

**NO CHILD LEFT BEHIND ACT (NCLB):
IMPROVING TEACHER QUALITY STATE GRANT PROGRAM
FISCAL YEAR 2009 RENEWAL GRANT ALLOCATION**

Submitted for: Action.

Summary: This item recommends approval of 10 renewal grants for the NCLB – Improving Teacher Quality State Grant Program. This federally funded grant program is authorized under the No Child Left Behind Act of 2001. The NCLB - Improving Teacher Quality (ITQ) State Grants are provided to eligible partnerships comprised of Illinois colleges and universities (including community colleges) and high-need Illinois public school districts. This item also includes as an appendix a meta-evaluation of the NCLB-ITQ program in Illinois developed by evaluators at Illinois State University.

Program Purpose:

- Improve long-term student achievement in 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 \$2,962,521 in NCLB - ITQ State Grants to 10 renewal 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 2009 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 3 to 6 percent of their approved grant awards for the evaluation and dissemination of their project's outcomes. During the past year, IBHE staff has emphasized the importance of project outcomes, and partnerships were required to submit a Logic Model with their FY2009 renewal applications. 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 2001¹, 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.

¹ The NCLB Act of 2001 was signed by President Bush on January 8, 2002 and amends the Elementary and Secondary Act (ESEA) of 1965.

ITQ Partnerships Support the Public Agenda

The ITQ grants directly support Goal One of the Public Agenda - *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;
- Projects that would create online professional development opportunities, supported by scientific research, for middle and high-school mathematics and science teachers statewide targeting “high need school districts”;
- Projects 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;
- Projects that increase access for teachers and students from historically underrepresented and underserved groups, and;
- Projects that support science teachers across grade levels to better integrate mathematics concepts into the science curriculum.

Annual Symposium and Logic Modeling

The IBHE staff, along with NCLB consultants from Illinois State University, hosted a symposium in Bloomington on October 10, 2008. The theme of the symposium was “Effective Professional Development Resulting in Long-Term Student Achievement.” The agenda included a discussion about state strategy, policy issues, and reflections on 2007-2008; and introduced the concept of logic modeling. In addition, project teams participated in four facilitated breakout sessions throughout the day. Those sessions were titled:

- Partnership Structures;
- Partnership Processes;
- Evaluation to Sustain Long-Term Student Achievement; and
- The Granting Process and Evaluation Capacity Building

Logic modeling is an effective tool to help document the strategic processes whereby school and higher education collaborators work productively together over time to improve teacher quality. A logic model helps document the school/university relationship and documents how each partnerships represent a coherent, systemic set of processes likely to make a difference in teacher quality that is both demonstrable through evaluation and sustainable over time.

Figure 1 shows a generic logic model and an example that typifies the ITQ projects. The first logic model component, *Inputs*, shows resources for the programs, consisting mainly of material and expert support. The second, *Activities*, are program actions intended to yield specific results. The third component is the project’s *Outputs*, or evidence that the project is implemented as intended. *Outputs* tend to be rough quantitative measures that function to audit projects in a basic way. **Finally, the logic model includes *Outcomes*, which are evidence of intended results.** *Outcomes*, or results, are typically gathered using a rich mix of qualitative and quantitative evaluation methods.

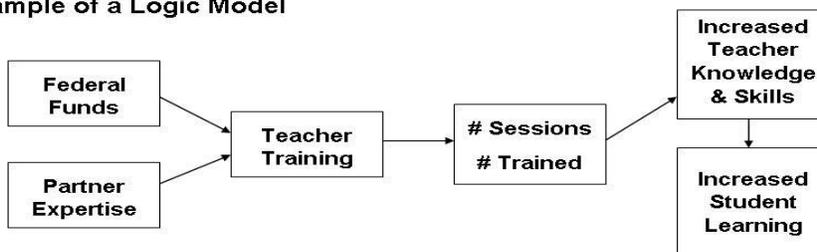
Figure 1: The Components of the Logic Model and an ITQ Grant Generic Example

Logic Models: Basic Structure and Example

Basic Logic Model Structure



Example of a Logic Model



Review Process for Grants

All renewal applications were reviewed by IBHE staff and NCLB consultants based on the following review criteria published in the FY2009 Renewal 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?

Evaluation

During the past year, the IBHE has contracted with Dr. Paul Vogt of the Center for the Study of Education Policy at Illinois State University to provide guidance to grantees and to Board staff to increase the effectiveness of the NCLB grant projects by developing a comprehensive or "meta-evaluation" (Appendix B). The overall goal of the meta-evaluation is to improve the quality of teacher professional development as required by the NCLB Act while improving the quality of all future Board grant awards for NCLB projects.

Federal Site Monitoring Results

The U.S. Department of Education conducts a monitoring visit in Illinois annually. The purpose of the visit is review the progress of the state in meeting the highly qualified teacher requirements and to ensure that the federal funds are being used to prepare, retain and recruit high-quality teachers and principals so that all children will achieve to a high academic achievement standard and to their full potential. The state of Illinois received commendations from Libby Witt, Team Leader of the Teacher Quality Program for the Department of Education. In her summary, Ms. Witt reported:

"The State Agency for Higher Education (SAHE) is commended for its structured monitoring efforts that focus on reviewing outcomes rather than outputs. The SAHE is

commended for its sophisticated program evaluation plan. The SAHE is focused on improving effectiveness, not just on compliance.”

