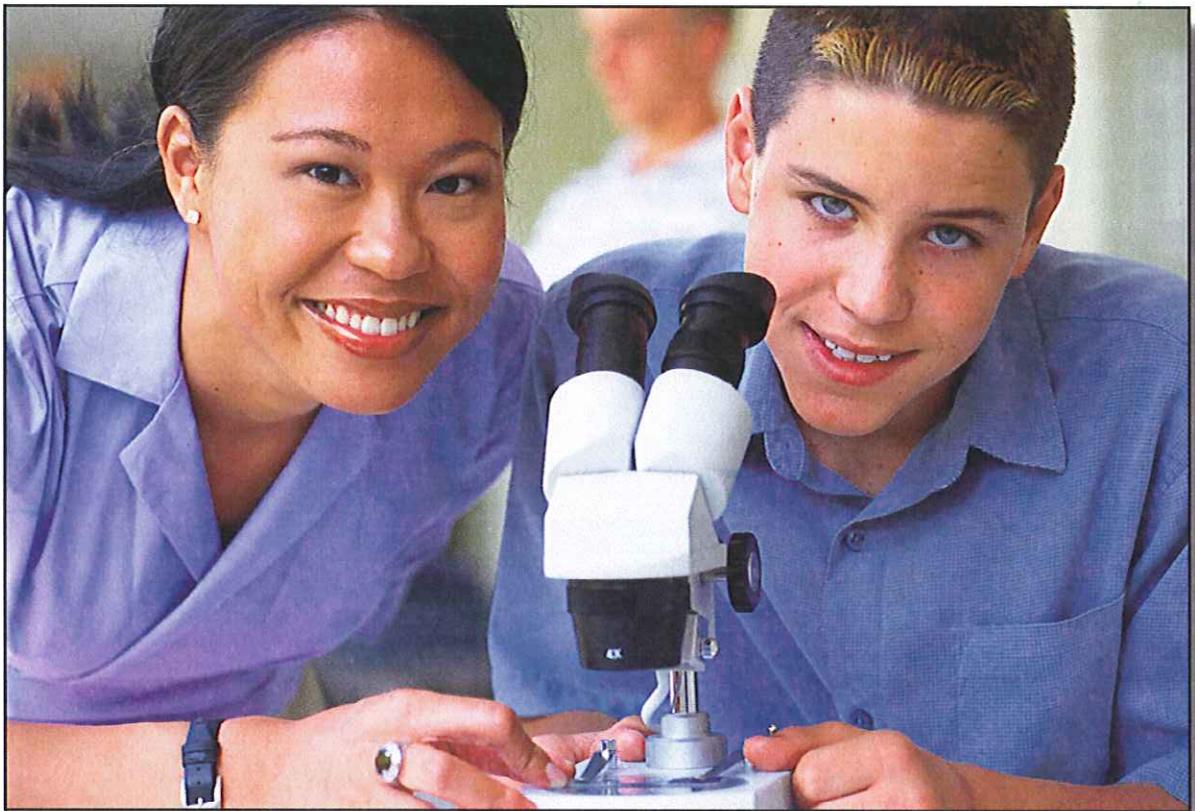


LEARNING NETWORK CONFERENCE



2009
Partnership Development

WISCONSIN DEPARTMENT OF PUBLIC INSTRUCTION
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Mathematics & Science Partnerships



2006

Madison Mathematics

Madison Science

Pecatonica

Rio

2007

Chetek

Kenosha

Linn J6

Phillips

2008

Green Bay

UW-Oshkosh

Milwaukee

A QUALITY
EDUCATION
FOR
EVERY
CHILD



Wisconsin Department of Public Instruction
Madison, Wisconsin

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➤ MSP Application/Request for Proposal (new, renewal, repeat)	Yellow

Introduction

With the reauthorization of the Elementary and Secondary Schools Act in January of 2002 (also known as the No Child Left Behind Act, NCLB) introduced the Improving Teacher Quality Grant Programs (Title IIB). These programs encourage scientifically based professional development as a means for improving student academic performance in all 50 states.

Each state's department of education is responsible for administering the program on a competitive basis. The program is a formula grant program, with each state's funding determined by student population and poverty rates. The program is commonly known as the Mathematics and Science Partnership Program (MSP).

Wisconsin's MSP *strives to improve teacher quality* through partnerships between state education agencies, institutions of higher education, local and regional education agencies, and school districts; *And to increase student academic achievement in mathematics and science.* The program supports partnerships between one or more of Wisconsin's high-need Local Educational Agencies (LEA) and at least one institution of higher education department of science, mathematics, and/or engineering.

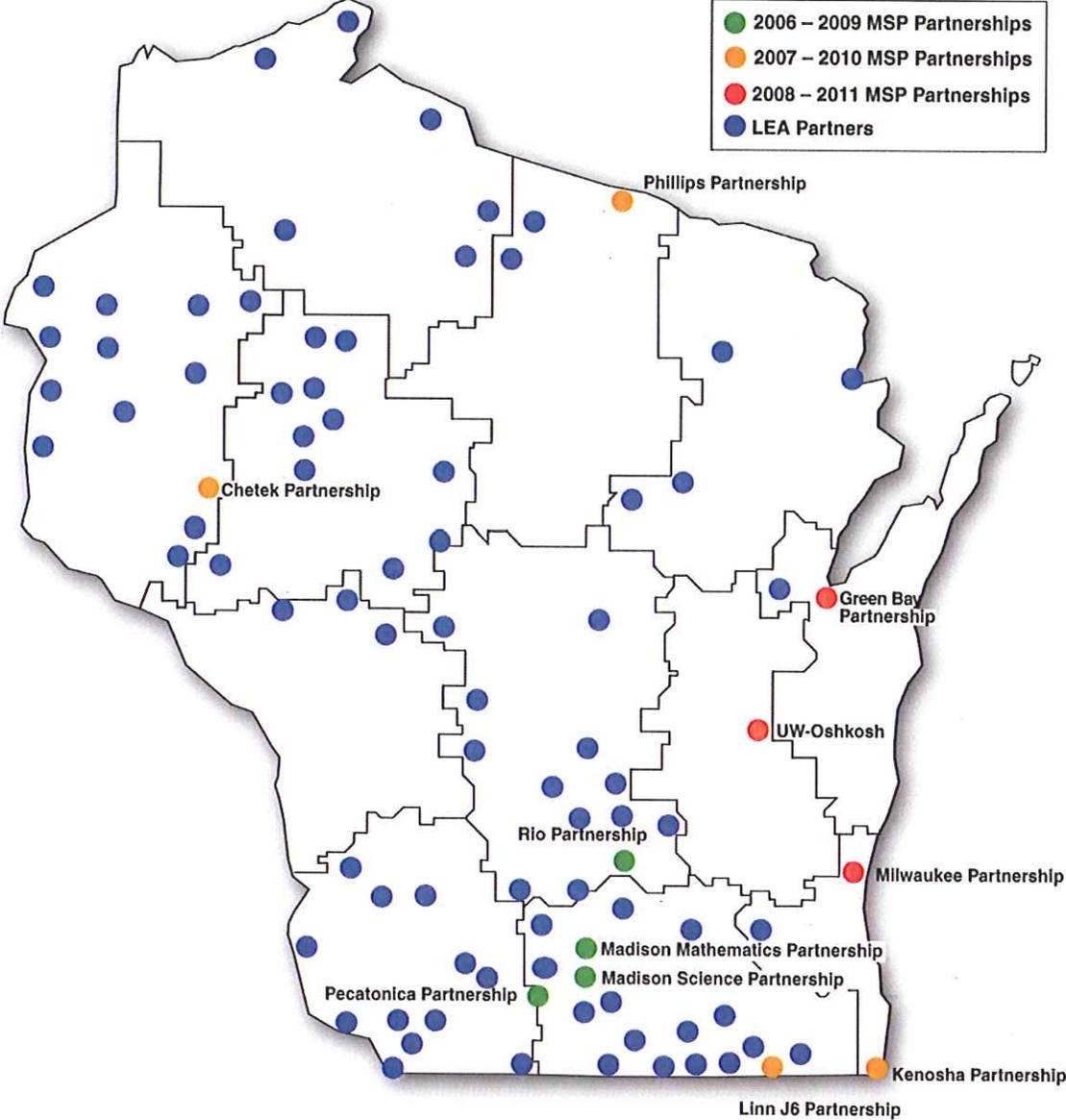
Partnerships between these high-need school districts and the science, technology, engineering, and mathematics (STEM) faculty in institutions of higher education are at the core of each MSP. Each individual partnership focuses on increasing and enhancing the content knowledge and teaching skills of classroom teachers of mathematics and science; are typically for two to three years in duration, and includes face-to-face instruction and a continual electronic dialog among participants.

*A high need Local Education Agency (LEA) is any district where mathematics or science student proficiency scores do not exceed 65 percent, based on disaggregated Wisconsin Knowledge & Concept Examination (WKCE) scores, and where there is no currently active Title II, Part B grant, in the same content area, and one of the following:

1. At least 10 percent of the student population is from families with income below the poverty line as identified by the Census 2004, or
2. Schools/districts having Rural Education Achievement Program (REAP) or meeting local codes of 6, 7, or 8, or
3. Not achieving Adequate Yearly Progress (AYP) in mathematics based on 2005/06 data.

MSP Program Locations

Mathematics and Science Partnership Program



Please refer to DPI News Release in the back of this book for complete listing of partnership districts.

Presenters



Partnership Development

Terry Millar

8:45 a.m.

Gray Wolf room

Terry Millar is the Project Director and PI of System-wide Change for All Learners and Educators (SCALE), a Comprehensive Math and Science Partnership funded by the NSF. He has been on the mathematics faculty at UW-Madison since 1976, is the associate dean for the Physical Sciences of the Graduate School, and served as NISE interim co-director from September 1996 to July 1998. He was team leader of the NISE's Graduate Science, Mathematics, Engineering, and Technology Education Team. Millar organized the NISE Graduate Education Forum, which was held in Washington, DC, on June 29-30, 1998.

Presenters



Greenheck Fan Corporation

Kathy Drengler
10:00 a.m.
Gray Wolf room

Greenheck's worldwide leadership in providing cost-effective, value added solutions for air movement and control challenges evolved from rather humble beginnings. Bernie and Bob Greenheck weren't sure what lay ahead when they opened their small sheet metal shop in Schofield, Wisconsin USA in 1947, but they were determined that no product would ever leave their shop, unless it met the most stringent quality standards--their own. At first, the company manufactured a variety of sheet metal products. In 1956, Greenheck engineers developed a highly efficient power roof ventilator. This product and the innovative ventilation solutions that followed ultimately enabled us to expand our distribution throughout the world. Today, quality Greenheck products are efficiently moving air in commercial buildings, institutions, and factories throughout North America, Latin America, the Middle East, and Asia.

The company now achieves sales of approximately \$500 million annually, employees approximately 2,500 people and utilizes more than 1.5 million square feet of manufacturing space. Manufacturing operations are located in Schofield WI (corporate headquarters), Minneapolis MN, Sacramento CA, Frankfort KY, Somerville TN, Kings Mountain NC, Kunshan China and Saltillo Mexico.

Kathy Drengler is Director, Human Resources for Greenheck Fan Corporation. She joined the company in 1986 and has served in many roles in both finance and human resources. She holds a BS in Managerial Accounting from UWSP and a MS in Training and Development from UW – Stout. She is past President of the Central WI Chapter of ASTD, past Chair of the Wausau/Marathon County Workforce Development Committee and serves on the UW Stevens Point Chancellor's Advisory Council and the Governor's Council on Workforce Investment.

