

**NO CHILD LEFT BEHIND ACT (NCLB):
IMPROVING TEACHER QUALITY STATE GRANT PROGRAM
FISCAL YEAR 2011 GRANT ALLOCATION**

Submitted for: Action.

Summary: This item recommends approval of nine grants for the No Child Left Behind Act (NCLB) – Improving Teacher Quality State Grant Program. This federally funded grant program is authorized under the NCLB Act of 2001. The NCLB - Improving Teacher Quality (ITQ) State Grants are provided to eligible partnerships comprised of Illinois colleges and universities and high-need Illinois public school districts.

Program Purpose:

- Improve long-term student achievement in core academic subject areas, primarily mathematics and science.
- Increase the number of highly qualified teachers in the classroom and highly qualified principals and assistant principals in schools.
- Develop an environment of collaboration among P-12 school districts and universities and their units that prepare teachers and school administrators.
- Improve teacher and principal quality through research-supported innovation in teacher and principal preparation programs.

Program Benefits:

- Supports partnerships that improve teachers' knowledge of subjects they teach and improves the abilities of higher education institutions to prepare quality teachers for our schools.
- Enables students to meet the Illinois Learning Standards in core academic subject areas and teachers to demonstrate the skills, knowledge, and traits of highly qualified teachers.
- Supports activities designed to increase administrator knowledge of instructional and curricular leadership.
- Enhances assessment of learning and teaching at all levels.

Action Requested: That the Board approve the allocation of \$3,111,980 in NCLB - ITQ State Grants to nine partnerships specified in this item.

STATE OF ILLINOIS
BOARD OF HIGHER EDUCATION

**NO CHILD LEFT BEHIND ACT:
IMPROVING TEACHER QUALITY STATE GRANT PROGRAM
FISCAL YEAR 2011 GRANT ALLOCATION**

Background/Importance

Since fiscal year 2004, the Illinois Board of Higher Education (IBHE) has awarded competitive teacher and principal professional development grants to eligible partnerships comprised of colleges and universities and high-need public school districts located across the State of Illinois. A major change instituted in fiscal year 2007 was the requirement of an external evaluation jointly agreed to by the project directors and the Board of Higher Education. Grantees were asked to allocate funds for the evaluation and dissemination of their project's outcomes. The importance of improving teacher quality was emphasized by President Obama in his speech on education before the Hispanic Chamber of Commerce on March 10, 2009:

"To complete our race to the top requires the third pillar of reform — recruiting, preparing, and rewarding outstanding teachers. From the moment students enter a school, the most important factor in their success is not the color of their skin or the income of their parents, it's the person standing at the front of the classroom."

**Purpose of the NCLB Improving
Teacher Quality State Grant Program**

The Improving Teacher Quality State Grant Program (ITQ), authorized under Title II, Part A, of the No Child Left Behind (NCLB) Act of 2001, supports professional development and teacher and school leader preparation activities across all core academic subject areas to assist schools in increasing the academic achievement of all students through the preparation of highly-qualified teachers and school leaders. Partnerships made up of institutions of higher education and high-need school districts provide professional development aimed at improving and increasing teacher and school leader knowledge in core academic areas. Partnerships focus on effective, scientific research-based instructional strategies aligned with the *Illinois Learning Standards* for core academic subject areas and the *Illinois Professional Education Standards*.

ITQ Partnerships Support the Public Agenda

The ITQ grants directly support Goal One of the *Public Agenda For College and Career Success* - Increasing educational attainment to match best-performing U.S. states and world countries. The ITQ grants will help to eliminate the achievement gap by providing high-quality professional development to teachers in high-need school districts, thus improving student achievement. Illinois, like the nation, suffers a significant and enduring disparity in academic achievement and educational attainment affecting racial and ethnic minority students. Students

suffering from the achievement gap – predominantly students of color – will make up the largest segment of Illinois’ population growth over the next two decades.