Statewide Monitoring, Site Visit Schedule, and Interventions

The IBHE staff, along with external consultants paid with NCLB administration funds, has developed a six-step grant monitoring process to be used throughout the year. As was done in 2008, partnerships are provided with support and suggested interventions throughout the year as part of the six-step grant monitoring process.

Step	Activity	Dates
1	Study of evaluation reports and renewal applications to determine final steps in carrying out partnership projects	January 2009
2	Make site visits in the field to further study the strengths and challenges of professional development partnerships	February through June 2009
3	Preliminary analysis of models of collaboration, implementation, and capacity-building for sustainable partnerships	September through December 2009
4	Follow-up visits in the field including school sites and the study of how the partnership impacts classroom practices and student learning evaluated in project-specific ways and Offer technical assistance for analysis of evaluation data and provide it to those projects requesting it	Fall and Winter 2009-2010
5	Series of position papers that present models of successful partnerships that have strong impact in teacher and student learning	Spring 2010
6	Final consultation and reports for IBHE grant administration staff on implications of findings for new directions for future Title II partnerships	Spring 2010

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, an area 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 2009 grants totaling \$2,962,521 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, 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 2009 RENEWAL PROJECT ALLOCATION

Board Item #	Lead Institution Partner Institutions	High-Need District Partner Districts	Project Title	
1	U of I - Urbana/Champaign Illinois Math and Science Academy	CPS #299 Pana Unit #8 Danville Unit #118 Hoopeston Unit #11 Joliet Unit #86	Developing and Implementing an Online Professional Development Model for Middle and High School Mathematics and Science Teachers Statewide	\$300,000
2	Columbia College Chicago	CPS #299 Summit Unit #104	Extending Teacher Capacity to Increase ELL Success in Mathematics	\$305,058
3	Eastern Illinois University	Mt. Vernon #80 Danville #11 38 public schools	Leadership for the Improvement of Teaching Performance	\$267,949
4	Western Illinois University	Neponset #309 Kewanee #229 Wethersfield #230 East Moline #37 Central Visitation School	Math + Science Teachers Teaching Teachers to Teach (M & S T ⁴)	\$273,160
5	U of I - Urbana/Champaign	Danville #118 Urbana # 116	I-LLINI Partnerships	\$311,675

Table 1 (continued)
ILLINOIS BOARD OF HIGHER EDUCATION
NCLB - IMPROVING TEACHER QUALITY STATE GRANT PROGRAM
FISCAL YEAR 2009 RENEWAL PROJECT ALLOCATION

Board Item #	Lead Institution Partner Institutions	High-Need District Partner Districts	Project Title	Recommend Amount
6	North Central College Dominican University Illinois College Lake Forest College McKendree College Lewis University Associated Colleges of Illinois	CPS #299 Beardstown #15 Jacksonville # 117 Meredosia #11 Waukegan #60 Scott-Morgan #2 Virginia #64 Belleville # 118	ACT's Science and Math Learning Collaborative	\$311,675
7	S I U - Carbondale	Carbondale #95 Murphysboro #186 Meridian #101 St. John's Lutheran St. Mark's Lutheran	Rural Access to Mathematics through Professional Development	\$310,332
8	University of Chicago	CPS #299	UC & CPS: Developing Models & Tools for PD and Teacher Preparation	\$324,254
9	Chicago State University	CPS #299	Institutionalization of the Chicago Science Van Programs	\$261,111
10	S I U - Edwardsville	Cahokia #187 East Alton #14 40 public schools 2 charter schools 14 private schools	Hands-On Science: Improving Science Teacher Quality	\$297,307
Total Renewal Projects				<u>\$2,962,521</u>

APPENDIX A

ILLINOIS BOARD OF HIGHER EDUCATION

**Fiscal Year 2009
No Child Left Behind
Improving Teacher Quality State Grant Program**

Partnership Profiles

April 7, 2009

Lead Institution:	University of Illinois at Urbana-Champaign with the Illinois Mathematics and Science Academy
Project Title:	Developing and Implementing an Online Professional Development Model for Middle and High School Mathematics and Science Teachers Statewide
High Need School District:	CPS #299
Partnership members:	Champaign Unit 4; Danville Unit 11; Decatur Unit 61; Rantoul Unit 137; and Urbana Unit 116
Core Academic Area(s):	Math and Science
Grade Level(s):	Middle and High School Teachers
Grant Amount:	\$300,000
Project Director:	Dr. Charles V. Evans Assistant Vice President and Dean, Academic Affairs Director, University Outreach and Public Service University of Illinois at Urbana-Champaign 378 Henry Administration Building 506 S. Wright Street Urbana, IL 61801 (217) 333-3079 cevens4@uillinois.edu

Project Synopsis: The continued goal of this project is to develop and implement an online professional development (OPD) model for middle and high school mathematics and science teachers—new, early career and veteran—in the state of Illinois. This ODP program will connect novice teachers with exemplary classroom practitioners as well as university education, mathematics and science experts.

We will work with schools in high-need school districts (Chicago Public Schools, District 299; Hoopston Area Middle and High Schools, CUSD 11; Joliet Public Schools, District 86; Danville Public Schools, CCSD 118; and Pana Middle and High Schools, CUSD 8) to ensure their “freshmen” teachers receive sustained support over multiple years and ensure that they develop into proficient teachers who use effective instructional strategies to engage and nurture their students to success in mathematics and science. With the inclusion of Internet-based interactions among novice, early-career, and veteran teachers, and the research-based knowledge available through the College of Education at the University of Illinois at Urbana-Champaign and the Illinois Mathematics and Science Academy, our unique value-added approach will result in improved student learning.