Presenters



Evaluation and Form Development

Cindy Walker
12:45 p.m.
Gray Wolf room

Cindy Walker is an Associate Professor in the Department of Educational Psychology at UW-Milwaukee and the Director of the Consulting Office for Research and Evaluation (CORE) in the School of Education. She teaches courses in educational and psychological measurement, statistics, research design, and program evaluation.

She conducts research in the area of testing and measurement. Her research focuses primarily on applied issues in psychometrics and includes work done with the Certification and Skills Assessment team at Microsoft Corporation, the Office of the Superintendent of Instruction in the state of Washington, and the National Science Foundation. She also has extensive experience working with large testing databases, such as TIMSS, NAEP, and those associated with states and districts.

Walker has published on the topics of differential item functioning, multi-dimensional item response theory, and computer adaptive testing in journals including *Journal of Educational Measurement*, *International Journal of Testing*, and *Educational Measurement: Issues and Practice*. Her interest in psychometrics is enhanced by her interest in how children learn and are assessed in a constructivist mathematics classroom. Walker received an M.S. in mathematics education from Illinois State University and a Ph.D. in quantitative research methodologies from the University of Illinois at Urbana-Champaign.

Mathematics & Science Partnerships

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Beloit School District

Deerfield Community Schools

Kettle Moraine School District

Madison Metropolitan School
District

Sun Prairie Area School
District

Wisconsin Heights School
District

Extending Math Knowledge, Madison Metropolitan School District (MMSD), University of Wisconsin—Madison, SCALE (an NSF Math/Science Partnership)

The Extending Math Knowledge Project is designed to improve the content knowledge of intermediate grades (3-5) mathematics teachers. This program builds on the MMSD Math Masters Project, a math/science partnership designed to improve math knowledge of middle school teachers. There are five school districts in south central Wisconsin included in this project including, Beloit, Deerfield, Madison, Sun Prairie, and Wisconsin Heights.

This program will be designed around the different strands of mathematics: Algebra, Geometry, Measurement, and Data. The 60-hour Professional development program will include:

- Math courses team taught by a UW Mathematics Professor and an MMSD Elementary Math Resource Teacher
- Discussions about math content, pedagogy, and research on student learning
- Facilitated online discussions about effective math instruction

Teachers will meet during the summer followed by face to face and online discussion groups during the school year.

Mathematics & Science Partnerships

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Deerfield Community School
District

Madison Metropolitan School
District

Monona Grove School
District

Mount Horeb Area School
District

Oregon School District

Sauk Prairie School District

Sun Prairie School District

Wisconsin Heights School
District

SCALE (an NSF
Math/Science Partnership)

UW-Madison

Science Masters Institute

The goal of the Science Masters Institute (SMI) is to improve achievement of middle school students in science by strengthening the quality of science instruction. SMI is designed to provide content and inquiry-based professional development to meet objectives that addresses the following:

- **CONTENT KNOWLEDGE:** Increase the content knowledge of 120 middle school science teachers by offering high-quality content and inquiry-based courses co-designed and co-facilitated by a UW scientist (STEM faculty) and an Madison Metropolitan School District (MMSD) instructional resource teacher in secondary science.
- **INSTRUCTION:** Improve participating teachers' understanding of how students learn science content and ensure that new content knowledge is incorporated into the classroom by offering pedagogical and instructional supports.
- **CURRICULUM IMPLEMENTATION:** Enhance implementation of standards-based science curricula within classrooms by expanding teacher knowledge of essential content, concepts, and teaching strategies associated with middle school science
- **STUDENT ACHIEVEMENT:** Raise middle school student achievement in science in all grades as teachers with strengthened content knowledge, understanding of student learning, and mastery of curriculum teach more students in more strands of the curriculum over time.
- **ACHIEVEMENT GAP:** Reduce the achievement gap in science among all NCLB sub-groups by helping teachers master key concepts they can use to adapt instructional goals, assessment strategies, and learning activities to meet the needs of all students.

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Mathematics & Science Partnerships

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Deerfield Community
School District

Madison Metropolitan
School District

Monona Grove School
District

Mount Horeb Area School
District

Oregon School District

Sauk Prairie School District

Sun Prairie School District

Wisconsin Heights School
District

SCALE (an NSF
Math/Science Partnership)

UW-Madison

Science Masters Institute—continued

STEM faculty from UW-Madison and SMI partner school districts have collaborated for the past three years on the Title IIB-funded Math Masters Projects 1 & 2. SMI will use some of the same design elements from the highly successful Math Masters Projects as it extends into the content areas of earth, life, and physical sciences at the middle school level.

Over the course of one year, a cohort of 60 middle school science teachers will participate in two SMI components:

Three 20-hour content seminars co-designed and co-facilitated by a UW STEM faculty member and an MMSD instructional resource teacher in secondary science offered on a rotating basis during both the summer and the academic year. The rotation focuses on one key middle school science concept area commonly taught in either grade 6, 7, or 8 and in either earth, life, physical science. The Earth Science concept areas include: Structure of Earth Systems (6), Earth's History (7), and Earth in the Solar System (8); in Life Science: Cellular Structure & Function (6), Natural Selection & Evolution (7), and System Interactions & Regulation (8); and in Physical Science: Motion & Forces (6), Properties & Changes in Matter (7), and Transfer of Energy (8).

Ten hours of moderated online discussion among all cohort members for each seminar or summer institute, and academic year classroom visits by the instructional resource teacher.

Mathematics & Science Partnerships

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Partners:
Cuba City School District

Fennimore School District

Highland School District

Hillsboro School District

Holmen School District

La Crosse School District

Iowa-Grant School District

Ithaca School District

Lancaster School District

North Crawford School
District

Pecatonica School District

Platteville School District

Mathematics Achievement Project

The vision of the Mathematics Achievement Project (MAP) is to ensure that more highly qualified mathematics teachers will be part of the educational infrastructure in western Wisconsin resulting in increased student learning and performance. To achieve this vision, the UW-P, CESA #3, CESA #4, and local LEAs formed the Western Wisconsin Mathematics Improvement Consortium (WWMIC). The partnership was formed on the premise that student achievement could be improved only by enhancing the content knowledge and the quality of instruction by mathematics educators. The WWMIC received \$130,000 annually for a two-year period to provide a high-quality, sustained professional development experience in mathematics content and pedagogy for 25 mathematics teachers. A third year of funding was requested and approved.

Based on ten national, state, and local needs that were determined by the WWMIC, six project goals were identified: 1) Expert panel, 2) Curriculum alignment, 3) Mathematics content, 4) Constructivist pedagogy, 5) Learning plans, and 6) Student achievement. Teachers will participate in an intensive two-week summer Math Academy using Marilyn Burn's Educational Associates *Math Solutions Program* as a reform framework. UW-P faculty will employ a problem-solving approach to teach mathematics content that is centered on the Wisconsin Model Academic Standards (WMAS) for mathematics. Inquiry-based teaching methods, authentic assessment strategies, and grade-level connections will be modeled over the two-year period. A trained expert panel in Math Solutions will mentor and network with the 25 teacher participants. These participants will apply the new knowledge gained and pedagogical techniques learned by developing standard-based learning plans. Grant funding will be used to pay instructor salaries, provide support stipends, and purchase resources and equipment for learning plan implementation.

The six grant goals were designed to be achieved over a three-year cycle. Significant progress has been made in four of the six goals; learning plans and student achievement data are still being created and students are in the process of completing the pre-test.

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Partners - continued:
Prairie du Chien School
District

Richland School District

Riverdale School District

River Valley School District

Seneca School District

Southwestern School District

Tomah School District

Mathematics Achievement Project - continued

Progress on each of the six learning goals is summarized below:

1. Expert Panel. The expert panel was assembled in the spring of 2007. The Panel consists of three University of Wisconsin-Platteville professors (two from the Mathematics Department and one from the Engineering Department), three teachers, and two Cooperative Education Service Agency (CESA) employees. The Expert Panel traveled to Deer Park, Texas June 4-8, 2007 to attend Marilyn Burns Math Solutions About Teaching Mathematics-Part 1 training. After attending the training the Panel planned how to address mathematic processes, mathematics standards, and cooperative learning for the summer institute. The Panel conducted all of the training during the two week summer institute held at UW-Platteville July 16-20 and July 23-27, 2007.
2. Curriculum Alignment. During the course of the two week institute participants explored and participated in activities in each of the Wisconsin Mathematics Standards. Each participant received a three ring binder in which they accumulated activities that aligned to the Mathematic standard for their grade level. The expectation for networking nights is that participants will bring documentation of lesson plans that they have implemented in one of the Mathematics standards to present to other participants.
3. Mathematic Content. Trained 37 elementary, middle and high school teachers in year one summer institute on Mathematic processes. The teachers all took a pre and post assessment to measure their math content knowledge.
4. Constructivist Pedagogy. Trained 37 elementary, middle and high school teachers in year one summer institute on using the constructivist approach to teaching mathematics.
5. Learning Plans. No Learning Plans from the participants were due during year one.
6. Student Achievement. The goal of increasing student achievement is a work in progress. WKCE-CRT test results are being collected and analyzed at the time of this report. Student Tier II pre-assessment data is also being collected at the time of this report.

Mathematics & Science Partnerships

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Cooperative Educational
Service Agency #5

Lodi School District

Montello School District

Necedah School District

New Lisbon School District

Pardeeville School District

Pittsville School District

Portage School District

Port Edwards School District

Princeton School District

Randolph School District

Tri-County School District

University of WI – Platteville

Mathematics Excellence in the Middle Grades

Mathematics Excellence in the Middle Grades (MEMG) is a three-year professional development project designed to raise student achievement by developing deeper mathematical content and pedagogical knowledge in teachers of students in grades 5-8 within the Rio Mathematics Partnership, a consortium of seventeen central Wisconsin school districts.

Faculty from the education, mathematics and engineering departments at UW-Platteville, and curriculum specialists at CESA 5 have organized the grant work around two four-day summer institutes centered on the *Wisconsin Model Academic Standards for Mathematics* in each of the summers from 2007-09. These summer institutes are organized by mathematics content strand, and complemented by three school-year meetings to continue intensive work focused on teacher and student needs, and the exploration of action research questions chosen by participating teachers.

On-site coaching and assistance to all consortium schools will continue to be available in the third and final of the grant to extend the summer learning and further develop a sustainable model for improving mathematics instruction and promoting reflective best practice. A wiki website connects participants to resources and to one another to provide an electronic learning community.

Strengthening and developing parent partnerships is also a high priority for MEMG. Every parent plays an important role in encouraging and supporting student achievement in math, but the grant's role takes on special importance in districts where reform curricula are being implemented. Written into the grant are parent outreach activities that contribute to building a multi-generational community of learning.

continued on to next page

Mathematics & Science Partnerships

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Necedah School District

New Lisbon School District

Pardeeville School District

Pittsville School District

Portage School District

Port Edwards School District

Princeton School District

Randolph School District

Tri-County School District

University of WI – Platteville

Mathematics Excellence in the Middle Grades - continued

In the first year of MEMG, the 31 participants included several Title 1 teachers and two special educators, as well as teachers who teach all subjects including math, and junior high and middle school math teachers from public and parochial schools in our area. The cohort at the 2008 summer institutes represented 17 returning and 18 new participants from twelve partner school districts. As we enter the final year of the grant, we expect many participants to continue, and have set the goal of having at least one teacher from each participating district. The 2009 summer institutes will focus on the Number and Operations and Problem Solving and Reasoning strands within the context of best practice instruction and assessment for improving student learning.