Eligible Applicants

As defined by the U.S. Department of Education, applicants eligible for ITQ grant funds must be partnerships comprised of, at a minimum:

- An approved public or private institution of higher education and the division of the institution that prepares teachers and principals;
- A school of arts and sciences, and;
- A high need Illinois public school district. A high need public school district is defined as a school district that (a) serves not fewer than 10,000 families with incomes below the poverty line, or for which not less than 20 percent of the children served by the district are from families with incomes below the poverty line; and (b) for which there is a high percentage of teachers not teaching in the academic subjects or grade levels that the teachers were trained to teach, or for which there is a high percentage of teachers with emergency, provisional, or temporary certification or licensing.

Funding Priorities for Grant Applications

Priority consideration is given to proposals that target one or more professional development opportunities for:

- Low performing, “high-need” schools;
- Professional development aligned to state standards;
- Partnerships that help to provide middle and high school mathematics and science teachers with the tools and knowledge needed for students to meet the standards in order to be prepared for college-level mathematics and science courses;
- Teacher recruitment and/or induction activities;
- Partnerships that increase access for teachers and students from historically underrepresented and underserved groups, and;
- Professional development linked to student achievement.

Review Process For Renewal Grants

A renewal application was released on November 23, 2010 with a due date of January 14, 2011. An informational meeting was held on December 7, 2010 with all renewal partnerships. The purpose of this meeting was to: (1) review the requirements of the FY2011 renewal application, (2) support successful renewal applications, particularly in evaluation and (3) provide opportunities to meet and work with IBHE staff and the consultants from The Center for the Study of Education Policy at Illinois State University (ISU) who assist IBHE staff in monitoring partnerships throughout the year.

In the morning sessions, each partnership presented their distinctive evaluation approaches. These sessions sparked conversations across partnerships on how to link teacher learning to student achievement. In the afternoon work sessions, project teams worked together with facilitation by our evaluation consultants in alternating sessions to look for ways to modify

and improve evaluation plans. Partnerships were given documents titled “Sorting Out Logic Models” and “Six Core Areas of Focus for the Evaluation Process” prior to the meeting.

All partnerships were reviewed based on the following review criteria published in the FY2011 Application:

- **Collaborative Planning:** How well does the proposal provide clear evidence of involvement by all partners, including teachers, administrators, and institutions of higher education, in the collaborative design of the Improving Teacher Quality State Grant Program project?
- **Need for Professional Development:** How well does the proposal provide clear evidence of the K-12 school students’ and educators’ need for professional development?
- **Eligible Project Activities:** How well does the proposal clearly explain how the professional development activities can produce long-term, systemic change and include goals, objectives, and activities that reflect a program of sufficient duration, size, scope and quality that, if implemented, will yield improvements in teaching and learning? Does the proposal explain how the professional development activities are based on research and proven to increase student achievement?
- **High Priority Activities:** How well does the proposal incorporate appropriate elements to address the high priority considerations?
- **Evaluation Process:** How well does the proposed evaluation process assess the effectiveness of the activities in relation to the stated goals and objectives in producing improvements in teaching and learning? Is a reputable external evaluator identified?
- **Budget:** How well does the proposed budget reflect cost-effectiveness and demonstrate consistency with the scope of the proposed objectives and activities?

One partnership did not elect to renew their grant in FY2011 which resulted in additional funding available to be allocated to the remaining projects. The five highest performing partnerships measured by the review criteria listed above were given an opportunity to apply for these additional funds. These five projects, based upon ongoing project evaluation, all demonstrated key elements of a successful partnership which include: (1) a high degree of collaboration; (2) a clear need for professional development; (3) evidence that the partnership can produce long-term, systemic change; and (4) a strong evaluation plan to assess the effectiveness of the partnership.

The five projects that demonstrated key elements of success were asked to submit a revised budget and a budget justification for additional funds. A teleconference was held with each of the five project directors to discuss how the additional funds would be used. Based upon the revised materials and the conference calls, staff allocated the additional funds to the top five partnerships.

Project Monitoring

The IBHE staff, along with external consultants paid with NCLB administration funds, will monitor fiscal and programmatic activities throughout the year. As was done in 2010,

partnerships are provided with technical support and suggested interventions throughout the year as part of the grant monitoring process. An annual symposium is being planned for Fall 2011.

