start Date*  
12/01/2011

*Report End Date*  
12/29/2012

*Actual Outcome/Impact*

We held a three-week training (14 days) and successfully trained 55 science and math teachers during the summer of 2012 in Modeling Instruction. These teachers are impacting at least 2,850 students. The pre/post tests of the teachers increased by 5% in math content knowledge and 11% in science content knowledge. The teachers also experienced using Vernier equipment. This has been a very successful outcome, as they have been using the equipment more in their classrooms. The teachers have also started using Modeling Instruction in their lessons this school year. We were also able to have a Saturday session with the teachers after school started, to follow-up with training implementation. Due to this success, the district has set aside money to continue training in Title I schools in the summer of 2013.

We were able to hold the training at Wichita State University. We also toured several local aviation industries and other career/tech ed. facilities.

All schools represented received additional Vernier equipment for their school. Each teacher received training materials and classroom materials.

Additionally, the curriculum office purchased Vernier equipment to use during professional development at schools to encourage other teachers to use the equipment and attend future trainings.

*Lessons Learned/Plans for Replication/Scaling*

We will replicate this project in the summer of 2013 with Title I schools. Hopefully we will procure additional funding to expand the training to high school teachers. We expanded our relationships with area industry establishments, Wichita State University, Wichita Area Technical College, the Career and Tech Education department of Wichita Public Schools, the College of Engineering, NIAR and aviation companies. These relationships have developed into possible partnerships in future endeavors. Teachers were exposed to different job opportunities that they can relay to their students to pursue STEM careers.

The math/science conversations between the teachers went better than planned. We also started much-needed math/science conversations between middle school and high school teachers, which we hadn't anticipated.

In the future, we would plan follow-up training during the school year to support teachers in implementation.
*Best Practices/Collaborations/Other Comments*

We learned that Modeling Instruction works well in middle school. The training helps the teachers gain content knowledge to increase their efficacy. We collaborated with local aviation companies and the local university and career tech education school so that all aspects of the STEM pipeline were represented. We used two Wichita teachers as apprentice trainers who will be full trainers for the summer of 2013. They could possibly be hired by other districts to provide training.

Metrics - Primary and Secondary Education

- # of materials/curricula developed and disseminated: 55
- # of teachers/administrators/students reached: 2910
- # of training sessions/programs held: 15