This project proposes the development and delivery of online training modules, the opportunity for teachers to receive continuing education units/professional development units and/or graduate credit, and the pairing of novice teachers with veteran teachers to create an online teachers mentoring network. By the end of the three-year grant period, a curriculum of professional development courses, delivery and support infrastructure, and evaluation mechanisms will be in place to provide access to quality educational and professional resources to thousands of mathematics and science teachers. As a result, middle and high school students will be better prepared for the mathematics and science disciplines. They will be better equipped for the classroom, their confidence increased, and ultimately resulting in increased retention in the profession.

Lead Institution: Columbia College Chicago

Project Title: Extending Teacher Capacity to Increase ELL Success in Mathematics

High Need School District: Chicago Public Schools

Partnership members: Summit School District #104

Core Academic Area(s): Math/Latinos

Grade Level(s): Grade School

Grant Amount: \$305,058

Project Director: Dr. Ava Patricia Belisle-Chatterjee
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Project Synopsis: In this renewal proposal, we state our intention to continue efforts to enhance teacher capacity in mathematics content knowledge and pedagogical skills related to teaching English language learners (ELL's) and to increase the number of teachers so prepared. It is being submitted by the Education Department of Columbia College Chicago, in partnership with the Chicago Public Schools District #299 (CPS), and Summit School District #104, a small, predominantly Hispanic school district in a Chicago suburb. Our project continues to address the pressing need and challenge in large and small school districts nationwide: to increase and deepen elementary school teachers' mathematics content-area knowledge and related pedagogical skills and to tailor such informed instructional and assessment practices to ELL students. Studies in public schools support the use of the arts to further learning in other subject areas, and particularly as an arts institution, we plan to continue this vital integration of the arts into mathematics learning for our ELL students.

As in previous years, we propose to prepare another cohort of at least 30 new teachers to adapt standards-based mathematics instruction to enhance the linguistic strengths of ELL students. However, the primary focus for this, the sixth and final year of the project's activities, will be to further build sustainability into the project in order to increase capacity at the individual school level by building the teacher and administrator skill sets necessary to provide the leadership and support required for sustained implementation of the program model at the school building level.

Our goals for this year are:

Goal #1: To improve teacher practice by extending and deepening both mathematics content and pedagogical knowledge.

Goal #2: To improve teacher practice by extending and deepening their pedagogical knowledge to include use of effective approaches for teaching mathematics in conjunction with art-supported strategies and materials for teaching English-as-a-new-language.

Goal #3: To support the development of teacher facilitators, who can act as leaders in professional development delivery and provide classroom support for other teachers, as they implement standards-based math curricula using the project's instructional model with ELL students.

Goal #4: To facilitate teacher use of the strategies and materials introduced during the summer professional development workshops during the academic year and in the teachers' classrooms.

Goal #5: To build sustainability of the use of the projects' instructional model and practices.

Goal #6: To strengthen the unit's teacher preparation programs through systematically structured interactions around the project activities among P-12 educators and their students, and university educators and their teacher candidates.

This will involve efforts on several fronts: professional development for teachers, building program sustainability at the school-based level through teacher leadership development and school administration participation; and extending the benefits of the program model to teacher education and university instruction.

We fully expect the practices promoted by this project to extend beyond the grant's time frame, as we have developed long-term and fruitful relationships with the school district partners and teachers.

Lead Institution: Eastern Illinois University

Project Title: Leadership for the Improvement of Teaching Performance

High Need School District: Mt. Vernon City Schools #80, Shiloh, Urbana 116, Danville 118

Partnership members: Armstrong Township High School District #225, Armstrong-Ellis Consolidated District #61, Atwood-Hammond CUSD #39, Danville School District #118, Decatur Public Schools #61, Mount Vernon City Schools #80, Palestine School District #116, Pana C.U.S.D. #8, St. Elmo School District, Shiloh CUSD #1, Urbana School District #116, Regional Office of Education #9 – Champaign/Ford, Regional Office of Education #11 – Clark, Coles, Cumberland, Douglas, Edgar, Moultrie, & Shelby, Regional Office of Education #3 – Bond, Fayette, & Effingham, Mt. Vernon Regional Office of Education #25, Vermillion County Regional Office of Education #54, Paris Union School District #95, Shelbyville CUSD #4, Charleston CUSD #1, Stewardson-Strasburg CUSD # 5A, Windsor CUSD #1, Paris Community Units School District #4, Arthur CUSD #305, Tuscola CUSD #301, Central A & M CUSD #21, Oakland CUSD #5, Sullivan CUSD #300, Casey-Westfield USD #C-4, Marshall CUSD #C-2, Kansas USD #3, Shiloh CUSD #1, Edgar Community Unit #6, Martinsville CUSD #C-3, Villa Grove CUSD #302, Arcola CUSD #306, Beecher City CUSD #20, and Cowden-Herrick CUSD #3

Core Academic Area(s): All

Grade Level(s): Administrators

Grant Amount: \$267,949

Project Director: Dr. Linda M Morford
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Project Synopsis: The Leadership for the Improvement of Teaching Performance Project is framed around the belief that systemic (Senge, 1994) approaches to educating students will promote improved performance and, therefore, compliance with the NCLB standards. The movement to a systemic approach of educating our children takes the combined efforts of all the key players in the educational system. The project will center on two key performers, the teachers and the administrators who must coach and promote quality teaching performance.

