

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 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 2009, the Title II Advisory Panel awarded first-year funding to four new multi-year projects in an amount totaling \$595,801.<sup>1</sup> The grants were awarded for the period ending June 15, 2010, on the basis of a competitive review process. Grant funds totaling \$981,021 will also support ongoing second- and third-year projects 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. Grants are made for single- and multi-year projects of up to three years in duration.<sup>2</sup>

Grant projects are designed to develop and provide professional development opportunities for K-12 teachers with a focus on 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/local education agency, as defined by federal statute for Iowa;
- 📖 Representatives from the area education agencies served by the project; and
- 📖 Any other eligible contributing partners.

The Title II Advisory Panel includes representatives from the Board Office, Regent universities, Iowa independent colleges and universities, community colleges, K-12 school districts, area education agencies, and Iowa Department of Education. The Committee approved the grant awardees on the following page at its February 13, 2009, meeting.

---

<sup>1</sup> Eight proposals were submitted.

<sup>2</sup> There are seven continuing projects for the coming year.

**TITLE IIA/IIB GRANT RECIPIENTS FOR THE PERIOD ENDING JUNE 15, 2010**

---

Project: **Science Pioneers: Science Content through Inquiry**

Applicant Institution: Central College

Project Director: Kris Kilibarda, Assistant Professor of Education

Proposed Project Period: Three years

Total Funding Awarded: \$450,000 (First year award = \$150,000)

Partners: Central College, Green Valley AEA 14, Science Center of Iowa, Creston Community School District\*, Lenox Community School District\*, Central Decatur Community School District\*, Bedford Community School District, Mount Ayr Community School District, Corning Community School District, Red Oak Community School District, Drake University

The Science Pioneers Program (SPP) provides a research-based, collaborative program to enhance the content knowledge and pedagogical skills of participating K-8 teachers. Teachers will be members of learning communities, which include in-service teachers, administrators, specialists in science content, and professors of education. Teachers will participate in scientific inquiry lessons developed to increase their own scientific knowledge and skills. The teachers will receive extensive training in the essential science concepts of the K-8 Iowa Core Curriculum and in how to recognize, develop, and effectively implement rigorous inquiry-based lessons.

During the summer institutes, the learning communities will develop lessons that engage students in scientific inquiry as suggested by the Core Curriculum and the Every Learner Inquires Initiatives. The K-8 teachers will implement these lessons during a summer science camp for participating elementary students. The teachers will receive continued training and support throughout the 2010-2012 school years as they implement scientific inquiry as an instructional strategy. In addition, participating teachers and administrators will be empowered to be change agents in science education and to function as leaders in science instruction. The SPP's effectiveness will be evaluated to determine the teachers' change in attitude, understanding of science content, and implementation of the scientific inquiry strategies, as well as student attitude toward science and achievement in science.

\*Indicates a high need district.

---

**Project: Teaching and Learning Mathematics with Cognitively Guided Instruction**

Applicant Institution: Buena Vista University

Project Director: Sherry Williams, Prairies Lakes AEA Math/Science/School Improvement Consultant

Proposed Project Period: Three years

Total Funding Awarded: \$395,487 (First year award = \$149,808)

Partners: Buena Vista University, Prairie Lakes AEA, Estherville-Lincoln Central Community School District, Humboldt Community School District, Storm Lake Community School District\*, Fort Dodge Community School District\*, Twin River Community School District, Gilmore City-Bradgate Community School District\*, East Sac County Community School District

The purpose of this collaborative partnership is to implement cognitively guided instruction (CGI), a comprehensive research-based teacher development program. The efficacy of CGI has been documented as producing significant results in children's ability to think mathematically and solve problems. This CGI project is for elementary school teams that include teachers, principals, and Prairie Lakes AEA and Buena Vista University staff. Development of the project was guided by the Iowa Professional Development Model. The project was designed to support sustained changes in classroom practices that ensure continued delivery of quality mathematics instruction in elementary classrooms after the project ends.