Goals for MEMS are for teachers who participate in the program to be able to

1. Deepen their content knowledge
2. Expand their pedagogical knowledge
3. Use formative assessment to improve student mathematics achievement
4. Integrate technology regularly in their mathematics instruction
5. Utilize resources available for a coaching model of professional development

Mathematics & Science Partnerships

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Barron

Chetek

Clayton

Clear Lake

Durand

Grantsburg

Luck

Menomonie

Osceola

Saint Croix Central

Somerset

Unity

University of Wisconsin –
Stout

MATH & Science Partnership Grant

The Creating Mathematics Excellence (CME) partnership between the University of Wisconsin – Stout, and a total of 14 rural and high poverty school districts in northwestern Wisconsin – including Barron, Birchwood, Chetek, Clayton, Clear Lake, Grantsburg, Luck, Menomonie, Osceola, Pepin, Saint Croix Falls, Shell lake, Somerset, and Unity – have joined forces to develop this project. It is designed to increase the mathematical knowledge of both regular and EEN teachers' grades 3-9 and their students. CME is a comprehensive and focused project supporting the identified needs within the consortium. The partnership utilizes scientifically based research and effective practices in mathematics and professional development and the activities are in line with the stated purpose of the Math and Science Partnerships, Title II, Part B as well as the PI34 and NSDC standards. The CME project is predicated on research findings that indicate that experienced teachers who know both their content and effective instructional strategies tend to produce higher achievement outcomes among their students.

Mathematics faculty from UW-Stout and UW-Eau Claire who have considerable experience working with the K-12 schools will deliver 8 days of professional development seminars focused on the Wisconsin Model Academic Standards for Mathematics relevant to grades 3-9 over three summers. They will also provide extended classroom consultation and regional workshop support for a total of 4 days each year. An ongoing electronic communication will help project participants and faculty maintain a continuous reflective dialog. Participants will receive a summer stipend and mileage.

CME will support upwards of 60 teachers of grades 3-9 who are highly qualified in their areas of licensure, but have identified needs in mathematics content and instructional strategies. As a result of participation in this program, 50 teachers will:

1. More confidently know and understand the mathematics concepts necessary to teach at their grade level and beyond.
2. Design instruction using the tools of inquiry and structures of the discipline in order to create learning experiences that make the aspects of mathematics more meaningful to students.
3. Make wise choices about classroom curricular materials that support a standards-based classroom for all students.
4. Help their students make sense of mathematics.
5. Learn how to formatively and summatively assess student work and adjust instruction according to data and assessment results.

Mathematics & Science Partnerships

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Partners:
Carthage College

Kenosha Unified School
District

Advancing Science Knowledge (ASK)

The Wisconsin Department of Public Instruction (DPI) Education Standards and the Elementary & Secondary Education Act (ESEA) student performance goals K-12 are the foundation of the Kenosha Unified School District Advancing Science Knowledge (ASK) grant. Teacher Standard #1 clearly states the importance of content, “The teacher understands the central concepts, tools of inquiry, and structures of the disciplines he or she teaches can create learning experiences that make these aspects of subject matter meaningful for pupils.” The ESEA promotes that all students will be proficient or advanced by 2013-2014 school year. KUSD Strategy #4 advances the achievement of that performance goal to 2010 by ensuring “that staff is implementing the District curriculum and using effective instructional strategies, as well as, data to help students demonstrate proficiency on District and standardized assessments.”

Kenosha Unified School District and Carthage College are partnering in the ASK grant. KUSD will select twenty teachers to participate in the Broad Field Science curriculum designed by Carthage College and aligned with the Wisconsin and National Science Standards. The twenty teachers will be selected to participate in the ASK grant based on the following criteria:

- Assigned to teaching the middle school science curriculum in grades 6 through 8
- Hold DPI license or certification to, at least, teach in grades 6 through 8
- May hold either regular or special education licensure or certification
- Do not hold Broad Field Science licensure

As a result of participation in this program, middle science teachers will:

1. Better know and understand those science concepts necessary to teach science at their grade level and beyond;
2. Design effective units and lessons of instruction based on KUSD middle school science benchmarks as well as on best practices in instruction;

continued on to next page

Mathematics & Science Partnerships

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Advancing Science Knowledge (ASK) - continued

3. Better understand the central concepts of science, tools of inquiry, and structures of the discipline in order to create learning experiences that make the aspects of science meaningful to students;
4. Learn how to formatively and summatively assess student work and adjust instruction according to assessment results;
5. Help students make sense of science concepts;
6. Earn an ASK Certificate of Completion from the KUSD Board of Education;
7. Have the opportunity to complete a minor in Board Field Science through Carthage College

The goals and objectives of the ASK grant program are consistent with the KUSD Mission and Strategies “to empower all students to reach their unique capabilities, by providing diverse and challenging opportunities to learn through the collaborative efforts of students, families, communities and staff.”

The teachers will earn college credits in the Broad Field Science curriculum and use their newly acquired knowledge of science content and methodology to improve student achievement. Data on student achievement will be gathered starting in the fall of 2008 and culminating in the summer of 2010.

The final result of this project will ensure increased teacher knowledge that will, in turn, positively impact student learning, content knowledge and higher student achievement on Wisconsin Knowledge and Concepts Exams.

Mathematics & Science Partnerships

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Beloit Turner School District

Delavan-Darien School
District

Dynamic Math Institute
Streamwood, Ill.

Fontana J8 School District

Linn J4 School District

Linn J6 School District

Marquette University
College of Engineering

Parkview School District

Sharon J11 School District

Twin Lakes J4 School District

Walworth J1 School District

University of Wisconsin -
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Department of Education:
Master's Program

University of Wisconsin -
Platteville
Department of Education:
Mathematics

Understanding the World Through the Language of Mathematics: Math Literacy for All

The three-year grant project, Meeting the Challenges of the 21st Century: Building Mathematical Proficiency for All Students grounds its partnerships and work in the belief that we are responsible for preparing all students to be mathematically proficient for their next level of education, and ultimately, to be a productive and informed member of our democratic society and the world. The grant project aspires to the vision described in the opening chapter of Principles and Standards for School Mathematics. "Imagine a classroom...where all students have access to high-quality, engaging mathematics instruction. There are ambitious expectations for all, with accommodation for those who need it."

In collaboration with Dr. Robert Weber from Marquette University - Department of Engineering and the nine school districts of Beloit Turner, Delavan-Darien, Fontana J8, Linn J4, Linn J6, Parkview, Sharon J11, Twin Lakes #4, and Walworth J1, the Southeastern Consortium identified two goals for the project. The goals are (1) increase student mathematical proficiency and achievement and (2) increase teacher content knowledge of mathematics, pedagogical skills to meet the needs of all learners, and the knowledge of how students learn mathematics. The Southeastern Consortium selected the project design because the goals of the project align with the Math Partnership goals, the Wisconsin Model Academic Standards, the Wisconsin Teacher Standards, PI 34, and the goals of NCLB to assure that all students have equitable access to instruction grounded in research and best practice. Project activities are designed to address the gaps identified in the needs assessment. The activities involve teachers using problem-solving strategies to solve real world problems, applying the concepts in mathematics, demonstrating pedagogical practices in a collegial team setting, and applying new skills in their classroom. The key features include 1) learning teams using real-life applications, 2) lesson study, and 3) reflection through journal writing and collegial dialogue.

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Mathematics & Science Partnerships

Linn J6
Est. 2007

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Partners:
Beloit Turner School District

Delavan-Darien School
District

Dynamic Math Institute
Streamwood, Ill.

Fontana J8 School District

Linn J4 School District

Linn J6 School District

Marquette University
College of Engineering

Parkview School District

Sharon J11 School District

Twin Lakes J4 School District

Walworth J1 School District

University of Wisconsin -
LaCrosse
Department of Education:
Master's Program

University of Wisconsin -
Platteville
Department of Education:
Mathematics

Understanding the World Through the Language of Mathematics: Math Literacy for All-continued

The project targets the math needs of 3,222 students in grades K-5. Eighty-six percent of the total student population represents high-need districts. The grant provides training for 145 teachers from the Southeastern Consortium. Eighty-four percent of the total teacher population represents high-need districts. The data analysis for the needs assessment examined trend and cohort achievement data. The findings from the trend data indicated that six out of the nine districts had achievement gaps at grade three. Four out of the nine districts had achievement gaps at grade five and no more than two gaps appeared at the remaining grade levels. The cohort analysis revealed interesting results. Six different grade levels with a gap in 2005 made sufficient gains that did not create a gap in the following year for the cohort group. Seven grade levels that did not have a gap in 2005 lost points in the following 2006 year. The unevenness in gain and losses, as well as the wide ranges in gains and losses after an additional year of instruction, strongly indicated that the mathematical learning experience made a difference in achievement for students. To build a classroom across all grade levels and school districts where all students have access to high-quality, engaging mathematics instruction guided the development of the experimental design.

The experimental design of the project engages teachers in sustained professional development in small, supportive grade level groups. During year one and year two, treatment groups receive one year of training that includes three non-consecutive days of training and three additional follow-up days focusing on lesson study. A two-week summer session provides a capstone experience for members of the treatment group following their year of training. In the third year, a new treatment group randomly selected from participants in year one and two, receives an additional three days of lesson study. The project design also includes training for the math leaders over the three-year period. Math leadership teams developed in each district will provide on-going support for teachers during training and after the project is completed.

The benefits of the proposed design support the increased use of constructivist teaching, job-embedded support with sustained professional development, and implementation of lessons and activities developed during the institute and training ultimately leading to increase mathematical proficiency for all students.

Mathematics & Science Partnerships

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Partners:
CESA #10

Abbotsford School District

Cadott School District

Cornell School District

Ladysmith-Hawkins School
District

Lake Holcombe School
District

Mondovi School District

Neillsville School District

Spencer School District

Stanley-Boyd School District

Weyerhaeuser School District

CESA #12
Bayfield School District

Butternut School District

Hurley School District

Mellen School District

Mercer School District

Phillips School District

South Shore School District

Superior School District

Washburn School District

Northern Wisconsin Rural Partnership for Mathematics Education

Teams of three teachers from grades three through eight from each partner district will attend two-week summer institutes conducted by current or retired faculty members of the University of Wisconsin-Eau Claire Mathematics Department. Each of these individuals has many years of experience teaching in K-12 schools and in working with teachers at these levels. These institutes will be done at two sites – one for CESA 10 area schools and one for CESA 12 area schools. Each year there will also be two weekend (Friday-Saturday) sessions that will be held for combined groups. In-school consultations during the academic year of years two and three of the project will assist the participating teachers in implementing the work from the summer and will assist the entire school and/or district in implementing a mathematics program based on high standards for all and an online component will connect participants between sessions.

As a result of this program teachers will:

1. Know mathematics necessary to teach mathematics at their grade level and beyond.
2. Capitalize upon the connections between how mathematics is learned and the mathematics that is learned
3. Select appropriate rich mathematical tasks to exemplify and clarify important mathematical topics.
4. Answer classroom questions that arise and stretch the mathematics covered by having competence and confidence in their own mathematical understandings.
5. Make wise choices about classroom curricular materials that will truly implement a standards based classroom as a curriculum for all.
6. Help students make sense of mathematics.

Evaluation:

Teacher knowledge gain will be connected to student achievement on Wisconsin Knowledge and Concept Examinations and through this approach demonstrate the worth of this particular regimen of professional development for teachers. Rural teachers will also reduce their isolation by establishing a network of colleagues in similar schools and be connected online to these colleagues and mathematics professors. With a three-year project building ongoing competence for these teachers, and the presence of a team of two or three in each building, capacity is expected to grow as these more highly qualified teachers exercise leadership. The growth of teacher content knowledge will be measured by the use of the Knowledge of Mathematics for Teaching measures developed by Ball and associates at the University of Michigan.