The focus of the project is on working with high-need schools to assist them in the development of meaningful teamwork; the regular collection and analysis of student performance data; the establishment of a set of standards based goals that are clearly defined and measurable; and the development of appropriate strategies to accomplish the stated improvement targets. In other words, a “collaborative culture with a focus for learning for all students” (Solution Tree, 2007, p. 29). The target population for the project consists of 11 high-need schools as identified by IBHE. The project will consist of four major components that are linked with the same inclusive objectives - improve instructional leadership of school administrators in our partner schools and improve teaching performance focused on success for all students. The four components include:

1. New Leaders Assistance Service: A mentoring and induction program for new administrators focused on Instructional leadership.
2. Building Leadership Team workshops focused on training teams to implement professional learning communities and the development of student assessments.
3. Teacher Mentoring & Induction: Clinical support for new teachers utilizing research-based approaches focused on improving student performance by pursuing quality teaching strategies.
4. Administrators' Roundtable: Seminars focused on instructional leadership and the development of quality student assessments to guide the development of teaching performance.

The project outcomes include:

1. Improved academic performance of all students in our partner schools, especially in the core academic subjects.
2. Increased number of highly qualified teachers in our partner schools.
3. Improved instructional leadership in our partner schools.

Lead Institution: Western Illinois University

Project Title: Developing a Successful PDS: A TIERED Process

High Need School District: Neponset

Partnership members: Kewanee Public Schools, Kewanee Wethersfield Public Schools, Visitation Parochial Schools, East Moline K-8 District

Core Academic Area(s): Math & Science

Grade Level(s): 5-12

Grant Amount: \$273,160

Project Director: Dr. Donna Sue McCaw
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Project Synopsis: This project elevates teacher development to the next level. The big goals for this project are improved student achievement in math and science. Improved student achievement happens with improved teaching. At this third level of development the focus is on capacity building. By establishing a core of Teacher Mentors; training teachers in the integration of math, science, and technology; solidifying principal walk-thru knowledge and skills; and creating a core of at-risk but math savvy students called Mini-Math-Mentors (M3) math and science scores will continue to improve.

This project involves all key stakeholders (principals, teachers, and students) in the learning process, including parents (involved in the MASA summer experience). Through the integration of what the research states is necessary for change to occur that this project continues to elicit positive student achievement results.

Lead Institution: University of Illinois at Urbana-Champaign

Project Title: I-LLINI Partnerships

High Need School District: Danville District 118 Schools

Partnership members: Urbana School District 116, Champaign Unit 4 Schools

Core Academic Area(s): Science

Grade Level(s): K-8

Grant Amount: \$311,675

Project Director: Evangeline Secaras Pianfetti, Ph.D.
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Project Synopsis: Two years ago, I-LLINI Partnerships: Lifelong Learning IN Illinois for 21st Century Teachers (I-LLINI Partnerships) presented the idea that learning is a two-way conversation. Between students and teachers, between content and pedagogy, between research and practice. The I-LLINI Partnerships now seeks renewed funding to continue our conversations. Our theory of change states that student learning outcomes in mathematics and science will improve as a result of teachers employing pedagogical strategies and techniques acquired through customized professional development activities emphasizing data-driven decision making, inquiry learning, and digital media and technologies.

We will maintain our established partnerships among University of Illinois faculty and Learning Technologies Specialists, Danville District 118 Schools, Urbana School District 116, and Champaign Unit 4 School District as well as expand to include teacher participants from one additional high-needs district, St. Elmo CUSD 202. Feedback loops established among and between Year I and II university and school district participants will continue to produce our short- and medium-term outcomes, and will ultimately generate our long-term goal of increased student knowledge and understanding of mathematics and science concepts. Our approach links a myriad of interconnected activities that emphasize needs-based, customized professional development opportunities with continued support for classroom integration of inquiry-based technology enriched lessons.

The I-LLINI partners will experience face-to-face as well as virtual opportunities through which they may share ideas, best practices, successes, and challenges as they explore new means of teaching and learning. We envision impacting not only student learning outcomes in middle school classrooms, but also rethinking how instruction is delivered to pre-service teacher candidates in order to have a stronger connection between the university and authentic classroom settings.

Lead Institution: North Central College

Project Title: ACI's Science and Math Learning Collaborative

High Need School District: Chicago Public Schools District 299

Partnership members: The Associated Colleges of Illinois; Dominican University School of Education; Rosary College of Arts and Science; Chicago Public Schools District 299; St. Edmunds School in Oak Park; St. Francis of Rome, Cicero; Illinois College Department of Education and Division III Social Sciences; Beardstown Community Unit District 15; Jacksonville School District 117; Meredosia-Chambersburg CUSD; Northgreene Unit District 3; Scott-Morgan Community Unit District; Virginia Community Unit School District; Lake Forest College Department of Education; Waukegan CUSD 60; Lewis University College of Education and College of Arts and Science; Union School District 81; McKendree College Education Division; Belleville Public Schools District 118; North Central College Department of Education and Division of Arts and Science; Chicago Public Schools District 299; and East Aurora District 131.