The goals of the project are to (1) provide educators in the target districts with access to a research-based process for teaching developmentally appropriate mathematics and improve their content knowledge and skills in the area of mathematics; (2) assist educators to implement CGI strategies in their classrooms as measured by the framework of the Iowa Professional Development Model and the Iowa Teaching Standards; and (3) build the capacity of targeted districts for expanded implementation of CGI as a strategy to increase K-5 student achievement in mathematics.

\*Indicates a high need district.

---

**Project: Iowa Physics Teacher Instruction and Resources**

Applicant Institution: University of Northern Iowa

Project Director: Lawrence Escalada, Associate Professor of Physics and Science Education

Proposed Project Period: Three years

Total Funding Awarded: \$445,979 (First year award = \$146,704)

Partners: University of Northern Iowa, AEA 1, AEA 267, AEA 8, Waterloo Community School District\*

Iowa Physics Teacher Instruction and Resources (IPTIR) is a three-year professional development program to prepare additional high-quality high school physics teachers for Iowa schools and to improve the performance of their students. The IPTIR program will target a cohort of 24 existing high school physics teachers and secondary science teachers who are completing the requirements necessary for the State of Iowa Grades 5-12 physics teaching endorsement. IPTIR will be modeled after the successful Title II University of Northern Iowa Physics Resources and Instruction for Secondary Science Teachers (PRISST) program, a professional development program for out-of-field high school physics teachers.

The IPTIR program will include intense two-week summer institutes followed by academic year professional development and support. The IPTIR program will focus on physics content and pedagogy with emphasis on research-based instructional methods and national-state science education initiatives. The participating teachers will have access to classroom physics resources available on loan during the implementation component of the project; the resources were funded by a Carver Trust Foundation grant. Partners will include UNI faculty from the Colleges of Natural Sciences and Education and master high school physics teachers working in collaboration with area education agencies, participating teachers, and their schools. Partners include AEA 1, AEA 267, AEA 8, Waterloo Community School District, and other AEAs. More than 25 teachers throughout the state have expressed interest in participating, including the following high-need school districts – Storm Lake\*, Dubuque\*, Belmond-Klemme\*, and Osage\*. Possible partners include school districts in the western part of the state.

\*Indicates high-need district.

---

Project: **IMPACT (IMPacting Achievement with Collaborations and Technology)**

Applicant Institution: University of Northern Iowa

Project Director: Doreen Hayek, IT Projects Administrator

Proposed Project Period: Three years

Total Funding Awarded: \$449,100 (First year award = \$149,289)

Partners: Iowa Academy of Science, Science Center for Teaching, Outreach, and Research (STORM), MFL MarMac Community School District, Howard-Winneshiek Community School District, Osage Community School District\*, UNI College of Education, UNI ITS-Educational Technology, Area Education Agency 1

The Iowa Educational Technology and Training Institute (IETTI) at the University of Northern Iowa proposes the continuation of the IMPACT (IMPacting Achievement with Collaborations and Technology) program as an application of the Iowa Title II professional development program. The focus of the IMPACT program is to integrate the earth science-based programs of STORM and the Global Learning and Observations to Benefit the Environment (GLOBE) along with educational technology into existing PreK-12 science curriculum. Teacher learning communities have been formed between participating teachers, UNI science and College of Education faculty, and educational technology staff. Activities for the learning communities include two-week Summer Institutes for teachers together with yearly on-going support, sharing, and education for the participants. Teachers receive at least 100 contact hours of professional development.

The project intent is to improve and upgrade the status and stature of science teaching to impact positively student achievement. The professional development activities have been aligned with the Iowa Professional Development Model. All professional development materials have been aligned with national content standards and the Iowa Core Curriculum and are based on research-grounded methods. The IMPACT activities have been aligned with the needs in teacher quality, professional development, and mathematics and science found in the participating schools' needs assessments.

The effect of IMPACT is widespread. The target audience for IMPACT includes teachers in the MFL MarMac Community School District, Howard-Winneshiek Community School District, and Osage Community School District, all of which are primary partners in the program. A total of 45 teachers will ultimately be directly affected, together with school administrators and additional teachers who interact with the participating teachers.

\*Indicates high-need district.

---