Summary

Each of the partnerships recommended for funding in Table 1 provides high-quality, research-based professional development aimed at improving teacher quality, the academic achievement of elementary and secondary students across Illinois, and teacher preparation programs across the state. While these NCLB grants can support professional development across all core academic subject areas, the majority focus on professional development for teachers of mathematics and science, areas of identified need throughout Illinois. Accompanying this item as Appendix A is a listing of more detailed information for each partnership recommended for funding. This information was provided by each project director.

The informational items include:

- Lead Institution
- Project Title
- High Need School District
- Partnership Members
- Core Academic Areas
- Grade Level
- Grant Amount
- Project Director
- Project Synopsis

The staff recommends the adoption of the following resolution:

The Illinois Board of Higher Education hereby allocates fiscal year 2011 grants totaling \$3,111,980 for the No Child Left Behind - Improving Teacher Quality State Grant Program to the institutions specified and in the amounts shown in Table 1. In the event that funds are not requested by a partnership in their entirety, the Executive Director shall have the authority to re-allocate funds to another partnership.

Table 1
ILLINOIS BOARD OF HIGHER EDUCATION
NCLB - IMPROVING TEACHER QUALITY STATE GRANT PROGRAM
FISCAL YEAR 2011 - PROJECT ALLOCATION

Board Item #	Lead Institution(s)	High-Need District Partner Districts	Project Title	Request Amount	Recommended Award Amount
1	Loyola University Chicago	Chicago Public Schools (Area 10)	Supporting Middle Grades Science Professional Development CPS Content, Curriculum, Coaching	\$394,284	\$384,309
2	Northeastern Illinois University	J. Sterling Morton (District 201) Morton East High School Morton Freshmen Center Morton West High School	Plan for Academic Success for All Students	\$289,247	\$289,247
3	Northern Illinois University	Rockford Public Schools (District 205) Auburn High School Guilford High School Jefferson High School Rockford East High School	Promoting Achievement through Literacy Skills	\$276,000	\$276,000
4	Roosevelt University	Chicago Public Schools Chalmers Elementary Dumas Elementary	Differentiating Professional Development: A Driven Model for Literacy Workgroups	\$395,994	\$385,975
5	SIU - Carbondale Illinois State University	Anna and Cairo Carbondale, Carterville Dongola, Eldorado Harrisburg, Murphysboro Sparta, Vienna	Southern Illinois Partnership for Achievement in Math & Science	\$311,499	\$311,499

Table 1 (continued)
ILLINOIS BOARD OF HIGHER EDUCATION
NCLB - IMPROVING TEACHER QUALITY STATE GRANT PROGRAM
FISCAL YEAR 2011 - PROJECT ALLOCATION

Board Item #	Lead Institution(s)	High-Need District Partner Districts	Project Title	Request Amount	Recommended Award Amount
6	S I U - Carbondale	Cairo Murphysboro, Meridian Steelville Emmanuel Chester St. John's Lutheran Learning Technology Center VI South St. Mark's Lutheran	RAMPD UP: Rural Access to Math Prof. Development: Unparalleled Performance	\$388,841	\$388,841
7	S I U - Edwardsville	Centralia and East St. Louis 40 public schools 2 charter schools 14 private schools	Students Learning Science through a Sustained Network of Teachers	\$400,000	\$389,880
8	St. Xavier University	Chicago Public Schools - Area 2 5 Elementary Schools Blaine, Brenneman, Clinton Disney and Stockton	Developing 21st Century Critical Thinking Skills	\$296,966	\$296,966
9	University of Chicago	Chicago Public Schools Donoghue North Kenwood Oakland	Teacher Leadership for Elementary Mathematics & Science	\$399,367	\$389,263
Total New Projects				\$3,152,198	\$3,111,980

APPENDIX A

ILLINOIS BOARD OF HIGHER EDUCATION

Fiscal Year 2011 No Child Left Behind Improving Teacher Quality State Grant Program

Partnership Profiles

June 7, 2011

Lead Institution: Loyola University of Chicago

Project Title: Supporting Middle Grades Science Professional Development in CPS: Content, Curriculum, Coaching and Using Data