Mathematics & Science Partnerships

Green Bay
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Partners:
Green Bay Area Public
School District

School District of
Wausaukee

St. Norbert College

Northeast Wisconsin (NEW) Mathematics Partnership

The Green Bay Area Public School District, the School District of Wausaukee, and St. Norbert College are partnering to provide an opportunity for approximately 34 elementary and middle school mathematics teachers to work together with mathematics professors from St. Norbert College. During this professional development partnership, participating teachers will take a series of three graduate level courses, for a total of six credits. These courses will deepen and broaden their knowledge and understanding of important mathematical concepts.

In June of 2009, these teachers will take a two-week summer course focusing on increasing their math content knowledge. During the 2009-10 school year, teachers will take a course on math pedagogy, followed by a two-week summer course exploring 21st century applications of mathematics. The grant partnership will concentrate on strengthening comprehension and building proficiency with standards-based instructional practices among participating teachers from grades four through eight. Teachers will develop a clear vision of the mathematics scope and sequence in the Green Bay Area Public School District and the School District of Wausaukee and will focus on the seamless articulation of mathematics instruction for students progressing from elementary to middle schools.

In addition to deepening their mathematical content knowledge, participating teachers will increase their repertoire of successful mathematics instructional strategies by focusing on best teaching practices. Further, participating teachers will develop congenial and collegial relationships with their peers and with the St. Norbert College faculty. The three graduate level courses were developed to fit the needs of the districts' teachers. Throughout the project and upon completion, these teachers will share the knowledge learned with their colleagues in their respective schools and work to assure that students benefit through improved academic achievement.

Mathematics & Science Partnerships

UW-Oshkosh
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Dr. John Beam
UW Oshkosh

Dr. William Mickelson
UW Whitewater

Partners:

Bayfield School District

Bowler School District

Crandon School District

Ho Chunk Nation After
School Programs

Lac du Flambeau School
District

Menominee Indian School
District

Naytawaus Charter School,
MN

Seymour School District

Wabeno School District

Winter School District

Closing the Mathematics Achievement Gap of Native American Students Identified as Learning Disabled Project (CMAG)

Development of the Closing the Mathematics Achievement Gap (CMAG) Project was motivated by the fact that there is a disproportional number of Native American students identified as learning disabled (LD). The study hypothesis is that by preparing teachers of Native students identified as learning disabled to effectively implement Cognitively Guided Instruction (CGI), basing instruction on student understanding and focusing on the development of mathematical reasoning through problem solving, the students will perform significantly better on the reasoning-based Wisconsin Knowledge and Concept Exam (WKCE). It is also hypothesized that this improved performance will reduce the achievement gap between Native American and non-Native students within the CMAG participating districts and schools.

The Title II Part B provides funding for thirty teacher participants in the CMAG Project. Thirteen additional teachers (funded by the Ho Chunk Nation) and one administrator (self-funded from a Minnesota private school) are also participating.

The following activities have been completed:

1. The first of three August workshops was held the week of August 4 – 8, 2008. At the beginning of this workshop, participants completed two pre-assessments: Math Content Knowledge and Teacher Beliefs. The mean score of the content knowledge assessment was 48.4% (25 items). The Teacher Beliefs Survey provides qualitative documentation of limited understanding of the National Council of Teachers of Mathematics (NCTM) Process and Content Standards.
2. Parent consent for release of project student assessment data has been granted. Project teachers have pre-assessed project students with the CGI Word Problem and Base 10 Interviews and a fifty-item content knowledge assessment. Base-line reading achievement data has also been collected.

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Mathematics & Science Partnerships

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UW Whitewater

Partners:
Bayfield School District

Bowler School District

Crandon School District

Ho Chunk Nation After
School Programs

Lac du Flambeau School
District

Menominee Indian School
District

Naytawauh Charter School,
MN

Seymour School District

Wabeno School District

Winter School District

Closing the Mathematics Achievement Gap of Native American Students Identified as Learning Disabled Project (CMAG) - continued

3. Start-up conferences with participant teachers at school sites were conducted in October, and implementation observations were conducted in November and December. Teachers were interviewed following each observation, and interviews are currently being analyzed.
4. A two-day reflection session was held January 26 - 27, 2009.
5. The CMAG Project also serves as a training of trainers. Project participants have been given workshop resources: a word problem booklet with teacher's manual and a DVD of classroom problem solving sessions to share with district teachers when providing overviews of the project.

Perhaps one of the major contributions of the CMAG project will be the development of WKCE preparatory materials. In the past, instruction of special needs students focused on computation and remediation with little emphasis placed on reasoning-based problem solving lessons. Currently, many teachers working with LD and Emotional Behavioral Disability (EBD) students use released WKCE items that are significantly above the students' knowledge level, and as a result, most special needs students give up when attempting to work through these developmentally inappropriate problems, and the experience exacerbates the students' 'learned helplessness'. When working with a student who exhibits learned helplessness, it is important to make the learning experience cognitively safe – this means instruction must not be insultingly simple and not overwhelmingly difficult.

To begin to address this problem, all CMAG teacher participants assessed their students with ability leveled packets formatted to align with the WKCE: students begin at their comfort level and progress incrementally to their instruction level. These WKCE preparatory materials also serve as a teaching resource: after completing ten problems independently, teachers discuss the problems with the student/s to determine understanding.

The truly exciting news is that all of the CMAG teachers who are implementing the CGI principles are thrilled with what they are observing. While meeting with project teachers during Fall 2008, many made comments such as, "I had no idea the students would be able to do this type of reasoning," and "The students are able to solve in ways that I would never think of."

Mathematics & Science Partnerships

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UW-Milwaukee

The Better Elementary Science Teaching (BEST) program

The Better Elementary Science Teaching (BEST) program will engage 60 elementary level teachers [K-8, regular, exceptional education, and English as a Second Language (ESL)] from the Milwaukee Public School District (MPS). In partnership with the University of Wisconsin-Milwaukee (UWM) College of Letters and Science (L&S), College of Engineering and Applied Sciences (CEAS) and the School of Education (SOE), MPS teachers will engage in a sustained and rigorous program (nine semester sessions over a three year period) to increase their science content knowledge and improve their ability to teach science effectively. As a result of the building of their own knowledge base of science content and teaching pedagogy, the teachers will then serve in science leadership roles at their schools.

Three goals provide the framework for obtaining the vision of the BEST program: (1) increasing the science content knowledge of MPS elementary grade level teachers (K-8) and improve student achievement in science; (2) increasing teacher pedagogical content knowledge (PCK) and use of effective standards-based science teaching methodologies, curriculum and assessments (i.e. PCK; standard-based instruction, use of inquiry-based activities, formative and summative assessments, inclusion of the nature of science, use community-based resources for teaching science content, establishing linkages between science and language art instruction, adaptations for exceptional students and; (3) improve the quality of science teaching through sustained professional development and the establishment of the program's participants as science instructional leaders at their schools.

MSP Resources

The National Research Council (NRC) has produced an excellent series of books related to learning, especially in the areas of mathematics and science. They can be ordered from the National Academy Press. Their website address is: www.nap.edu. In 1999, the NRC published two very significant books titled How People Learn: Brain, Mind, Experiences, and School (NRC, 1999) and How People Learn: Bridging Research and Practice (NRC, 1999). The next year, these two publications were combined into one expanded version titled How People Learn: Brain, Mind, Experience, and School Expanded Edition (NRC, 2000). The NRC then published Adding It Up Helping Children Learn Mathematics (NRC, 2001). This book really looked at how elementary students learn mathematics and presented a complete example of how the teaching of the content area of numbers unfolds throughout the elementary curriculum. It also provides some ideas for the other five content areas. Last year the NRC published its most recent contribution in the area of learning titled How Students Learn: History, Mathematics, and Science in the Classroom (NCR, 2005). Subsequently they published three separate smaller books. Each book contains: the introductory material, the content chapters relevant to that particular content area, and the conclusions reached by the authors.

Meanwhile, the professional associations were equally hard at work. The National Council of Teachers of Mathematics (NCTM) published: Curriculum and Evaluation Standards for School Mathematics (NCTM, 1989), Professional Standards for Teaching Mathematics (NCTM, 1991), and Assessment Standards for School Mathematics (NCTM, 1995). By 2000, the NCTM revised and updated its standards with the publication of Principle and Standards for School Mathematics (PSSM) (NCTM, 2000). They also have a set of E-Standards available on their website. This is a fixed set of sample lessons for implementing the PSSM philosophy and ideas into a teacher's classroom. They have also teamed up with a group of business partners to create a website titled Illuminations. This website differs from the E-Standards in the sense that it is designed to be "infinitely" expanding. There is an appointed committee that approves the best lesson plans (of those submitted for consideration) to be added to the Illuminations collection. To supplement the PSSM, NCTM has published A Research Companion to Principles and Standards for School Mathematics (NCTM, 2003). The most recent publication from NCTM is Curriculum Focal Points for Pre-kindergarten through Grade 8 Mathematics A Quest for Coherence (CFP)(NCTM, 2006). At each grade level three major topics are identified to be emphasized at that grade level. It also lists topics designed to enhance the learning of those three topics. The appendix provides a match up between the material in the CFP and the PSSM. NCTM anticipates that a similar publication involving lenses, rather than focal points will be available in late 2008. The lenses will be designed to look at the high school mathematics curriculum and individual courses, rather than grade levels like the focal points. All these publications are listed on the NCTM's website. The address is: www.nctm.org.

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MSP Resources

The state affiliate of NCTM is the Wisconsin Mathematics Council (WMC). Its main event is the Annual Green Lake Meeting which is held the first Thursday and Friday of May. Each of the last two years over 1,800 teachers of mathematics K-16 have attended the two-day conference. In addition to numerous local speakers, the conference invites noted speakers in mathematics education from all over the country to speak. Every year WMC presents two scholarships to students who are one year from their bachelor's degree in mathematics education and one scholarship to a deserving high school senior who plans to go into the area of mathematics

education. Other activities sponsored by the WMC are workshops on topics relative to mathematics teaching and learning. Their newsletter is published three times during the school year and keeps members informed on what WMC and other mathematics education activities are occurring in Wisconsin and neighboring states. Every year WMC members look forward to receiving three issues of their superb journal titled Wisconsin Mathematics Teacher. The articles cover contemporary mathematics education issues in K-12. Many of the articles are written by WMC members and often include activities that can be implemented right into the classroom. For

further information on the WMC and its activities visit its website at: www.wismath.org.

The National Science Teachers Association (NSTA) continued along the same line. They joined with Project 2061 sponsored by the American Association for the Advancement of Science (AAAS) to publish Science for All Americans (AAAS, 1989) and Benchmarks for Scientific Literacy (AAAS, 1993). In 1995, the NRC published National Science Education Standards (NRC, 1995). The AAAS and the NSTA has published several books providing resources for scientific literacy. Of particular note is Atlas of Scientific Literacy (AAAS, 2001) and NSTA's Pathways to the National Science Education Standards (NSTA, 2000) for the elementary, middle level, high school, and college level classrooms. In 2005 NSTA and Corwin Press teamed up to produce the publication Science Curriculum Topic Study (NSTA, 2005); the publication is designed to bridge the gap between research and practice. Each of the publication and much more can be found on NSTA's website at www.NSTA.org.

The Wisconsin Society of Science Teachers (WSST) has been instrumental at the state level with implementing both the state and national standards. In 1996, WSST promoted and sold many copies of the national standards. Those standards became the cornerstone for all their activities

Wisconsin is also home to two major MSP-NSF initiatives. The Milwaukee and Madison school districts are each involved with the University of Wisconsin—Milwaukee and the University of Wisconsin—Madison, respectively, in five year Mathematics and Science Partnership (MSP) grants from the National Science Foundation (NSF).

