JACK KENT COOKE
FOUNDATION

Fact Sheet

The Jack Kent Cooke Foundation's Talent Development Award is a biennial recognition of exemplary practices in the elementary and middle school grades that transform economically disadvantaged learners with great potential into higher achievers. This year the Foundation has selected the Connie Belin & Jacqueline N. Blank International Center for Gifted Education and Talent Development at the University of Iowa (B-BC) as the recipient of this award because of its *STEM Excellence and Literacy* program, which engages high-potential middle school students from rural and low-income school districts across Iowa in rigorous STEM curricula through an afterschool math and science program. *STEM Excellence and Literacy* provides 96 hours of direct instruction in math and science over the course of 24 weeks throughout the academic year.

The program began in 2003 under the name *Iowa Excellence*. Its purpose was to prepare academically talented middle school students for Advanced Placement courses in high school. Although it increased enrollment and improved achievement in AP courses, it was suspended in 2009 when federal funding was eliminated. The Foundation's award will support two years of program operations with the Belin-Blank Center fully funding a third year, altogether enabling the B-BC to revive and expand its enrichment program for low-income middle school students of high ability, especially those living in rural or small school districts.

Iowa's excellence achievement gap is most pronounced in rural communities, where many students qualify for free and reduced-price lunches. In 2013, for instance, roughly 40 percent of Iowa's K-12 students were eligible for the state's Free and Reduced Lunch Program, but only 14 percent participated in Advanced Placement programs and only 10 percent scored high enough to have their test results accepted at most colleges.

Because the disparities that appear among high school populations can be traced back to elementary and middle school, addressing these disparities must begin no later than middle school. *STEM Excellence and Literacy*, which builds upon *Iowa Excellence*, will therefore directly serve 330 middle school students of high ability living in high-need, small, or rural Iowa school districts. It will focus on students from grades 6 to 8 because international comparisons reveal that the United States lags behind many nations in STEM education at the elementary and secondary levels.

The original *Iowa Excellence* program expanded middle school mathematics and science curricula in order to enhance the knowledge base needed for advanced math and science courses in high school. *Iowa Excellence* adopted math and science curricula developed by the Israel Arts and Science Academy (IASA), a residential public high school for talented and gifted students in Jerusalem. Shortly after its establishment in 1988, the administrators of IASA realized that the majority of students came from large urban areas. Students in the rural and remote areas lacked the academic preparation necessary for success at the academy.

IASA educators then worked with content experts to develop multiple math and science units, which became known as the Mitchell Excellence Curriculum. Their goal was to level the playing field between large urban communities and rural communities that typically had fewer resources. The Mitchell Excellence Curriculum demonstrated great success in low-income communities in Israel, which inspired B-BC staff to investigate the potential for such programming with rural and/or low-income middle schools in Iowa.

Now, with this award from the Jack Kent Cooke Foundation, the B-BC will expand and reorganize the original *Iowa Excellence* program. The new program has been renamed *STEM Excellence and Literacy* (SEAL). The expanded SEAL program directly addresses the need for more rigorous curricula in math and science for students with high potential. It has four objectives:

1) Expand middle school mathematics and science curricula in Iowa's neediest, small, or rural areas to enhance the requisite knowledge base for advanced math and science courses in high school.
2) Boost participating middle school students' preparation and aspirations to the highest-level math and science in high school.
3) Increase enrollment of students from small or rural schools in high-level high school math and science courses.
4) Enhance middle school teachers' ability to nurture their students' ambitions and prepare middle school students for high-level math and science classes in high school.