Core Academic Area(s): Math & Science

Grade Level(s): Middle School

Grant Amount: \$311,675

Project Director: Ms. Cindy Diehl Yang
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Project Synopsis: North Central College and the Associated Colleges of Illinois' (ACI) Center for Success in High-Need Schools seek funds to continue the work of ACI's Science and Math Learning Collaborative (SMLC), an innovative response to the Illinois Board of Higher Education's (IBHE) No Child Left Behind (NCLB) Improving Teacher Quality State Grant Program. Guided by the five standards of the National Council for Accreditation of Teacher Education (NCATE) Professional Development Schools (PDS) model, ACI's SMLC is building a cadre of teachers who can address the issue of improving math and science education for girls from high-need districts.

The ACI's SMLC is a collaborative project enlisting six ACI member colleges and universities (IHEs), 11 high-need school districts (LEAs), and 18 schools throughout Illinois in order to: (1) train college faculty to infuse gender-equity into professional development programs so middle grade teachers gain an understanding of what gender-equitable instruction is and why it is crucial for high-need learners in science, technology, engineering, and mathematics (STEM); (2) offer gender-equitable professional development in math and science to in-service teachers, and (3) conduct and engage collaboratives of faculty and in-service teachers in action research that develops new gender-equitable instruction for teaching STEM in the high-need school classrooms.

The overarching goal of ACI's SMLC is to increase the number of teachers embedding gender-equitable pedagogy in middle-grade science and math instruction so that girls persist in STEM disciplines.

Lead Institution: Southern Illinois University Carbondale

Project Title: Rural Access to Mathematics through Professional Development

High Need School District: CESD #95

Partnership members: MCUSD#186, St. Mark's Lutheran School, and St. John Lutheran School

Core Academic Area(s): Mathematics

Grade Level(s): K-8

Grant Amount: \$310,332

Project Director: Ms. Susanne C. Ashby
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Project Synopsis: Project RAMP'D is a collaborative endeavor in professional development developed by the Carbondale Elementary School District #95 and Southern Illinois University Carbondale's College of Education and Human Services and Mathematics Department for the purpose of improving K–8 student achievement in mathematics. This project proposes an approach to sustainable professional development that encompasses relief of teacher anxiety issues surrounding math, teacher acquisition of mathematical knowledge, and in-depth training and application of the research-based cognitively guided instruction.

This professional development approach will serve not only the K–8th grade teachers of the Carbondale Elementary School District #95, but also Murphysboro and Meridian school districts and two faith-based schools. The goals and objectives of this proposal are as follows: (1) to reduce teachers' math anxiety while increasing teachers' confidence in their own ability to apply mathematical skills, concepts and processes to their own learning as well as their classroom instruction; (2) to increase mathematical thinking processes of all teachers; and (3) to establish a community of practice at each school site through which teachers learn about the development of children's mathematical thinking followed by examination of how their own students think mathematically.

Teachers will be provided over 80 hours of training and coaching per year to overcome their own personal anxieties, enhance their knowledge base and to acquire the tools utilized in cognitively guided instruction (CGI) to improve instruction.

Lead Institution: University of Chicago

Project Title: UC & CPS: Developing Models and Tools for PD and Teacher Preparation

High Need School District: Chicago Public School District 299

Partnership members: Chicago Public Schools Office of Mathematics and Science and the Chicago Public Schools Department of Program Evaluation

Core Academic Area(s): Math & Science

Grade Level(s): K-8

Grant Amount: \$324,254

Project Director: Mr. Timothy Knowles, Lewis-Sebring Executive Director and Senior Research Associate
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Project Synopsis: This project brings together the University of Chicago (UC) and the Chicago Public Schools (CPS) in a collaborative effort to improve leadership, instruction, and achievement in mathematics and science in nine CPS elementary schools: three professional development schools and six others. The project also will inform and enhance elementary teacher education programs at UC and elsewhere.

In order to achieve these goals, the project partners will: (1) support implementation of high-quality mathematics and science curricula in participating schools, (2) institute the use of school-based leadership teams in participating schools, (3) create sustainable models for collaboration between PD schools and other schools, (4) develop and disseminate tools (issue-based case studies, classroom vignettes, reading lists, etc.) that can be used in both in-service PD and pre-service teacher preparation, (5) use ongoing evaluation and self-assessment to inform all project activities, (6) strengthen the mathematics and science strands of UC's Urban Teacher Education Program (UTEP), and (7) enhance UTEP's model for a pre-service teacher education program embedded in PD schools.

The project will result in (1) better instruction and higher achievement in mathematics and science at the three professional development schools and six other participating schools, (2) tools and knowledge that will be broadly useful in both pre-service and in-service teacher education, (3) improvements in teacher preparation at UC and elsewhere, and (4) institutionalization of program elements at both UC and CPS. The project will significantly affect teachers and leaders at participating schools and graduates of UTEP and also will reach beyond Chicago through a comprehensive dissemination plan for sharing its tools and knowledge.

Lead Institution: Chicago State University

Project Title: Institutionalization of the Chicago Science Van Programs

High Need School District: City of Chicago School District 299

Partnership members: In Search of Genius Foundation, Chicago State University Foundation

Core Academic Area(s): Science

Grade Level(s): High School

Grant Amount: \$261,111

Project Director: Dr. Mike N. Mimnaugh
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Project Synopsis: Since 1993, the Chicago Science Alliance Chemistry Van Program has been serving the needs of Chicago Public High School chemistry teachers and their students. It has accomplished this through a two pronged approach that includes: (1) professional development training in chemistry for teachers in hands-on, inquiry-based, research-based, grade-appropriate instruction in laboratory science and (2) assistance to the school district and individual teachers through an in-class, in-service, support program for the implementation of the model instructional program in their classrooms. During academic year 2006-2007, chemistry van personnel made more than 200 visitations to deliver materials and supplies to more than 30 chemistry teachers trained in the program and teaching in 25 Chicago Public High Schools and impacting more than 6,000 students.