Finally the National Assessment of Educational Progress (NAEP) provides a powerful on-line question tool. The NAEP Questions Tool provides easy access to NAEP questions, student responses, and scoring guides that are released to the public. These questions can be used for both professional development as well as actual student worksheets. The question tool can be accessed at the following address: <http://nces.ed.gov/nationsreportcard/itmrls/>

MSP Resources

U.S. Department of Education/MSP Program:

The website of the U.S. Department of Education offers background and legislative information on the MSP Program: <http://www.ed.gov/programs/mathsci/index.html>.

Teacher Education Materials Project (TE-MAT):

The TE-MAT site offers a database of resources to support mathematics and science professional development providers as they design and implement programs for in-service teachers: <http://www.te-mat.org/>.

National Staff Development Council (NSDC):

The website of the NSDC offers information and resources for professional development providers: <http://www.nsd.org/>.

What Works Help Desk:

The U.S. Department of Education (ED) has established this help desk to provide federal, state, and local education officials, researchers, program providers, and educators with practical, easy-to-use tools related to program evaluation: <http://www.whatworkshelpdesk.ed.gov/>.

Horizon Research, Incorporated (HRI):

The website of HRI offers a wealth of information related to research and evaluation of mathematics and science initiatives. Some of its tools may be helpful in conducting a professional learning needs assessment: <http://www.horizon-research.com/instruments/>.

Learning Mathematics for Teaching (LMT) Project:

The LMT Project website offers information on the assessment instruments required by all funded mathematics MSP projects: <http://sitemaker.umich.edu/lmt/home>.

Project MOSART:

Project MOSART's website offers thorough information, including a tutorial, on the required assessment instruments: http://www.cfa.harvard.edu/smgphp/mosart/about_mosart.html.

Grant Information

Mathematics and Science Education Research:

http://ies.ed.gov/funding/grant_topic_selection.asp

Applications Available: TBA

Deadline for Transmittal of Applications for CFDA 84.305A: TBA
Deadline for Transmittal of Applications for CFDA 84.305B: TBA

Enhanced Assessment grant: <http://www.ed.gov/programs/eag/applicant.html>

Current Application Closing Date: TBA

The purpose of Enhanced Assessment grant is to support state activities designed to improve the quality, validity, and reliability of State academic assessments beyond the requirements for such assessments in the No Child Left Behind Act of 2001. The grant funds may be used for the development of new assessment products or procedures, such as innovative test format, empirical analysis of variations in test format or procedures, or statistical models useful for combining data from multiple measures, or charting student progress over time.

Another portion of the NCTM website deals with the Mathematics Education Trust (MET). The MET runs on tax deductible contributions and endowments to honor others. The grants are awarded to individual teachers, a group of teachers, or an entire school (elementary) or an entire department (secondary). Most grants are for up to \$3,000 and run for one year. Grants are awarded in the following areas: teacher professional development (K-5, 6-8, 9-12), using music to teach mathematics (K-2), engaging students in learning mathematics (6-8), narrowing the achievement gap in mathematics (6-8), international development fund (K-12, up to \$10,000), improving students' understanding of geometry (K-8), implementing the mathematics content of the Principles and Standards (7-12), connecting mathematics to other subject areas (9-12), classroom-based research (K-12, up to \$8,000), school in-service training (K-5, 6-8, 9-12, up to \$4,000), emerging teacher-leaders in elementary school mathematics (K-5, up to \$6,000), mathematics graduate course work scholarships (7-12, up to \$10,000), mathematics graduate course work scholarships (K-5, 6-8, 9-12, up to \$2,000), prospective secondary teacher course work scholarships (7-12, up to \$10,000), prospective teacher NCTM conference attendance awards (K-12, up to \$1,200), and future leaders initial NCTM Annual Meeting attendance award (K-12, up to \$1,200). The MET also supports affiliate grants. Every year NCTM joins Toyota to present the Toyota Awards that go to teams of mathematics and science teachers to work on designing more ways to implement technology into their classrooms. To get more information on any of these grants go to the NCTM website at: www.nctm.org/about/met.

Vertical Teams

What is a Vertical Team?

Most commonly a vertical team consists of middle school and high school educators who teach in the same academic area. It may also include elementary teachers, school counselors, administrators, department chairs, or curriculum specialists. Through communication and cooperation, teams design curricular change and create support structures necessary to make high achievement by all students a reality.

Purpose of a Vertical Team

In vertical teams, teachers from different grade levels work together to develop a continuum of knowledge and skills that build from one grade level to the next. Team communication leads to a greater understanding of what is taught each year, which helps teachers organize strategies, plan introduction of concepts, and reduce repetition of content. As a result, student achievement and success is enhanced.

Goals of a Vertical Team

- To increase achievement of all students to close the achievement gap
- To bring about coordination and communication between grade levels
- To foster greater inclusion and to build enrollment in advanced coursework
- To introduce skills, concepts, and assessment methods to prepare students for success in advanced coursework
- To encourage innovation
- To stimulate enthusiasm for advanced coursework in the school, family and community

Benefits for Students

A successful vertical team will:

- Prepare students for the next level of challenge by developing skills and strategies necessary for success in advanced coursework
- Promote greater inclusion and progress towards closing the achievement gap
- Improve student achievement

Equity and Access

The concept of vertical teams is based on a philosophy of inclusion; on the notion that all students benefit from experiencing a rich and rigorous curriculum. Research shows that students of color and socio-economically disadvantaged students tend to be under-represented in advanced coursework. The goal of vertical teams is to prepare all students for success in rigorous courses at the secondary level, not only certain groups. This results in an organizational pipeline that promotes equity and access for all.

Title I

Part of the No Child Left Behind (NCLB) Act of 2001:

Part A: Improving Basic Programs operated by Local Education Agencies.

Title I, Part A is the largest federal education available to states and districts. It is designed to supplement educational opportunities for children from high poverty areas so they can meet the state content and performance standards. Services can be provided as Targeted Assistance or Schoolwide programs.

A Targeted Assistance program is one which individual students are targeted to receive Title I services. They are identified through the use of multiple, objective and educationally-related criteria. Services may be delivered in a variety of ways, such as in-class instruction, extended day, week or year programming, or small group supplemental support during non-instructional periods of the school day.

A school receiving Title I funds is eligible to provide services as a Title I Schoolwide program when the poverty level is at least 40 percent, the school has engaged in a year-long needs assessment and planning process, and has developed an implementation and evaluation program that includes required components. A Schoolwide program provides greater flexibility in the use of Title I funds. This whole-school reform model focuses on improving teaching and learning for all students, especially those who struggle the most to meet the state academic standards. This model is expected to provide extended learning time for all students who need it and encompasses all core subject areas.

Title I and Mathematics

Title I services are generally provided in reading and mathematics. In Wisconsin, services have historically focused more on reading than mathematics. It is important that each school use multiple sources of data to determine where the greatest needs exist. Results of state testing suggest that in many cases, mathematics is emerging as a priority need. When developing a Title I mathematics program it is important to keep many things in mind, including:

- Providing supplemental instruction that supports the classroom mathematics experiences - a variety of support models can be used: within the classroom, outside of the classroom (during the school day), outside of the school day (before school, after school, summer programs)
- Assigning highly qualified staff (teachers and paraprofessionals) who know how children learn mathematics, understand how to effectively build students' mathematical understanding, and have a strong understanding of mathematics content and pedagogy
- Providing rich mathematical experiences that support the mathematics curriculum to ensure mathematical proficiency: conceptual understanding, procedural fluency, strategic competence, adaptive reasoning and productive disposition (*Adding It Up: Helping Children Learn Mathematics*, 2001)
- Using a variety of approaches to learning mathematics, including the use of mathematical tools such as manipulatives, measuring tools, computers and calculators
- Working with parents as partners to reinforce positive attitudes and experiences with mathematics

Adolescent Learning Toolkit

The Adolescent Learning Toolkit will be a useful resource for math and science educators working at the middle and high schools. It was developed from the AYP Handbook, which offers general suggestions to schools that missed Adequate Yearly Progress (AYP). The Toolkit, though, delves deeper and aims to help educators at the secondary level improve their instructional practices in mathematics and reading. As current foci of the No Child Left Behind Act, reading and mathematics are key areas in which to support Wisconsin educators.

The Toolkit examines how to achieve equity in math instruction, so that all students are learning the necessary information to succeed in life and future studies. It deals with issues of student engagement, use of discourse in mathematics, and summarizes the Wisconsin Model Academic Standards in relation to math instruction. Furthermore, specific instructional practices to support learning math are explored, covering topics such as writing, reading and use of graphic organizers, cooperative learning, and interventions. The ever-pressing matter of assessment is also discussed, identifying the role and meaning of different assessments and how best to use them to effect change. The Adolescent Learning Toolkit is intended to be a hands-on guide that is practical and research-based.

Reading is a necessary skill to do well in any subject area. Thus, the Toolkit bridges content-area instruction with the teaching of reading. It addresses the important issue of teaching vocabulary, while providing specific instructional strategies to develop better readers - who are, in turn, better learners. These strategies are explained in depth and are accompanied by activities to illustrate their usefulness across content areas. The section also explores how students can learn with understanding, engaging in higher order thinking and deeper construction of knowledge. As content area teachers attend to the integration of reading in their subjects, the Toolkit will be a useful instructional source.

Third, the Toolkit also comprises a section for leadership which focuses on infrastructural changes to address when leading for reform. This section discusses the change process, professional development, alignment to standards, and the role of math and reading specialists. It also offers several self-assessments for school leaders to conduct in order to determine what their specific needs are in terms of school improvement. The leadership section is directed toward principals and other school leaders as they work toward systemic change in their schools.

The Adolescent Learning Toolkit is developed by Wisconsin practitioners who have experience and expertise in their respective fields. These educators identified best practices in math and reading, and grounded them in current research. They focused on strategies and ideas that are user-friendly and effective in increasing student achievement. The work of these Wisconsin educators culminates in an important resource for teachers and leaders at the secondary level.

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State of Wisconsin
Department of Public Instruction
Elizabeth Burmaster, State Superintendent

****NEWS RELEASE****

FOR IMMEDIATE RELEASE

DPI 2008-102

Monday, August 4, 2008

CONTACT: Patrick Gasper, Communications Officer, (608) 266-3559

**New partnership grants to fund
mathematics and science professional development**
Partnership grants fund three new and three renewal projects

MADISON—Teachers in 50 school districts throughout the state will learn new developments in mathematics and science as well as effective teaching and assessment strategies for those subjects through training activities funded by grants from the Wisconsin Department of Public Instruction.

Three new partnerships will share \$1.6 million of the \$2.2 million in federal funding available for Wisconsin. The Mathematics and Science Partnership grants are intended to increase student achievement in mathematics and science through professional development activities that enhance the content knowledge and instructional skills of classroom teachers. The department also was able to fund renewal grants totaling \$557,160, which will allow three current partnerships to continue for a third year. Requests for grants from the Mathematics and Science Partnership program totaled \$6.2 million.

“Caring, quality educators who know their subject and how to teach are the foundation for student academic success,” said State Superintendent Elizabeth Burmaster. “It is clear from the competition for these grants that our school districts want to invest in their teachers so they learn some of the latest knowledge and research in mathematics and science to share with their students.”

New grants are for two years with an option to apply for a third year, subject to federal funding. Funded projects focus either on mathematics or science, are based on scientifically based research, and have an active and well-defined partnership among science, technology, engineering, and mathematics (STEM) faculty and school district participants. Each project incorporates a summer institute that directly relates to mathematics and science curricula and will enhance teachers’ ability to use *Wisconsin’s Model Academic Standards* for mathematics and science. Projects also include follow-up contact among participants during the academic year.