High Need School District: Chicago Public Schools

Partnership members: Loyola University Center for Science and Mathematics Education, Loyola University Chicago School of Education and the Chicago Public Schools

Core Academic Area(s): Science

Grade Level(s): 6-8

Grant Amount: \$384,309

Project Director: Dr. Rachel Shefner
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Project Synopsis: The Supporting Middle Grades Science Professional Development in CPS: Content, Curriculum, Coaching and Using Data Project aims to increase student achievement in middle grades science in the Chicago Public Schools' Area 10 through improving teachers' science instruction. This Area, located on the South and Southwest side of Chicago, contains 24 schools with middle grades. The average student performance in Area 10 on the seventh grade Science ISAT is significantly below the state average, and 95 percent of the students in the area are low income. This project will impact 73 teachers of middle grades science, including special education and bilingual teachers, and 5,345 sixth-eighth grade students.

Project activities include three types of professional development: a series of 51 hours of workshops to provide teachers with the necessary content and pedagogical knowledge that will allow them to implement high quality middle grades science curricula, 15 hours of workshops that will provide teachers and administrators with tools that will help them interpret data on what teachers are doing in their science classrooms and how to improve instruction, and some 12 schools in area 10 will receive ongoing in-school support from instructional coaches.

An important aspect of this project is to give Area 10 teachers and administrators tools to help them understand and reflect on aspects of high quality instruction in science. Our expectation is that this data-based reflection will enhance the impact of professional development on curricular materials alone. We anticipate that as a result of this project, Area 10 science teachers will attend the professional development offered, will increase their science content knowledge, and will demonstrate qualities of improved science instruction. We further anticipate that teachers' improved quality of instruction will lead to an increase in student achievement in science by the end of the project.

Lead Institution: Northeastern Illinois University

Project Title: PASAS (Plan for Academic Success for All Students)

High Need School District: J.S. Morton High School District 201

Partnership members: Morton East High School, Morton Freshmen Center, and Morton West High

Core Academic Area(s): English

Grade Level(s): HS Teachers

Grant Amount: \$289,247

Project Director: Ms Amy Hendricksen
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Project Synopsis: The Plan for Academic Success for All Students is a teacher professional development project. The goal of this project is to improve teacher knowledge and use of English and Social Studies content and research-based instructional strategies coupled with classroom-based support for implementation of new learning and active participation in professional learning teams. This will lead to improved student achievement as measured by college-readiness benchmarks. The main professional development activities in the project design include:

- English and Social Studies content seminars aligning with ILS/Common core.
- Training in research-based instructional strategies and differentiated instruction.
- Classroom-based coaching to connect new learning to practice.
- School-based horizontal and vertical teams to connect learning to practice.
- Cross-disciplinary literacy teams to collaborate and review teacher observations and student work.

The outputs from the activities include:

- Improved teacher instruction, with increased integration of research-based strategies, and differentiated instruction.
- Alignment of units, curriculum maps, and common local assessments with standards.
- Demonstrations of standards-aligned lessons and units, including showcases and walk-throughs, by and for teachers.
- Resource toolbox of units, lessons, best practices and assessments for dissemination digitally and via publication.
- Ongoing formative and summative assessments of student and teacher growth.
- Foster and maintain a network of educators committed to improving teaching and learning.
- Disseminate work, resources, and research findings of project processes and results regionally and apply them to other departments internally.

Lead Institution: Northern Illinois University

Project Title: Promoting Achievement through Literacy Skills (PALS)

High Need School District: Rockford School District 205

Partnership members: Rockford Public School District 205.

Core Academic Area(s): All

Grade Level(s): High School Teachers

Grant Amount: \$276,000

Project Director: Dr. Connie Fox
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Project Synopsis: Rockford District 205 identified inadequate literacy skills as a major cause of low student achievement in all subjects at the District's four high schools. Northern Illinois University (NIU) will join the District in establishing a professional development program that ensures every high school teacher is highly qualified and that enables high school teachers in all subject areas to raise student achievement by improving their content knowledge and their ability to integrate literacy instruction (reading and writing as well as information, visual, and digital literacy) into their content teaching. The PALS project also will strengthen the leadership skills of principals who guide the implementation of changes in their schools.