While the initial acquisition of equipment and supplies for the Chemistry Van Program was accomplished by donations from professional organizations, federal funding agencies and private companies, the year-to-year operational expenses of both the chemistry and physics vans for the last 12 years has been through the Illinois Board of Higher Education (IBHE); first from the Eisenhower Program and more recently from the No Child Left Behind Program. That support came to an abrupt halt when the Van Program's annual application to NCLB for AY2007 was not recommended for funding. The halt in support was due at least in part to an IBHE decision that it would no longer support programs on a long term basis.

The potential loss of the Chemistry and Physics Van programs galvanized into action a consortium of CPS teachers, the Deans of the Colleges of Education and Arts and Sciences at Chicago State University, the Chicago Public Schools administration and private foundations. As a consequence of a number of initial planning meetings and discussions with these constituencies we proposed a three-year transition plan that would allow the Chemistry, Physics, and a to-be-created Biology Van program to become self-sustaining. This revised proposal to IBHE was approved and the first year of activities in a three year proposed transition process began in September 2007.

Lead Institution: Southern Illinois University Edwardsville

Project Title: Hands-On Science: Improving Science Teacher Quality

High Need School District: East St. Louis, East Alton-Wood River, Madison, East Alton, Cahokia; and Venice.

Partnership members: Highland, Okawville, Valmeyer, Greenville, Mt. Olive, Triad, Mascoutah, Gillespie, Belleville West, Carlinville, O'Fallon, Staunton, Civic Memorial, Waterloo, Lutheran, Lebanon, Trinity, Livingston, Christian Academy, Central Visual P.A., Collinsville, New Athens, Freeburg, Divernon, and BCCU #2 .

Core Academic Area(s): Science

Grade Level(s): 6-12

Grant Amount: \$297,307

Project Director: Dr. Sadegh Khazaeli
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Southern Illinois University Edwardsville
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Dr. Eric Voss, Dr. Abdullatif Hamad, and Dr. Dennis Kitz

Project Synopsis: The objective of this project is to provide hands-on professional development for high school chemistry, high school physics, 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, and become aware of available high quality science educational resources. 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 students who are better prepared for high school and college science courses.

During Spring 2009 we will have seven sessions (one day a week) of classroom-format discussion and demonstrations for 20 high school chemistry teachers. During Summer 2009, 30 high school chemistry teachers will participate in hands-on activities and laboratory experiments on the topics covered in Spring 2009. Similarly, during fall 2009 we will have seven sessions of classroom-format discussion and demonstrations for 20 high school physics teachers and during summer 2009, 30 high school physics teachers will participate in hands-on activities and laboratory experiments on the topics covered in fall 2008. During summer 2009, 60 middle-school teachers will have 10 days of classroom-format discussion (mornings) and laboratory/demonstration sessions (afternoons) on topics in biology, chemistry, earth science, and physics.

APPENDIX B

ILLINOIS BOARD OF HIGHER EDUCATION

**Fiscal Year 2009
No Child Left Behind
Improving Teacher Quality State Grant Program**

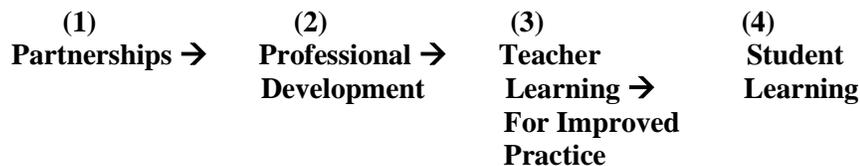
Meta-Evaluation

Improving Teacher Quality – Meta-Evaluation

The ITQ program is composed of 10 professional development projects across the state. This meta-evaluation provides an overview of the statewide program. It is not a series of individual evaluations; instead, it builds on documents such as the individual evaluations conducted by each project’s external evaluator to construct an evaluation of the program as a whole (see the note on sources at the end of this document).

While the projects differ greatly in goals and methods, they naturally have elements in common since they are all part of the same IBHE program. First, they focus on improving science and mathematics education by professional development for teachers (and sometimes administrators). Second, they employ the same basic project model as required by the U.S. Department of Education which funds them through the NCLB legislation. This basic project model is referred to as the “logic model” in the IBHE/ITQ program.

Figure 1. Basic Logic Model of the IBHE/ITQ/NCLB Program



The partnerships are between school districts and universities (and within universities). The collaboration among partners leads to better professional development, which leads to increased teacher knowledge, which leads to growth in student learning. Each step or stage in this model requires that change occur and that it be documented and evaluated.

Despite their diversity, all projects in the state’s ITQ program confront similar issues. These recur in discussions with individual project staff and are addressed in this meta-evaluation and with IBHE staff. By pooling knowledge drawn from the individual projects, the meta-evaluation draws conclusions about what has been effective and addresses implications for IBHE-sponsored programs in the future.