(more)

“Research has documented that students who take a rigorous curriculum in high school, especially advanced mathematics courses such as algebra and geometry, are more likely to graduate from college and have higher earnings later in life. The benefit of math classes extends to all students, even those who do not continue with college-level mathematics,” Burmaster said. “Wisconsin’s economic development and capacity to compete in the technological future depends on students gaining a strong foundation in mathematics and science. These grants will support our efforts to teach students the knowledge and skills they need to succeed.”

The Mathematics and Science Partnership Grant Program is based on research that has shown a direct relationship between teachers’ knowledge and skills and student achievement. Partnership grants are intended to provide professional development activities among participating schools and STEM faculty in institutions of higher education that are of a quality and duration to effect change. The goal is to deepen teachers’ content knowledge of mathematics or science. Grants also support projects that increase teachers’ knowledge of how students learn, provide opportunities for engaging learning, and establish coherence in teachers’ professional development experiences.

The Mathematics and Science Partnership grants are part of the federal No Child Left Behind Act, Title II, Part B, Improving Teacher Quality Program. Each state receives a formula grant and is responsible for administering the program and awarding competitive grants to eligible partnerships. The grant program requires projects to form partnerships that include a high-need school district and a college or university. School districts that have a school or schools identified for improvement under federal requirements and districts with small student populations that partner together to serve a minimum of 1,800 to 2,500 students received priority for funding. Partnerships for grants could include other public schools, public charter schools, private schools, businesses, and nonprofit or for-profit organizations that focus on mathematics or science.

###

NOTES: A list of Mathematics and Science Partnership awards follows. This news release is available electronically at http://dpi.wi.gov/eis/pdf/dpi2008_102.pdf.

Mathematics and Science Partnership Grants

No Child Left Behind Act of 2001, Title II, Part B

New Two-Year Grants

Milwaukee Science Partnership — \$836,092

Milwaukee Public Schools
University of Wisconsin-Milwaukee

University of Wisconsin-Milwaukee

Walworth J1 School District

Menominee Indian Mathematics

Partnership — \$455,628

Bayfield School District
Black River Falls School District
Bowler School District
CESA 8, Headquarters: Gillett
Hayward Community School District
Lac du Flambeau School District
Menominee Indian School District
Seymour Community School District
University of Wisconsin-Oshkosh
Wabeno Area School District
Winter School District

Chetek Mathematics Partnership — \$166,428

Barron Area School District
Chetek School District
Clayton School District
Clear Lake School District
Grantsburg School District
Luck School District
Menomonie Area School District
Osceola School District
Shell Lake School District
Somerset School District
Unity School District
University of Wisconsin-Stout

Green Bay Mathematics Partnership — \$329,435

Green Bay Area School District
St. Norbert College, De Pere
Wausaukee School District

Phillips Mathematics Partnership — \$332,916

Abbotsford School District
Bayfield School District
Butternut School District
Cadott Community School District
Cornell School District
Hurley School District
Ladysmith-Hawkins School District
Maple School District
Mellen School District
Mercer School District
Mondovi School District
Neillsville School District
Northwood School District
Phillips School District
South Shore School District
Stanley-Boyd Area School District
Superior School District
University of Wisconsin-Eau Claire
Washburn School District
Wisconsin Academy Staff Development Initiative

Renewal Grants (Third Year)

Linn J 6 Mathematics Partnership — \$74,816

Beloit Turner School District
Delevan-Darien School District
Dynamic Math Institute, Illinois
Fontana J8 School District
Linn J4 School District
Linn J6 School District
Marquette University, Milwaukee
Parkview School District
Sharon J11 School District
Twin Lakes #4 School District
University of Wisconsin-La Crosse



WISCONSIN
DEPARTMENT OF PUBLIC INSTRUCTION

**REQUEST FOR PROPOSAL
for
MATHEMATICS AND SCIENCE
PARTNERSHIPS GRANT**

NO CHILD LEFT BEHIND ACT OF 2001
TITLE II, PART B

2008/09

Due on May 16, 2009

These instructions are provided to help prepare a grant application/proposal for the Mathematics and Science Partnerships Program. Specific requirements are provided for key features and proposal requirements. If you have any questions, please call Abdallah Bendada at 608-267-9270.

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Division for Academic Excellence

WISCONSIN DEPARTMENT OF PUBLIC INSTRUCTION

Elizabeth Burmaster, State Superintendent

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APPLICATION INSTRUCTIONS

For Institutions of Higher Education, School Districts, and Nonprofit Organizations Seeking A MATHEMATICS AND SCIENCE PARTNERSHIPS GRANT

I. Introduction/Background

In January of 2002, the No Child Left Behind Act of 2001 (NCLB) became law. The Improving Teacher Quality Grant Programs (Title II) are a major component of the No Child Left Behind legislation. These programs encourage scientifically based professional development as a means for improving student academic performance. As schools are responsible for improving student learning, it is essential to have highly qualified teachers leading the way.

Title II, Part B of NCLB authorizes the Mathematics and Science Partnerships (MSP) program. MSP is intended to increase the academic achievement of students in mathematics and science by enhancing the content knowledge and teaching skills of classroom teachers. Partnerships between high-need school districts and the science, technology, engineering, and mathematics (STEM) faculty in institutions of higher education are at the core of these improvement efforts. Additional partners may include other public school districts, public charter schools, businesses, and nonprofit or for-profit organizations concerned with mathematics and science education. Private schools are encouraged to participate in the program. Private schools within the boundaries of any high need Local Education Agency (LEA) may participate directly in the program through the local public school district. Other private schools may participate as a secondary partner with any high need LEA.

The State of Wisconsin has been allotted \$2,098,642, and the Department of Public Instruction is responsible for the administration of this program. Funds available for the Mathematics and Science Partnership competitive grant program will be awarded by the Department of Public Instruction to support proposals submitted by eligible partnerships that provide programs to improve mathematics and science instruction.

II. Program Description

A. Purpose: The Mathematics and Science Partnership program is a formula grant program to states that supports improved student achievement in mathematics and science through enhanced training for mathematics and science teachers. The states are responsible for conducting a competitive grant program that makes awards to partnerships of high-need school districts and science, mathematics, and engineering departments within universities, giving districts and arts and science faculty joint responsibility for improving mathematics and science instruction.

MSP seeks ways to sustain intensive, high-quality professional development activities that focus on deepening teachers' content knowledge. It is also interested in increasing the knowledge of how students learn particular content, providing opportunities for engaging learning, and establishing coherence in teachers' professional development experiences.

B. Wisconsin Priority:

1. K-12 Mathematics
2. K-12 Science
3. K-12 Mathematics and Science (districts with less than 2,500 student population)

The analysis of student achievement data revealed that mathematics and science are areas in great need at all levels. Therefore, the MSP program will target the area of mathematics and science with an emphasis on schools identified for improvement (SIFI). Grants will be awarded each year for up to three years depending on funding from the U.S. Department of Education. Each project will be required to incorporate summer institutes at least two weeks in length (80 hours) each year combined with additional contact hours of follow-up during the academic year.

Priority will be given to eligible High-Need LEAs that are:

- Districts with SIFI schools
- Districts with small student population that partner together to serve a minimum of 1,500 students

Teachers in private schools located in LEAs or school attendance areas participating in these partnerships, regardless of the entity that received the grant and whether or not the private school is a member of the partnership, must be offered equitable participation.

The program will support projects to:

- **Increase the subject matter knowledge and teaching skills of mathematics and science teachers at all levels.** Programs will bring together mathematics and science teachers with mathematicians, scientists, and engineers to expand teachers' subject matter knowledge of mathematics and science. Activities will include summer institutes that directly relate to mathematics and science curricula and enhance the ability of teachers to understand and use *Wisconsin's Model Academic Standards for Mathematics and Wisconsin Model Academic Standards for Science*.
- **Focus on professional development of mathematics and science teachers as a career-long process.** Programs will provide opportunities for advanced and ongoing professional development activities that improve teachers' subject matter knowledge and knowledge of how students learn particular content. Projects will also provide teachers with the opportunity to work with experienced teachers and university faculty.

III. MSP Key Features

A. Partnerships: MSP projects are designed and implemented by partnerships that include K-12 administrators, faculty, and guidance counselors in participating K-12 schools, STEM faculty, and administrators in higher education organizations. Additional partners are encouraged and may include businesses,

private schools, nonprofit organizations, and teacher training departments of an institution of higher education (IHE). These partners and other stakeholders engage in the effort at both the institutional and individual levels, and share goals, responsibilities, and accountability for the project. The primary partnerships must include a high need LEA and a mathematics, science, physics, chemistry, or engineering department at an IHE. The partnership must include at least 80% of participants from high need LEAs or at least 80% of the participating LEAs are high need LEAs. The fiscal agent can be the primary High need LEA or the primary IHE. All coursework must be approved by the IHE, and all credits must be awarded by the primary IHE. The teaching staff must be employed by the primary IHE.

Content-Based Professional Development: The project focuses professional development on the deep mathematics and science content teachers need to understand for effective instruction, assessment, and evaluation.

1. **Needs Assessment:** The project must address the results of a comprehensive assessment of the teacher quality and professional development needs with respect to the teaching and learning of mathematics and science of any schools and LEAs that comprise the eligible partnership.
2. **Scientifically-Based Research (SBR):** The activities to be carried out by the partnership must be based on a review of SBR. An explanation of how the activities expect to improve student academic achievement and strengthen the quality of mathematics and science instruction must be included.
3. **Evaluation:** Each partnership project shall develop an evaluation and accountability plan for activities of the project that include rigorous objectives that measure the impact of the activities. Measurable objectives to increase the number of mathematics and science teachers who participate in content-based professional development activities must be included. Additionally, measurable objectives for improved student academic achievement are required. The partnership shall report annually to the US Department of Education Secretary and DPI regarding progress in meeting the objectives described in the evaluation and accountability plan.
4. **Eligible High Need LEAs:** To be eligible for a Mathematics and Science Partnership Grant, an applicant must demonstrate a need for improvement in student mathematics or science performance for which each school/district meets one of the enumerated requirements listed below. The demonstration of need must use recent data on student achievement and teacher qualification. Further, the proposal must demonstrate that the participating teachers serve a sufficient number of students exhibiting this need.

A high need LEA is any district where mathematics or science student proficiency scores do not exceed 65%, based on disaggregated 2007/08 WKCE scores, and where there is no currently active Title II, Part B grant, in the same content area, and one of the following:

1. At least 10 percent of the student population is from families with income below the poverty line as identified by the Census 2005, or
2. Schools/districts having Rural Education Achievement Program (REAP) or meeting local codes of 6, 7, or 8, or
3. Not achieving AYP in mathematics based on 2007/08 data.

4. **Project Criteria:** Projects must also meet the following criteria:

- Projects must focus on either mathematics or science. An applicant may apply for more than one project; i.e., one application for science and another for mathematics.
- If participating schools are involved in a mathematics/science school reform initiative, the proposal must clearly articulate how this program will integrate with ongoing reform efforts.
- Projects employ the five components of SBR. See Definitions.
- Projects must have an active and well-defined partnership between STEM staff and schools/districts in all aspects of the grant including planning and delivery of professional development.

IV. Proposal Requirements

The proposal sections (excluding appendices) of the proposal must be double-spaced and the font used must be at least 12-point. Proposals must contain the following sections:

A. General Information: School District Partner Identification Form, Higher Education Partner Identification Form, Other Partners Identification Form, Statement of Assurances, and Eligibility. The cover page must be signed by official representatives from the IHE and the LEA. See definition for details.