The PALS program uses three tiers of professional development in a research-based model. First, the high school teachers who are not highly qualified, including reading specialists, will be provided with support to attain HQ status. The Reading Teacher Endorsement program that will be offered to all interested high school teachers. Second, all high school teachers will have opportunities to attend summer professional development and that will be followed by year-round meetings, coaching, mentoring, and action research projects with NIU faculty. Third, principals also will participate in summer professional development to support them in implementing school improvement plans in reading and other innovations.

As a result of the PALS activities, student achievement at the high schools will increase. All teachers will be highly qualified; teachers' content knowledge and pedagogical skills will improve; classroom instruction will become more effective; the number of reading specialists will increase; and curriculum at RPS and in NIU teacher preparation programs will be aligned with emerging state standards. Increased knowledge and skills of principals will strengthen school leadership. Transformed teacher education programs will prepare strong teacher candidates for high-needs schools.

Lead Institution: Roosevelt University

Project Title: Differentiating Professional Development: A Data Driven Model for Literacy Workgroups

High Need School District: Chicago Public Schools District #299

Partnership members: Woodlawn Children’ Promise Community, University of Chicago Internet Project, University of Chicago, Tutoring program, and the DLA Piper Law Firm

Core Academic Area(s): Literacy

Grade Level(s): K-8

Grant Amount: \$385,975

Project Director: Dr. Teryl Ann Rosch, Ph.D.
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Project Synopsis: The IBHE-funded grant, “Differentiating Professionalism in CPS: A Data-Driven Model for Literacy Work Groups,” has made great progress in the first year of this three-year project. The primary goal of the project is to improve literacy instruction in the partner schools and thereby increase student achievement. This is being accomplished through professional development, mentoring and coaching by university faculty, and by creating and supporting teacher teaming around literacy. Roosevelt University will continue to collaborate and implement a data-driven model of literacy work groups for administrators and teachers, early career, and veteran, in two elementary schools within the Chicago Public Schools (CPS) District 299. The model will ensure that teachers receive sustained support over multiple years to become proficient teachers who use effective instructional strategies to engage and nurture their students to succeed in reading and other core academic subjects. The CPS schools will include services in their School Improvement Plans, and the established work teams will continue altering school structures in order to increase vertical and horizontal communication between teachers and administrators. Integral aspects of this process include aligning instruction to state and national standards and increasing the use of student data to inform instruction.

The key to any change and improvement process is developing a level of trust between the partners. Such trust has developed very quickly between the partner schools and the university participants in the past eight months and has led to the initiation of virtually all planned project activities. These activities have begun a transformative process that is changing the perspectives of the professional teaching corps towards improved standards of excellence. This change can be seen in the initial qualitative evaluation and by the number of actions that teachers have taken as a result of the project. It also can be seen in the number of parents who are borrowing books, thereby taking advantage of the project’s creation of Parent Libraries. The university faculty involved in the coaching and mentoring has been flexible enough to respond to particular area and school needs and requirements, such as

assisting teachers to understand and apply the Radner curriculum model that the CPS district Area Office has mandated. This adaptability by the coaches has increased the trust level which led to the great progress made to date.

The major revisions in project design have been the modification of the new teacher support program and the greater involvement of university faculty. Given the small number of new teachers at each school, coaches and faculty have mentored these new faculty individually rather than having separate teams. The number of university faculty has increased to include the entire Literacy Department. This has profound implications for the longer-term impact of the project on Roosevelt's pre-service teaching program.

While great progress has been made, we are only at the start of the change process. Trust has been established and activities initiated, but there still needs to be a broadening and a deepening of the activities. Teachers need continued support by university faculty to understand and utilize the new instructional techniques, increase the ability to use data, and institutionalize the teaming that is an integral part of the project. Several elements of the program, such as increasing math and science content knowledge, have only just begun and will be developed more fully in year 2. The goals and outcomes for the second year reflect the successes of this year, and the continued needs of the schools, so that the grant objectives are fulfilled and student improvement continues beyond the project's completion.

