**University of Minnesota, Crookston**  
**Ag Science Outreach Summary Report**

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Project Title:  
**Ag Science Outreach**  
http://www.crk.umn.edu/ag/NWMNsci/Index.htm

(Photo/Graphics) see website address above.  
Start Date 9/04  
End Date 6/05

**Description – progress monitoring and final results**  
**Goals:** What was the project designed to achieve?

In northwestern Minnesota, the University of Minnesota, Crookston (UMC) has been the center of agricultural research and education for over 100 years. Accordingly, this program is to introduce science-based activities in the context of existing high school curriculum. Briefly, agricultural topics are integrated into current lesson plans in at least thirty high school science and agriculture classes in northwestern Minnesota. Utilizing UMC faculty and students, teaching materials, technology resources and accomplished science instructors, high school students will gain agricultural knowledge as they learn science while they participate in special ag science learning activities on and off the UMC campus. Previous experience indicates that the impact of these “learning-by-doing” experiences continues long after the activities themselves have concluded. Success is the result of local leadership and on-going on-site and on-line support from UMC instructors and students.

The University of Minnesota, Crookston Ag Science Outreach project provided 895 students in northwestern Minnesota high schools unique opportunities to explore the scientific dimensions of agriculture and renewable resource studies. This year’s project was a tremendous success. With the dollars granted by the Academy of Distinguished Teachers (ADT), the Ag Science Outreach project had to limit its participants due to funding available. Ag Science Outreach project participants learned about the tremendous career opportunities available in agriculture and resource management and educators strengthen student appreciation for the systemic interdependence of scientific, agricultural, economic, societal, and environmental issues. The University of Minnesota, Crookston Agriculture Science Outreach project, helped young people who represent tomorrow’s leaders in northwestern Minnesota view agriculture’s opportunities and obligations from a the kind of scientific and holistic perspective that is key to sustainability.

**Approach and action to achieve goal**

Nearly one out of every four Minnesotans work in agricultural, food and related industries, yet agriculture curriculum in many schools is weak or non-existent. Moreover, the kind of agricultural curriculum needed today to promote prosperity and sustainability bears little resemblance to that of a generation ago. The Ag Science Outreach project grew in enrollment
as predicted and was introduced to new schools to provide students with learning opportunities that will be otherwise unavailable. Because of the popularity and enthusiasm of the Ag Science Outreach project enrollment was limited due to funding available. However the 895 participating students were made aware of the renewable resource science. This project encouraged young people to consider study and careers leading to an agriculture industry that is both in harmony with community priorities and successful in the marketplace. Finally, the Ag Science Outreach project created collaboration between participating schools for innovative teaching and learning around a model is transferable to other regions of Minnesota

Outcomes and tangible results

We have been able to sustain the program another year, receive funding for travel, meals and instruction not otherwise available. Our participation level has increased significantly. We are currently seeking additional funding to allow more high schools to participate. Currently we hosted over 890 students with on campus visits and want to continue to increase visits based on high demand from other northwestern Minnesota schools. We have served high school students since the late 90's and look to grow enrollment in the coming year. In addition to having northwestern Minnesota high schools on campus we too have taken the program on the road to those schools who don’t have a budget for bussing or additional time away from their particular class rooms.

The Ag Science Outreach project enhanced sustainability in each of the three areas: environmental, social and economic. UMC is capable, committed and has delivered personnel, facility and technology resources over the past four years. UMC is dedicated to improving and motivating the learning of students, and to bridging the gap between secondary and post-secondary education. Application and integration of technology into hands–on student experimentation is supplementing each schools curriculum with tools, labs and facilities not available in their district.

Ag Science Outreach enhanced the relationships between the local citizens/community, the University of Minnesota and participating high schools. The most important partners were the school districts, UMC and the committed teachers that are eager to provide students with the best learning opportunities possible. Together, we offered high school students a uniquely engaging curriculum in a new and academically stimulating learning environment.

For the region, the most important step we can take toward achieving a profitable agriculture, a sustainable environment, and a revitalized sense of community is to spark the imaginations and dreams our young people by expanding their knowledge of the world around them and elevating their overall level of educational attainment. I am confident that the Ag Science Outreach project did such through the grant awarded by ADT.

Ag Science Outreach is grateful as are the participating students in this program. It is of great importance that we as a community and region understand the importance of Agriculture, Food and Science and the positive impact they can have on our young students, soon to be our community leaders and constituents.