B. 1- Abstract: All applicants must provide a summary that briefly describes the project vision, goals, activities, and key features that will be addressed and expected benefits of the work. The abstract may not exceed 1 page.

2- Repeat Applicant Prior Work Summary: Repeat Applicants only: Partnerships or participating LEAs that have previously received MSP program funding must include an abstract of prior work. The abstract must describe the projects' intended goals, the amount of funding received by project year, the number of teachers it intended to serve (according to its formal proposal), the number of teachers it actually served, an explanation of how the budget was spent, qualitative and quantitative evidence of progress towards goals, a description of partnership roles, and an indication of how the proposed work differs from, builds on, or is otherwise informed by prior efforts. The abstract may not exceed 2 pages.

C. Program Narrative: The project narrative should contain the following elements and shall not exceed 20 pages:

Section 1: Needs Assessment

The project description should indicate a clear understanding of results of a needs assessment and how the goals and activities of the program are directly related to those needs. The following items are required to satisfy the needs assessment:

- Identify specific gaps or weaknesses in teacher and student mathematic and/or science knowledge and achievement to be addressed by the proposed MSP program.
- Provide convincing evidence that the LEA has a large population of students who have historically been under-represented and under-served.

- Include an analysis of objective data to establish a baseline that will guide the proposed program. (Attach relevant student achievement and LEA performance data.)

Section 2: Scientifically-Based Research (SBR)

The project description should discuss and cite the current state of knowledge to support the project. This brief literature review should clearly indicate why the proposed activities were selected or designed. If the proposal builds on prior work, the project description should indicate what was learned from this work and how these lessons learned are incorporated in the project. The following items are required to satisfy SBR:

- Provide a literature review that defines and supports the proposed activities selected or designed in this program.
- Provide references that employ sound research methods such as (a) experimental design, and (b) quasi-experimental design using demographic alignment of similar schools and/or districts and others.
- If the program builds on prior work, include a discussion about the lessons learned.

Section 3: Work Plan

A proposal must clearly describe the goals and objectives for the project. The project description should indicate a timeline and an estimate of the number, type, duration, and intensity of professional development activities and the responsibility of each of the partners. The professional development activities should develop the pedagogical content knowledge of teachers in the areas of mathematics and/or science that are a part of the state content standards. The following items are required to satisfy the work plan:

- Describe specific program activities to address the identified needs.
- Define the responsibilities of the partners. How will the partners account for all the goals and objectives?
- Include a timeline showing when activities will occur and their duration.
- Describe how the activities will increase the number of mathematics and/or science teachers who participate in content-based professional development activities.
- Explain how professional development activities of the program are aligned with the state Model Academic Standards for mathematics or science.
- Explain how professional development activities of the program are aligned with Chapter PI 34.

Section 4: Commitment and Capacity of Partnership

The project description must clearly demonstrate that the submitting entity has the capability of managing the project, organizing the work, and meeting deadlines. The following items are required to satisfy the commitment and capacity partnership:

- Describe how the program team members will manage the program and meet the deadlines set forth in the proposal.
- Provide a brief description of the program team's process for meeting identified needs and deadlines.
- Provide a brief description of the program team's decision making process.
- Describe the role of each of the partners in a collaborative relationship.
- Explain how the partnership will function beyond the three year grant period.

- Provide a brief description of how the partnership selected/developed the MSP program activities, including the types of organizations involved in the process (e.g., STEM faculty, districts, and other potential partners).

Section 5: Evaluation Plan

Each application should provide a description, identify the research and evaluation methods that the project will use, and explain why those methods are appropriate to the issues or questions that the proposal addresses. DPI requires applicants to use at least quasi-experimental designs. The proposal must make a compelling case for the activities of the project and describe how the activities will help the MSP Program build a rigorous, cumulative, reproducible, and usable body of findings. The following items are required to satisfy the evaluation:

- Provide a description that links the external evaluation to the desired teacher and student outcomes.
- Describe a process evaluation plan that provides detailed information on participants that were served as well as service delivery methods to include scope, duration, and other indicators of implementation fidelity.
- Provide an evaluation plan based on an experimental or quasi-experimental design (see Definitions).
- Provide an evaluation plan that states measurable teacher and student objectives and annual targets which describe progress toward meeting the goals and established objectives.
- Describe how the activities in the MSP will increase the number of mathematics and/or science teachers who participate in content-based professional development.
- Describe how the evaluation plan measures student academic achievement using student data assessment.

Section 6: Budget Justification

The budget must clearly be tied to the scope and requirements of the project. The budget narrative should describe the basis for determining the amounts shown on the project budget page.

All proposals should include provision for evaluation of the activities in budget. The following items are required to satisfy the budget justification:

- Provide details for each budget category.
- Describe how other available funds will be used to help support this program.
- Include the budget summary.

Appendix: While reviewers are only expected to read and score the 20-page narrative, the Appendix, which is not counted as part of the 20-page limit, may include the following:

- Letters of commitment from the partners;
- Resumes of key faculty and staff; (each resume cannot be over 2 pages);
- Elaboration of data (e.g., charts, tables, graphs, etc.) used to establish need, or elaboration of research or evidence base used to design this program;
- Evidence of impact from prior professional development efforts; and/or

Proposal Submission and Review

A. Submission: Applicants must submit the full proposal to the Wisconsin Department of Public Instruction. The signature pages

must include the original signatures of all partners. Fax and e-mail transmissions are not acceptable. To be considered for funding, proposals must be submitted electronically to the department by 4:30 pm on May, 16 2009. Incomplete applications will not be considered. Applications must not exceed 10 MB. Proposals must be submitted electronically at: <http://dpi.wi.gov/cal/t2bgrant.html>.

B. Review Process: Proposals will be reviewed for completeness and compliance with the requirements set forth by DPI to determine applicant eligibility. If the proposal is late, incomplete, or an applicant cannot establish its eligibility, the proposal will be eliminated from the competition. The decision of the department is final. Applicants submitting proposals that are eliminated will be notified in writing.

An expert review panel will evaluate eligible applications in light of the required application components and the established criteria. The review panel will review each eligible application and make recommendations to the department. Consideration is based upon the following criteria: final score assigned each proposal by the review panel; a cost-effectiveness ratio determined by the relationship between the number of teachers served, the total cost of the program; and geographic distribution.

Following the review, the department staff will contact selected project directors to discuss any modifications of the project plan that

may be required. To maximize the effects of limited funds, applicants whose grants are recommended may be requested to revise the project budget and/or scope of work.

Award Administration

A. Notification of the Award: Within thirty days of completion of the review process, the project director and chief financial officer will be notified of the status of their proposal.

B. Award Conditions: For the 2008-2009 competition, approximately \$2,098,642 is available for Mathematics and Science Partnership awards. The department will fund a minimum of three projects; however, as many as ten may be awarded.

C. Reporting Requirements: Each eligible partnership receiving a grant must report annually to the Department of Public Instruction by submitting the ANNUAL PERFORMANCE REPORTING. Further information regarding reporting requirements and forms are available on the MSP website at <http://www.dpi.wi.gov/cal/t2bgrant.html>.

D. Participation in State and National Conferences: The coordinators and evaluators of the grant recipients are required to attend the Fall MSP meeting, the Annual MSP Conference, and one USDE Regional MSP Conference annually.

Definitions

The following definitions are based on the definitions included in the No Child Left Behind Act of 2001.

A. Highly Qualified Teacher: A highly qualified teacher meets all of the requirements of PI 34 for the subjects and levels that he/she is teaching. The requirements include, but are not limited to, a bachelor's degree, completion of an approved licensing program, and a rigorous exam in the subjects being taught. In addition, a highly qualified teacher may be a teacher of record who is enrolled in a state-approved alternative teacher-training program.

B. Professional Development: The term "professional development" means instructional activities that:

1. Are based on SBR and state academic content standards, student academic achievement standards, and assessment;
2. Improve and increase teachers' knowledge of the academic subjects they teach;
3. Enable teachers to become highly qualified; and
4. Are sustained, intensive, and classroom-focused in order to have a positive and lasting impact on classroom instruction and the teacher's performance in the classroom.

C. Experimental Design: The term experimental design is a research method using the power of statistics to measure the growth of a given variable or treatment of a group compared to a baseline group. The group in an experiment which receives the specified treatment is called the *Treatment Group* or the experimental group. However, the term *Control Group* refers to another group assigned to the experiment, but not for the purpose of being exposed to the treatment. Thus, the performance of the control group usually serves as a baseline against which to measure the effect of the full treatment on the treat-

ment group. All members of each group should be selected randomly.

D. Scientifically-Based Research: The term "scientifically-based research" means research that involves the application of rigorous, systematic, and objective procedures to obtain reliable and valid knowledge relevant to education activities and programs and includes research that:

1. Employs **systematic, empirical** methods that draw on observation or experiment and involve rigorous data analyses that are adequate to test the stated hypotheses and justify the general conclusions drawn;
2. Relies on **measurements or observational** methods that provide reliable and valid data across evaluators and observers, across multiple measurements and observations, and across studies by the same or different investigators;
3. Is **evaluated using experimental or quasi-experimental** designs in which individuals, entities, programs, or activities are assigned to different conditions, with appropriate controls to evaluate the effects of the condition of interest and with a preference for random-assignment experiments or other designs to the extent that those designs contain within-condition or across-condition controls;
4. Ensures that **experimental studies are presented** in sufficient detail and clarity to allow for replication or, at minimum, to offer the opportunity to build systematically on their findings; and
5. Has been **accepted by a peer-reviewed journal or approved by a panel of independent experts** through a comparably rigorous, objective, and scientific review.

E. Summer Workshop or Institute: The term "summer workshop or institute" means a workshop or institute, conducted during the summer, that:

1. Is conducted for a period of at least two weeks or 80 contact hours;
2. Includes, as a component, a program that provides direct interaction between teacher participants and faculty; and
3. Provides for follow-up training during the academic year that is conducted in the classroom for a period of not less than three consecutive or nonconsecutive days.

F. Other Partners: This may include educational organizations, nonprofit organizations, for profit organizations, education departments, science education and mathematics education departments. It is expected that all partnerships will contribute to the project by direct involvement, or by providing funds, resources, or services.

G. Official Representatives: The official LEA representative is the superintendent/ designee.

The official IHE representative includes any of the following:

- President/Vice President
- Chancellor/ Vice Chancellor
- Provost
- Research Office
- Grant Office
- Sponsor Office

Allowable Expenditures

The MSP program funds must be spent **exclusively** on costs associated with providing high quality, content-specific professional learning opportunities to mathematics and/or science teachers of grades K-12. In general, it is expected that MSP partnerships will spend approximately \$30-\$40 per teacher per contact hour on the total cost of their MSP program work. The following table provides further specificity to allowable expenses.

Category	Guidelines
Teacher Stipends	The approved rate per 8-hour day during off-contract time; teacher fringe benefits may be covered by MSP grant funds. All teachers must be US citizens or hold a permanent residency in the US.
Substitutes	The approved rate per day when MSP training sessions take place during teacher contract time.
Project Management Team Salaries	Not to exceed 10% of the project director's salary and 5% of the site coordinators' salaries. The salary of the program coordinators, project director, and site coordinators should not exceed 10% of the grant amount and must be covered by the Administration section.
Indirect Costs	Not to exceed 8%. Explain for fiscal agent expenses.
Consultants and Contracts	Not to exceed \$500 per day. The total funds for consultants not to exceed 5% of the grant amount.
Higher Education Faculty	Regular salary per hour of contact time; 25% of salary per hour of planning/preparation time.
Evaluator	At least 10% of total project budget must be spent on a formal project evaluator.
Travel	Reimburse mileage, meals, and lodging according to state/system guidelines for project-related travel.
Meeting Events	Reimburse travel expenses for management team participation in ED and DPI-hosted MSP events according to state/system guidelines.
Materials and Supplies	Funds may be spent on materials and supplies to facilitate professional learning of teachers, not on classroom instructional materials.