Lead Institution: Southern Illinois University Carbondale

Project Title: Southern Illinois Partnership for Achievement in Math & Science

High Need School District: Cairo Community Unit School District 1 and Anna Community Consolidated School District 37

Partnership members: Dongola Unit School District 66, Carterville Community Unit School District 5, Herrin Community Unit School District 4, Murphysboro Community Unit School District 186, Sparta Community Unit School District 140, Vienna School District 55, Harrisburg Community Unit School District 3, Carbondale School District 95, and Eldorado Community Unit School District 44

Core Academic Area(s): Math and Science

Grade Level(s): 4-8

Grant Amount: \$311,499

Project Director: Dr Frackson Mumba
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Project Synopsis: Southern Illinois University Carbondale (SIUC), in partnership with Cairo School District 1, Anna Community Consolidated School District 37, Carbondale Elementary School District 95, Dongola Unit School District 66, Carterville Community School District 5, Herrin Community Unit School District 4, Murphysboro Community Unit School District 186, Sparta Community Unit School District 140, Vienna School District 55, Harrisburg Community Unit School District 3, Eldorado Community Unit School District 4, and Illinois State University (ISU) proposes to continue to implement a teacher professional development (PD) program aimed at increasing mathematics and science teachers' content knowledge and pedagogical skills and students' achievement in mathematics and science subject areas. A fundamental goal of this program was and is to improve mathematics and science teaching and learning in participating schools by providing a PD program that is focused on content, pedagogy, curricula articulation and mentoring. The outcomes are: increased teachers' content knowledge and pedagogical skills (short-term outcome), improved instructional practice (mid-term outcome), and increased student achievement in mathematics and science (long-term outcome). The SIPAMS program's defining features emphasize teachers working together with experts in content, pedagogy, and technology while staying in control of developing pedagogical solutions to meet classroom needs. The participants include SIUC & ISU professors in the mathematics, sciences, mathematics and science education, content-related reading, curriculum specialists from the partner school districts, principals; and elementary and middle school teachers and their students. All these participants are of central importance in the effective implementation of the program, since they form an inquiry-oriented learning community. Scientists and mathematicians provide insight into the methods that are used in the fields to pursue a scientific process of discovery and problem-solving.

Lead Institution: Southern Illinois University Carbondale

Project Title: RAMPD UP: Rural Access to Math Professional Development: Unparalleled Performance

High Need School District: Carbondale Elementary School District #95

Partnership members: Cairo School District #1, De Soto Consolidated Community School District #86, Meridian Community School District #101, Murphysboro Community Unit School District #186, Immanuel Evangelical Lutheran Church & School, St. John Lutheran Church & School, St. Mark's Lutheran School, and Regional Office of Education #30 which includes Jackson and Perry counties

Core Academic Area(s): Mathematics

Grade Level(s): K-8

Grant Amount: \$388,841

Project Director: Dr Jackie L. Cox
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Project Synopsis: Rural Access to Mathematics Professional Development: Unparalleled Performance (RAMPDUP) will continue to serve to not only broaden the scope of critical thinking skills and mathematical thinking across the southern Illinois region, but also will establish the infrastructure needed to sustain Cognitively Guided Instruction in the classroom. Overall, this project will increase student achievement in mathematics and improve critical thinking skills by providing teachers with the administrative support structure, classroom tools, and knowledge of how students develop their mathematic thinking over time. By first addressing any anxiety some teachers have regarding mathematics and providing them with interventions that not only help them, but also can be taught to their own students, mathematics can now become a time of exploration and not fear. Through analysis of teachers' knowledge and their students' needs based upon assessment data, teachers will be provided intense review of mathematical concepts from numeration to algebra.

On a parallel path, teachers will continue to also be provided with the research based foundation of how their students' mathematical thinking develops and how they can efficiently and accurately pinpoint their own students' understandings through carefully crafted problems that assist the students in building upon their own mathematical knowledge. Throughout this three-year project, school administrators will be fully apprised of the principles of Cognitively Guided Instruction and provided tools for how they can regularly assess and strengthen their teachers' skill set in its classroom usage. Teachers also will be supportive through the development of a cadre of teacher leaders experienced in the employment of Cognitively Guided Instruction in the classroom. This cadre will be provided additional professional development in how to sustain and support this instruction throughout the region. Nearly 70 teachers will be involved in the process along with 12 administrators from both public and faith-based schools in the region.