A meta-evaluation is inherently retrospective. The program meta-evaluation can only be truly completed after the final project evaluations have been conducted. Therefore, this is an interim meta-evaluation, a progress report on a three-year program that has just passed its halfway point. The goal of this interim evaluation is, first, to discover what can be learned before the end of the three-year cycle, while there is still opportunity to make adjustments and, second, to derive lessons for awarding grants and administering projects in subsequent IBHE programs. Improved efficiency in awarding grants and administering grant programs is of particular urgency in an era of scarce resources.

This interim meta-evaluation has five linked parts:

1. An assessment of the quality of project evaluation
2. A synthesis of outcomes achieved thus far
3. Challenges to successful implementation of projects
4. Suggestions for effective practice in future projects
5. Implications for administration of future statewide programs

Assessment of the quality of project evaluation

Introduction: Evaluation is the bedrock of achieving effectiveness. If a project does not evaluate its outcomes, it has no knowledge on which to base decisions about what is working and what needs to be revised, about what to do and how. The same is true of a statewide program that sponsors local and regional projects.

A. Partnerships

- The school-university partnerships have two main goals: (1) to create good professional development curricula and (2) to deliver them effectively. The key to the effective delivery of professional development is a joint commitment by partners to support the improvement of teacher quality and student learning. Several partnerships have been developed, in a variety of demographic and grade-level contexts, which can serve as models of their kind.
- The most effective way to evaluate the quality of partnerships is by site visits.

B. Professional development

- The evaluations of professional development have been most persuasive and useful for project adjustment when the professional development has been guided by a well-developed curricular concept, such as hands-on science, cognitively guided instruction (CGI) or Everyday Math. (EM). These provide standards to use to judge whether progress in professional development is being made and how to link professional development and the instruction of teachers to methods of instruction leading to student learning.

C. Teacher learning for improved practice

- Projects are more effective in their evaluation of teacher learning than in evaluation of other aspects of their work. They have often used multiple measures that have substantial face validity. The more successful programs have evaluated teachers' knowledge and skills, not only their attitudes and dispositions.
- Because teacher learning is harder to assess and teacher attitudes are comparatively easier to tally, evaluation efforts often stop when teacher attitudes toward professional development instruction have been summarized.

D. Student learning

- Although some projects have made considerable progress, most are still struggling with determining the best methods to measure students' learning. Several projects plan to use ISAT scores. When these are appropriate to evaluate the project, this is an efficient approach. But projects still have not worked out in sufficient detail *how* they will use the scores—for example, what level of analysis (classroom or school) will be used? Will scale scores or cutoffs be analyzed? Will growth-modeling (value-added) approaches be employed?

Conclusions

- Each step in the four-step process is a key to the evaluation of the previous step. For example, teacher learning is the criterion for evaluating professional development, student learning is the criterion for evaluating teacher learning. The program as a whole is best evaluated by how well the entire system of components in the logic model is

- functioning. Some projects stop their efforts short of the final step; this makes it impossible to complete the evaluation of the whole four-step model.
- Evaluation leads to better program efforts when it is linked to a theory of change that can be used to assess when progress is being made.
 - Monitoring projects through interim evaluations and site visits has enabled IBHE staff to take some corrective measures earlier than they otherwise could have done, such as addressing specific evaluation questions to each project.

What has been learned so far about outcomes of the ITQ program?

Introduction: Although the program and projects are only halfway through the second year of the projected three-year cycle, it is possible to identify several outcomes achieved so far.

A. Partnerships

- Partnerships are not themselves outcomes, but forming a partnership is a crucial step in establishing an effective professional development program.
- Establishing strong partnerships usually requires constancy of personnel in each partner institution. This is not something that can be accomplished using temporary personnel who devote limited and part-time attention to the project.
- If sustainability is to be achieved, the roles, relationships, and responsibilities of each member of each partnership (university and district/school) need to be identified very specifically.
- Partnerships should collaboratively participate in collecting and analyzing data to promote project improvement.

B. Professional development

- Professional development has been most successful when it has focused on specific strategies for providing specific content knowledge and methods to teachers. They have been less successful when they have aimed at encouraging dispositions and attitudes only loosely linked to curriculum and instructional practice.

C. Teacher learning for improved practice

- Successful projects have a credible theory of change. For example, they not only *assume* that teacher learning is likely to lead to student learning, or hope that it will, they specify the mechanisms through which it will do so; these mechanisms inevitably involve change in teachers' methods of instruction. A theory of change is credible when it is based on a review of and analysis of relevant research.

D. Student learning

- At the mid-point of the three-year grant cycle, we know very little about the effects of these programs on student learning. Several of the projects are well enough designed that there are strong grounds for optimism, but some projects have not gathered student learning data—not even baseline data, which in principle could be gathered quite early on in a project.

Conclusions

- By encouraging the use of logic models, which enable one to see the relation of a project's parts to the whole and to the ultimate outcome, the ITQ program has improved the level of project evaluation and implementation. This enables programs to better identify what is working well and what needs improvement in each project and in the program as a whole.

Challenges to successful implementation of projects

Introduction: Many challenges are local and project-specific. Others cut across individual projects and are likely to be important, in varying degrees, to all projects across the state. Both are discussed in this section.

A. Partnerships

- Functional partnerships can be difficult to achieve when the partners (whether universities and schools or arts & science colleges and education colleges) do not have a prior viable relationship.
- Partnerships have varying levels of complexity. As a general rule the more complex the partnership, the more difficult it is for the partnership to implement successful professional development programs.

