

Contact: Diana Gonzalez

REPORT ON TITLE II GRANT PROGRAM

Action Requested: Receive the report on the Title II Grant Program.

Executive Summary: The Board Office and the Iowa Department of Education jointly administer the Iowa grant programs authorized by Title IIA (Improving Teacher Quality) and Title IIB (Mathematics and Science Partnerships) of the federal No Child Left Behind (NCLB) Act of 2001. Each year, this joint program awards Title IIA and Title IIB federal funds to Iowa colleges, universities, school districts, and area education agencies to develop and provide professional development opportunities for K-12 teachers with a focus on enhancing student achievement in mathematics and science.

In February 2012, the Title II Advisory Panel awarded first-year funding to four¹ new multi-year projects² in an amount totaling \$543,749. The grants were awarded for the period ending June 15, 2013, on the basis of a competitive review process. Grant funds totaling approximately \$125,000 will also be awarded to support continuation of an existing project approved in prior year competitions.

Background:

The Board Office has been designated by the U. S. Department of Education as the state agency for higher education to administer the Title IIA grant program in Iowa. The Board Office and the Iowa Department of Education have jointly conducted a mathematics and science education grants program for more than a decade. Since the passage of NCLB, the respective agencies have conducted a single annual competition which combines the funds from the separate Title IIA and Title IIB federal programs. The two state agencies divide responsibilities for ongoing grants accounting and administration by project. In the past, grants have been made for single-year projects as well as multi-year projects of up to three years in duration.

Grant projects are designed to develop and provide professional development opportunities for K-12 teachers with an objective of enhancing student achievement in mathematics and science. Grants are made to interinstitutional partnerships which must include the following:

- ☐ College or department of education of an accredited institution of higher education in Iowa;
- ☐ College or department within the content area of the project (mathematics or science) of an accredited institution of higher education in Iowa;
- ☐ High-need Iowa school district(s), as defined by federal statute and modified for Iowa;
- ☐ Representatives from the area education agencies served by the project; and
- ☐ Any other eligible contributing partners.

The Title II Advisory Panel included representatives from the Board Office, Regent universities, Iowa independent colleges and universities, Iowa community colleges, K-12 school districts, area education agencies, and Iowa Department of Education. The Panel approved the grant awardees listed on the following pages at its February 3, 2012 meeting.

¹ Twelve proposals were submitted.

² The Elementary and Secondary Act (ESEA) has not been reauthorized. It is likely that Title IIA grant funds will be eliminated. Therefore, funding for the multi-year projects is not a certainty.

TITLE IIA/IIB GRANT RECIPIENTS FOR THE PERIOD ENDING JUNE 15, 2013

Project: **Communities of Exemplary Practice: A Math/Science Professional Development Framework for Middle School Teachers**

Applicant Institution: Loras College

Project Directors: Robert Keller, Associate Professor Mathematics

Rebecca Monhardt, Associate Professor of Education (Science)

Proposed Project Period: Three years

Total Three Year Funding Awarded: \$405,445

First Year Funding Awarded: \$134,543

Partners: Loras College, Dubuque Community School District*, Bellevue Community School District, Dubuque Holy Family Catholic Schools, Postville Community School District, Area Education Agency 1 (Keystone AEA), and Area Education Agency 9 (Mississippi Bend AEA)

Number of Educators to be served directly: 40

This project will provide professional development in math and science for middle school teachers in northeast Iowa. The objectives of this project support district Comprehensive School Improvement Plans (CSIPs) and include educating teachers on the most current state and national frameworks in math and science education, including STEM (science, technology, engineering, mathematics). Additionally, teacher participants will learn strategies for integrating math and science for the middle school grades and will have the opportunity to put what they learn into practice. A lesson study approach will be used to promote collaboration and develop a cadre of math/science teachers who seek constant improvement in their practice. The project will use distance technology for classroom observation, coaching, and feedback as teacher participants. Teacher teams from participating districts will attend summer workshops and on-going support will be provided throughout the school year as they put into practice new technology. The ultimate goal is to positively impact student performance. Data to measure the success of this project will include observations of lessons using the Reformed Teaching Observation Protocol, structured interviews, and student achievement data.

*Indicates a high need district.