Lead Institution: Southern Illinois University Edwardsville

Project Title: Students Learning Science through a Sustained Network of Teachers

High Need School District: East St. Louis #189, East Alton #13, East Alton-Wood River High School #14, Belleville #118, Cahokia

Partnership members: The following Public Schools: Belleville East, Edwardsville, Roxana, Granite City, SIUE East St. Louis Charter Highland, Okawville, Valmeyer, Greenville, Mt. Olive, Triad, Mascoutah, Gillespie, Belleville West, Carlinville, O'Fallon, Staunton, Civic Memorial, Waterloo, Lebanon, Livingston, Collinsville, New Athens, Freeburg, Divernon, BCCU #2, Jersey, Mulberry Grove Junior High, Bond County, Coolidge, Damainsville Elemenatry, Grantfork, High Mount, Highland Elementary, Hillsboro, Irvington, Liberty, Lincoln, Pocahantas, Pontiac, Ramsey, Smithton, Bellville West, Bunker Hill, Fulton, Garant, Virden, Nashville, Mary Schaefer, Joseph Arthur, Grigsby, Fox, Mel Carnahan, North Green, Red Bud, and Southwestern. The following Private schools: Trinity Lutheran, Holy Trinity, St. Anthony, Governor French Academy, Holy Rosary, Holy Childhood, Christian Academy, St. Ambrose, St. Clare, St. James, St. John the Baptist, St. Rose, Mater dei, Christ Light of the Nation, Gibault Catholic, St. Elizabeth, and St. Michael's

Core Academic Area(s): Science

Grade Level(s): 6-12

Grant Amount: \$389,880

Project Director: Dr. Sadegh Khazaeli
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Project Synopsis: The objective of this project is to provide hands-on professional development for high school chemistry, high school physics, high school biology, and middle school science teachers with an emphasis on science subject matter related to the Illinois State Board of Education's Illinois Learning Standards (Science) and Illinois Professional Education Standards (Science Core). We plan to work with regional school teachers to help them improve their science knowledge, gain insight into applications of science, become aware of available high quality science educational resources, and participate in a sustained science teacher network.

These tools and knowledge should assist teachers in preparing their students to meet the standards expected in high school and middle school science courses. It is anticipated that these activities will eventually lead to improved student learning and students who are better prepared for high school and college science courses. During Spring 2011, we will have seven sessions (one day a week) of

classroom-format discussion and demonstrations for 30 high school chemistry teachers on selected chemistry and environmental science topics. During Summer 2011, 30 high school chemistry teachers will participate in hands-on activities and laboratory experiments on the topics covered in Spring 2011. Similarly, during Fall 2011, we will have seven sessions of classroom-format discussion and demonstrations for 15 high school physics teachers and during Summer 2011, 20 high school physics teachers will participate in hands-on activities and laboratory experiments on the topics that were covered in Fall 2010. During Summer 2011, 50 middle school teachers will have ten days of classroom-format discussion (mornings) and laboratory/demonstration sessions (afternoons) on topics in biology, chemistry, environmental science, earth science, and physics. In Fall 2011, we will have seven sessions (one day a week) of classroom-format discussion and demonstrations for 15 high school biology teachers. We also plan to introduce the philosophy of science to all participating teachers. During each chemistry and physics workshop, we will dedicate one day to the mathematical skills needed for successful student learning. Time will be built into the schedule for teachers to share their experiences, expertise, and pedagogy. The plan is to include all educators in active learning in each meeting, rather than having a traditional lecture.

Special effort will be made to encourage teachers from high need districts, newly hired teachers, teachers who teach outside of their field of study, special education science teachers, teachers from schools with high minority populations, and pre-service teachers to participate in the program. There will be no IBHE funds used for pre-service teachers. Cross networking between middle school teachers and high school science teachers will be encouraged by inviting select high school teachers to provide content during the middle school workshop under supervision of the PIs. During the workshops, the participating teachers will be trained in the use of modern assessment techniques. Throughout the year, networking among teachers will be facilitated by the Program Board. This program has been developed in collaboration with the Southern Illinois University Edwardsville School of Education, the Southern Illinois University Edwardsville College of Arts and Sciences, and high school and middle school educators in our region, and they are active partners in shaping activities and maintaining sustainability of the ongoing program.

