

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 distributes 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 2011, the Title II Advisory Panel awarded one-year funding to three new projects in an amount totaling \$262,707.¹ The grants were awarded for the period ending June 15, 2012, on the basis of a competitive review process. Grant funds totaling \$1,305,000 will also support ongoing second- and third-year projects approved in prior year competitions.² This year, only Title IIA funds were available to support new projects.

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- and multi-year projects of up to three years in duration. However, the Elementary and Secondary Act (ESEA) has not yet been reauthorized, and with the likelihood that Title IIA grant funds will be eliminated, the three projects funded this year are single-year projects.

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.

¹ Five proposals were submitted.

² There are nine continuing projects for the coming year.

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 Committee approved the grant awardees listed on the following pages at its February 10, 2011 meeting.

TITLE IIA/IIB GRANT RECIPIENTS FOR THE PERIOD ENDING JUNE 15, 2012

Project: Des Moines Partnership for Cognitively Guided Instruction

Applicant Institution: Des Moines Public Schools

Project Director: Barbara Adams, Director – Mathematics Curriculum Coordinator

Proposed Project Period: One year

Total Funding Awarded: \$100,155

Partners: Iowa State University, Heartland AEA, Des Moines Public Schools*

The Des Moines Partnership for Cognitively Guided Instruction will enhance the quality of teaching in elementary classrooms by increasing students' content knowledge and teachers' pedagogical skills. Cognitively Guided Instruction (CGI) was developed by the National Center for Improving Student Learning and Achievement in Mathematics and Science at the University of Wisconsin – Madison. The researchers discovered that children can learn more challenging mathematics content at earlier ages than traditionally expected. CGI is based on an integrated program of research focused on (a) the development of students' mathematical thinking; (b) instruction that influences that development; (c) teachers' knowledge and beliefs that influence their instructional practices; and (d) the way that teachers' knowledge, beliefs, and practices are influenced by their understanding of students' mathematical thinking. The Iowa Department of Education states that using CGI strategies is an effective way of implementing the Iowa Core Curriculum for Mathematics at the elementary level.

CGI is a natural complement to the DMPS elementary mathematics curriculum development in the areas of algebra, data analysis and probability, geometry, measurement, and numbers and operations. CGI supports teachers by deepening their own understanding that mathematical thinking and problem solving involves seeking, examining, and naming patterns and relations.

*Indicates a high need district.

Project: **EMPOWERR (Elementary Mathematics Partnership Opening Windows to Excellence, Rigor, and Relevance)**

Applicant Institution: University of Iowa

Project Director: Walter Seaman, University of Iowa Associate Professor of Mathematics and Associate Professor-Teaching and Learning; Vicki Burketta, University of Iowa Clinical Professor

Proposed Project Period: One year

Total Funding Awarded: \$133,987

Partners: University of Iowa; English Valleys Community School District; Iowa City Community School District*; Anamosa Community School District*; Grant Wood AEA

EMPOWERR involves whole-school teams in building-wide efforts to improve mathematics teaching and learning. EMPOWERR will continue to provide more than 100 hours of ongoing professional development to 65 Grade K-6 teachers and principals in English Valleys, Iowa City, and Anamosa through a summer workshop, academic year seminars, ongoing lesson study, and implementation assistance.

EMPOWERR goals include improving student mathematics achievement, teacher content knowledge, and implementation of inquiry into daily mathematics classrooms. The project will include training and supporting teachers so they can generate research-based documentation of implementation of inquiry mathematics practice. Such documentation will be important as schools monitor progress on using problem-based instructional tasks and students' opportunities for authentic engagement in mathematics lessons, highlighted in the Iowa Core Curriculum. Anecdotal documentation of inquiry in mathematics classrooms has been collected in Years 1-3 of EMPOWERR through teacher implementation logs. Additional work this year will be to train teachers on the implementation of formative assessment which supports inquiry-based teaching and learning. Teachers will strengthen their use of alternative questioning strategies infused throughout their lessons.

*Indicates a high need district.

Project: **Iowa Physics Teachers Instruction Resources (IPTIR) - PLUS**

Applicant Institution: University of Northern Iowa

Project Director: Lawrence Escalada, University of Northern Iowa Professor-Physics and Science Education

Proposed Project Period: One year

Total Funding Awarded: \$28,565

Partners: University of Northern Iowa; Don Bosco High School; Wilton Community School District; West Hancock Community School District*; Saydel Community School District*; Xavier High School; Holy Trinity Catholic High School; Storm Lake Community School District*; Decorah Community School District; Mason City Community School District; Forest City Community School District; Lawton Bronson Community School District; Eddyville-Blakesburg Community School District; Iowa City Community School District*; Central City Community School District; St. Albert High School; Marshalltown Community School District*; Grinnell-Newburg Community School District; Pella Community School District; Maquoketa Valley Community School District; East Buchanan Community School District; Sioux City Community School District*; Southern Cal Community School District; Alta Community School District; Lamoni Community School District*; Emmetsburg Community School District; Spirit Lake Community School District; Mt. Pleasant Community School District; Madrid Community School District; Belmont-Klemme Community School District*; Center Point Community School District; Northwest AEA; Grant Wood AEA; Keystone AEA; Green Hills AEA

Iowa Physics Teacher Instruction and Resources (IPTIR) PLUS will maintain the expansion of the existing Title IIA IPTIR program from 24 teachers to 31 teachers that took place in Year 2 of the program. IPTIR is the University of Northern Iowa's latest effort to address the critical shortage of qualified high school physics teachers in the state of Iowa. IPTIR prepares more high-quality high school physics teachers for Iowa schools and improves the performance of their students. The professional development focuses on providing physics content and pedagogy with emphasis on the Iowa Professional Development Model, physics education research-based instructional methods, and national/state science education initiatives. The IPTIR program initially targeted a cohort of 24 existing high school physics teachers and secondary science teachers many of whom are completing the requirements necessary for the State of Iowa Grades 5-12 physics teaching endorsement. Additional teachers were added in Year 2 of the program to increase the participation of school districts from all area education agencies and address the needs of these schools.

*Indicates high-need district.