Project: **Thinking Mathematically in the Middle Grades**

Applicant Institution: University of Northern Iowa

Project Director: Olof Bjorg Steinhorsdottir, Assistant Professor of Mathematics Education

Proposed Project Period: Two years

Total Two Year Funding Awarded: \$212,687

First Year Funding Awarded: \$110,678

Partners: University of Northern Iowa, Lewis Central School District*, Logan Magnolia Community School District; Missouri Valley Community School District, Glenwood Community Middle School, St. Albert Catholic Schools, West Harrison Community School District, Green Hills Area Education Agency

Number of Educators to be served directly: 35

This program is designed to (1) improve teachers' content knowledge and pedagogical content knowledge in the area of fractions, proportions, and algebraic connection as comprised in the Iowa Core State Standards in mathematics; (2) improve student achievement in pre-requisite skills, such as fractions, proportions, and proportional reasoning, needed for success in algebra; and (3) impact teacher practice by emphasizing and exploring student-centered methods of instruction. These objectives will be achieved through in-depth professional development workshops, conducted by leading researchers in the field of mathematics education, which will provide teachers the rich opportunity to be immersed in exploration regarding the mathematics of the Iowa Core and investigate innovative methods of instruction that use student thinking about mathematics to enhance their practice. Teachers will have the opportunity to adapt these ideas to their instructional practice and conduct action research to determine the effect of their instructional decisions on students' understanding and learning.

*Indicates a high need district.

Project: **Reflective Assessment for Elementary Science in Iowa (RAES-Iowa)**

Applicant Institution: University of Iowa

Project Director: Cory Forbes, Assistant Professor of Science

Proposed Project Period: Three years

Total Three Year Funding Awarded: \$447,620

First Year Funding Awarded; \$149,608

Partners: University of Iowa, Iowa City Community School District*, Washington Community School District, Highland Community School District*, St. James Catholic Schools, Grant Wood Area Education Agency, Van Allen Science Teaching Center, University of Iowa Center for Global and Regional Environmental Research

Number of Educators served directly: 38

This project is a sustained professional development program designed to support elementary teachers' use of formative assessment practices in science. The program will engage 3rd through 6th grade teachers in learning to employ Reflective Assessment (RA), a four-step formative assessment strategy developed by the Lawrence Hall of Science, to teach science modules currently used through the Van Allen Science Teaching Center (VAS). Research demonstrates that elementary teachers' use of the RA strategy is strongly correlated with student learning gains in science. The RAES-Iowa professional development program is designed to accomplish four objectives: (1) promote teachers' effective use of RA in their science instruction; (2) promote teachers' effective use of RA in their content knowledge; (3) better engage elementary students in scientific practices; and (4) promote teachers' learning of science concepts. Teacher logs, video recorded lesson enactments, and student assessment data will be analyzed to evaluate the impact of the RAES-Iowa program on teacher and student outcomes as part of a rigorous evaluation design led by a highly-qualified external evaluator. The proposed project is research-based, supports pre-existing goals of improving science teaching and learning in Iowa, and is aligned with both state and national science education reform efforts.

*Indicates high-need district.

Project: **Making Sense of Mathematics and Teaching II: Learning and Leading**

Applicant Institution: University of Northern Iowa

Project Director: Vicki Oleson, Assistant Professor and Director of the Center for Teaching and Learning Mathematics

Proposed Project Period: Three years

Total Three Year Funding Awarded: \$448,894

First Year Funding Awarded: \$148,920

Partners: University of Northern Iowa, Waterloo Community School District*, Creston Community School District, Saydel Community School District*, Fort Dodge Community School District*, Fort Dodge Community Christian School

Number of Educators served directly: 50

This program is designed to increase elementary teachers' mathematics content knowledge for teaching, improve their instructional practices, and improve their students' achievement in mathematics. This project will build upon a previous project, *Making Sense of Mathematics and Teaching*, by (1) expanding the participants to include schools in west central, north central, and northeastern Iowa; (2) supporting general and special education teachers; and (3) measuring change in student achievement data. The project will serve 50 elementary teachers in four school districts – Creston, Saydel (including Heartland Shelter Care Educators), Fort Dodge (including Community Christian School), and Waterloo Community Schools. The project will deliver six professional development courses that focus on mathematics content (number, operations, geometry, measurement, algebraic thinking, and rational numbers), and instructional strategies aligned to the Characteristics of Effective Instruction and Common Core Standards for Mathematical Practice. Through participation in the courses, teachers will focus on changing their beliefs about the way students learn mathematics, improve their mathematics content knowledge for teaching, and improve their instructional practices.

*Indicates high-need district.