B. Professional development

- Projects often find it difficult to design ways of evaluating the effects of professional development training other than by conducting surveys of the attitudes and opinions of teachers about the training.
- A long-standing tradition in research on social projects, especially education projects, uses participant satisfaction as the main criterion of success, so much so that it is sometimes difficult for evaluators to imagine other approaches.

C. Teacher learning for improved practice

- For the more successful projects, it is clear that teacher participation in the project and active involvement in professional development leads to instructional improvements and broader changes in the school.

D. Student learning

- There remains a tendency to see evaluation as something done only or mainly at the end of a project. A related problem is a tendency to view evaluation as a distraction from the true work of the project. This can lead some projects to delay collecting baseline data, even when it could be collected in the opening months of a multi-year project. This leads to a consequent lag in the development of useful and practical measures of student learning. Projects afflicted with the resulting evaluation-avoidance syndrome are unlikely to reach the stage of evaluating student learning outcomes, even though they say they intend to do so.
- More successful projects establish a direct link to student learning in their plans and in their implementation. For projects lacking these links, it will not be possible to show whether and how professional development benefits students.

Conclusions

- There remains a tendency in some projects to confuse monitoring of processes and fidelity of implementation with documenting and evaluating results or outcomes.

Suggestions for future practice in ITQ and similar projects

Introduction: The quality of the evaluations, the outcomes achieved thus far, and the challenges to implementation together lead to suggestions for practice that can help the IBHE provide guidance to future projects in this and related programs.

A. Partnerships

- Principal (and other school administrator) buy-in is crucial for professional development programs to be successful. Teachers' professional development is more effective when it is encouraged, supported, and coordinated by school and district administrators.
- Projects need to specify how partnership relationships operate at all levels, from leaders through practitioners.

B. Professional development

- Professional development programs work better when intended teacher and student learning are analogous, that is, when *what* teachers are taught and *the way* they are taught it is closely parallel to what teachers will teach students and methods they will use to teach students.

C. Teacher learning for improved practice

- Teacher learning in professional development is most effective when it is frequently reinforced and assessed in practice. This means that “one-shot” events, no matter how prestigious or interesting the presenters, are not likely to be effective as compared to sustained learning and application of what is learned.
- Projects should be encouraged to consider how their models of partnerships, professional development, and teacher learning could be replicated in additional districts and schools.

D. Student learning

- Assessing the final outcome—student learning in this program—has to be planned for from the outset of a project. It needs to be planned for *specifically*, not only in general terms, such as by quick reference to evaluation platitudes such as: valid and reliable, formative and summative.
- This planning must include operational definitions of outcomes: how they will be identified, documented, and/or measured.
- Projects uncertain of how to accomplish this should seek help from IBHE staff, who can often provide technical assistance.

Conclusions

- The challenge in all partnerships designed to improve the quality of teacher performance is the creation of viable networks of ongoing support among peers as well as instructional specialists. Partnerships that allow teachers to continue to work in isolation will have little likelihood of helping schools improve their instructional programs.
- Project directors should tighten the alignment of their projects with their stated logic models and evaluation methods. Program administrators should monitor projects based on this expectation of alignment.

Implications for administering future statewide programs

Introduction: The IBHE staff has been monitoring and evaluating its own activities to learn how to better administer and assist projects in attaining high levels of effectiveness. The following summarizes some of the lessons learned. Most importantly, close monitoring and evaluating project evaluations is crucial to providing the support that all of them need to one degree or another.

A. Partnerships

- Early site visits are the key to identifying genuine partnerships and distinguishing them from marriages of convenience.
- Projects need to be able to specify how they will work to achieve intended results with each partner.

B. Professional development

- Professional development activities have to be explicitly linked to intended outcomes in schools. Even professional development activities that seem attractive and stimulating in and of themselves are of limited value unless the grantee can specify *how* these could lead to documentable outcomes in schools and how those outcomes can be measured or identified.

C. Teacher learning for improved practice

- The IBHE should encourage professional development learning to be shared among networks of teachers within and across schools and discourage projects from adopting a teacher-by-teacher strategy.
- The IBHE should help grantees develop methods for documenting the value added to the project from teacher networking.

D. Student learning

- Raising standards of measurement for student learning and similar outcome measures will mean that most projects will need considerable technical assistance. Educators have tended to focus more on delivering instruction and less on assessing its effects. This means that they do not often have the expertise needed to assess outcomes.
- The IBHE should require detailed plans for evaluation of outcomes. This means that projects may require technical assistance in the earliest stages as they amend their initial evaluation plans. (Of course, projects may amend these plans as they learn in the course of project implementation.)

Conclusions

- It can be difficult to tell from an initial proposal whether a project is likely to succeed. It is much easier to determine this after a year, or even by the first interim evaluation, which accompanies the first renewal application. When it becomes clear that a project is not measuring up, the program administrators can either intervene to improve it or to cut funding. This means that the interventions to insure that programs conform to the promises made in the initial funding application must be quite intrusive and rigorous.
- The IBHE should continue to require applicants for funding to specify detailed evaluation plans and updated revisions of these plans at each stage of interim and annual evaluations.

A note on sources:

While the meta-evaluation draws on individual project evaluations, it is a distinct analysis. It reaches independent conclusions using several sources of evidence. The main sources are documents and insights provided by the IBHE staff, the individual project directors, the external evaluators for each project, and the site visit team. These people are virtual co-authors as well as providers of data.