Lead Institution: St. Xavier University

Project Title: Developing 21st Century Critical Thinking Skills

High Need School District: City of Chicago School District 299

Partnership members: International Renewal Institute, Inc. and the Center for Elementary Mathematics and Science Education at the University of Chicago

Core Academic Area(s): Literacy

Grade Level(s): K-3

Grant Amount: \$296,966

Project Director: Dr. Sarah Beverly Gulley
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Project Synopsis: The Developing 21st Century Critical Thinking Skills Project utilizes sustained, collaborative professional development to enable teachers and school leaders to make fundamental changes in how they perceive and approach teaching and learning with the youngest members of their school communities. The project's collaborative design is a partnership among St. Xavier University; Chicago Public Schools, Area 2; and the International Renewal Institute, Inc. All partners were involved in the planning of the project design, and continue to collaborate throughout the project's implementation. Five elementary school principals, 30 teachers, approximately 840 Kindergarten – Grade 2 students, and Chicago Public Schools, Area 2, district leadership are being served by the project.

The project utilizes Feuerstein's Instrumental Enrichment, Basic as a tool to prevent early learning problems. This program consists of active-learning tasks that help Kindergarten – Grade 2 teachers facilitate the development of children's cognitive skills. The project targets the content areas of mathematics (Year 1), literacy (Year 2), and science (Year 3). Teachers study the content concepts identified in the Illinois Learning Standards, the milestones in their development, and the cognitive challenges they involve. They also analyze instructional units in the curriculum and reflect upon critical questions related to each of the targeted content areas. Intensive workshops, together with bi-monthly classroom observations and mentoring support teachers as they integrate their new knowledge into their teaching and assessment practices.

The project's goals for all students are to support critical thinking skills, improve academic achievement, and provide the best possible opportunity for them to become skilled 21st Century learners. The project's goals for the participating schools are to establish a school culture of leadership development and collegiality, to enable teachers and school leaders to make fundamental changes in their approach to teaching and learning, and to sustain systemic change.

Lead Institution: University of Chicago

Project Title: Teacher Leadership for Elementary Mathematics and Science

High Need School District: Chicago Public School District 299

Partnership members: The LOGOS Consulting Group, LLC (external evaluator)

Core Academic Area(s): Math & Science

Grade Level(s): K-8

Grant Amount: \$389,263

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Project Synopsis: This project brings together the University of Chicago’s Urban Education Institute (UEI), Center for Elementary Mathematics and Science Education (CEMSE), SESAME program, and the Chicago Public Schools (CPS) to improve instruction, leadership, and achievement in mathematics and science for teachers and leaders in Chicago and across Illinois. The primary audiences served by this project include teacher leaders in CPS, teachers and leaders in the University of Chicago’s elementary charter schools and its USI Network, and graduates and Clinical Instructors from the University’s Urban Teacher Education Program (UTEP). Teachers across Chicago and Illinois will also benefit from the project’s “Virtual PD School.”

This project builds on and extends the work and learning from a previous collaborative project between these partners. This project has four intersecting and overlapping strands:

- Continued support of the University’s elementary charter schools, with a particular focus on developing math and science leadership in these schools.
- Math- and science-focused support for UTEP graduates and Clinical Instructors, including induction coaching and workshops.
- Continuation of a Teacher Leadership Institute (TLI) for a group of roughly 25 CPS mathematics and science teacher leaders. The TLI is comprised of leadership sessions for teacher leaders and their administrators and job-embedded mentoring. The TLI focuses on developing leadership skills and promoting a healthy context for teacher leadership in participating schools.
- Development of a “Virtual PD School,” an interactive website that draws on all of these strands and allows teachers and schools from across the state (and beyond) to learn from the tools, instruction, and leadership practices of the UC charter schools and the other supports offered by the project.