Additionally, MSP program funds **cannot** be spent on equipment (e.g., smart boards, computers, printers, camcorders, etc.), capital improvements, facility rentals, full salaries of administrative or clerical personnel, and tuition charges and/or university fees (already covered in higher education partner's salaries and fringe).

Scoring Rubric for MSP Repeat Applicant Proposals Abstract

A. Are all signatures provided and all forms complete and signed by the official authorized personnel only.

B. Abstract:

1. Are all abstract component present
2. Repeat Applicant Prior Work Summary

Does the repeat project's proposal abstract clearly describe the goals and objectives of its funded proposal? Does it delineate how the project budget was spent during each year of funding? Does it include the number of teachers it intended to serve (as evidenced in the funded proposal) as well as the number it actually served? Does it effectively describe progress towards goals through a thorough description of the work that was performed and evaluated? Is compelling justification provided to explain any unintended results or challenging situations faced by the partnership?

Weak	Average	Strong
Evidence that prior project worked with significantly fewer teachers than intended; <u>or</u> Lacks evidence that prior project worked with intended number of teachers as stated in its funded proposal.	Evidence that prior project worked with as many or nearly as many teachers as it originally intended; <u>or</u> Provides acceptable explanation of why project did not work with intended number of teachers.	Strong evidence that prior project worked with more teachers than intended according to its funded proposal.
Lacks evidence that prior project spent its allotted budget effectively and appropriately.	Evidence that prior project used the majority of its allotted budget; Evidence that budget was spent appropriately on teacher needs.	Evidence that prior project used most or all of its allotted budget; Evidence that budget was spent effectively and appropriately to meet teacher needs.
Lacks evidence that prior project work resulted in gains in teacher content knowledge.	Quantitative and qualitative evidence that prior project work resulted in gains in teacher content knowledge.	Reliable quantitative <u>and</u> qualitative evidence that prior project work resulted in substantial gains in teacher content knowledge.
Lacks evidence that prior project met goals and objectives; <u>or</u> Lacks narrative evidence justifying why prior project did not meet its intended goals and objectives.	Clear evidence that prior project completed proposed work and met goals and objectives; <u>or</u> Provides acceptable justification of why prior project was not able to meet goals and objectives.	Compelling quantitative <u>and</u> qualitative evidence that prior project completed proposed work and met goals and objectives.
Lacks narrative explanation of how prior project intends to use new funding to inform or build upon previous successes and lessons learned.	Acceptable description of how prior project generally intends to use new funding to inform or build upon previous successes and lessons learned.	Clear and compelling description of how prior project intends to use new funding to inform or build upon previous successes and lessons learned.

C.1 Needs Assessment: The needs assessment should indicate a clear statement of needs derived from a comprehensive needs assessment and how the goals and objectives of the program are directly related to those needs.

Weak	Average	Strong
<p>The needs assessment:</p> <ul style="list-style-type: none"> • did not identify gaps or weaknesses addressed by the program. • provides no evidence the LEA has a large population of students who have historically been under-represented using WINSS and WKCE. • provides little or no baseline data and analysis using local assessment, WKCE, and WINSS to guide the program. • goals and objectives are not measurable and do not address identified needs. • provides no information how the partnership selected the program developed. 	<p>The needs assessment:</p> <ul style="list-style-type: none"> • identifies some gaps or weaknesses addressed by the program. • provides some evidence the LEA has a large population of students who have historically been under-represented using WINSS and WKCE. • provides some baseline data and analysis using local assessment, WKCE, and WINSS to guide the program. • goals and objectives are measurable and address some identified needs. • provides some information on how the partnership selected the program developed. 	<p>The needs assessment:</p> <ul style="list-style-type: none"> • identifies very specific gaps or weaknesses addressed by the program. • provides clear and convincing evidence the LEA has a large population of students who have historically been under-represented using WINSS and WKCE. • provides clear quantitative baseline data and analysis using local assessment, WKCE, and WINSS to guide the program. • goals and objectives are specific and measurable and address each need identified. • provides clear information how the partnership selected the program developed.

C.2 Scientifically-Based Research: The literature review should discuss and cite the current state of knowledge relevant to the program. This brief literature review should clearly indicate why the proposed activities were selected or designed. If the proposal builds on prior work, lessons learned are described and how these lessons are incorporated in the program is included.

Weak	Average	Strong
<p>The literature reviewed:</p> <ul style="list-style-type: none"> • does not support the program. • vaguely states lessons learned from prior work. • does not provide references that employ sound research methods. • does not cite research from peer reviewed journals. 	<p>The literature reviewed:</p> <ul style="list-style-type: none"> • supports some of the proposed activities selected or designed in the program. • states some lessons learned from prior work. • provides references that employ some sound research methods. • cites some accepted research sources from peer reviewed journals. 	<p>The literature reviewed:</p> <ul style="list-style-type: none"> • clearly defines and supports the proposed activities selected or designed in the program. • supports and clearly states lessons learned on prior work. • provides references that employ sound research methods. • cites accepted research sources from peer reviewed journals.

C.3 Work Plan: A proposal must clearly describe the program activities based on the measurable goals, objectives, and the responsibility of each of the partners. The program description should indicate a timeline and an estimated number, type, duration, and intensity of professional development activities.

Weak	Average	Strong
<p>The work plan:</p> <ul style="list-style-type: none"> • does not describe specific program activities that link the goals and objectives stated in the program or the data provided by the needs assessment. • the responsibilities of the partners are not defined and they account for few goals and objectives. • does not define the timelines for the program. • does not describe how activities will increase the number of teachers who participate in the professional development. • does not explain how professional development activities are linked with state content standards. • does not explain how professional development activities are linked with teacher standards. • does not explain how professional development activities aligned with PI 34.02 1-10. 	<p>The work plan:</p> <ul style="list-style-type: none"> • provides some program activities that link the goals and objectives stated in the program and the data provided by the needs assessment. • describes some responsibilities of the partners and accounts for how some of the goals and objectives in the program will be met. • provides general timelines as to when activities will occur. • describes how the activities will increase the number of teachers who will participate in the professional development. • links the professional development activities with state content standards. • links professional development activities with teacher standards. • links professional development activities with PI 34.02 1-10. 	<p>The work plan:</p> <ul style="list-style-type: none"> • provides specific and clear program activities that link the goals and objectives stated in the program and the data provided by the needs assessment. • clearly defines the responsibilities of partners and fully accounts for how all the goals and objectives in the program will be met. • provides definitive timelines as to when activities will occur and their duration. • clearly describes how the activities will increase the number of teachers who will participate in professional development. • clearly aligns professional development activities with state content standards. • clearly aligns professional development activities with teacher standards. • clearly aligns professional development activities with PI 34.02 1-10.

C.4 Commitment and Capacity of Partnership: The program description must clearly demonstrate the submitting partnership has the capability of managing the program, organizing the work, and meeting deadlines.

Weak	Average	Strong
<p>The partnership:</p> <ul style="list-style-type: none"> • does not provide information about how the program will be managed. • does not describe a process for meeting critical needs and/or deadlines. • does not describe an explanation for making decisions. • does not describe roles for each partner in the program. • does not explain how the partnership will continue beyond the three year grant. 	<p>The partnership:</p> <ul style="list-style-type: none"> • demonstrates the ability to manage the program. • describes a general process for meeting critical needs and deadlines. • describes a general explanation for making decisions. • describes roles for each partner in the program. • explains in general terms how the partnership will continue beyond the three year grant. 	<p>The partnership:</p> <ul style="list-style-type: none"> • provides a management plan outlining the ability to manage the program. • outlines a clear process for meeting identified needs and deadlines. • describes a clear process for making decisions. • describes specific and definitive roles for each partner in the program. • provides a projected plan and timeline for how the program will continue beyond the three year grant funding.

C.5 Evaluation Plan: Each application should identify process and outcome research and evaluation methods that the program will use and explain why those methods are appropriate to the identified needs the proposal addresses. A proposal must make a compelling case for the activities of the program and describe how the activities will help the MSP program build a rigorous, cumulative, reproducible, and usable body of findings.

Weak	Average	Strong
<p>The evaluation plan:</p> <ul style="list-style-type: none"> • is not based on the use of scientific methods or comparison groups. • has no measurable objectives or annual targets which describe progress towards meeting the goals and objectives established in response to the identified needs. • does not measure activities and the number and characteristics of teachers participating in professional development. • does not measure student academic achievement or compare with baseline data. 	<p>The evaluation plan:</p> <ul style="list-style-type: none"> • is based on the use of a comparison group of students, schools, or districts utilizing experimental or quasi-experimental design. Description of comparison group(s) is vague or incomplete. • has some measurable objectives and targets which may indicate progress towards meeting the goals and objectives in response to the identified needs. • measures some of the activities and the number and characteristics of teachers participating in professional development. • measures student academic achievement on WKCE in mathematics and/or science assessments compared to baseline data. 	<p>The evaluation plan:</p> <ul style="list-style-type: none"> • provides an evaluation plan based on an experimental or quasi-experimental design. Description of comparison group(s) construction is thorough and clear. • has clear measurable objectives and annual targets which describe progress toward meeting the goals and objectives in response to the identified needs. • clearly measures all activities and the number and characteristics of teachers participating in professional development. • clearly measures the student academic achievement on local assessment, WKCE, and other mathematics and/or science assessments compared to baseline data.

C.6 Budget Justification: The budget must clearly be tied to the scope and requirements of the project. The budget narrative should describe the basis for determining the amounts shown on the project budget page.

Weak	Average	Strong
<ul style="list-style-type: none"> • Budget justification is not provided or does not provide enough detail to justify expenditures. • Descriptions are not provided for all budget categories. • The budget and budget justification are not directly tied to the work plan outlined in Part C. • Does not indicate whether additional funds will be used to help support this program. 	<ul style="list-style-type: none"> • Provides adequate justification that the costs of the program are reasonable and meet the program needs. • Descriptions are provided for all budget categories. • The budget and budget justification are directly tied to the work plan outlined. • Includes a description of how other available resources will be used to support the program. 	<ul style="list-style-type: none"> • Provides strong justification that costs of the program are reasonable and clearly shows that the budget is sufficient to meet the program needs. • Detailed descriptions are provided for all budget categories. • The budget and budget justification are directly tied to the work plan and clearly shows how all aspects of the work plan will be supported. • Includes a specific description about how all available resources will be leveraged to coordinate services to support and sustain the program.



Wisconsin Department of Public Instruction
MATHEMATICS AND SCIENCE PROGRAM
PARTNERSHIPS APPLICATION / NEW
 PI-9550-IIB-New (Rev. 02-09)

INSTRUCTIONS: Applicants must submit the full proposal to the Wisconsin Department of Public Instruction (DPI) electronically by 4:30 pm on May 16, 2009 at: <http://www.dpi.wi.gov/cal/t2bgrant.html>

The signature pages must include the original signatures of all partners and must be delivered to DPI by 4:30 on May 16, 2009 via US mail to

WISCONSIN DEPARTMENT OF PUBLIC INSTRUCTION
DIVISION FOR ACADEMIC EXCELLANCE
 ATTN: Roselyn Bittorf
 PO BOX 7841
 MADISON, WI 53707-7841

Fax and e-mail transmissions are not acceptable. Application must not exceed 10 MB. For Assistance contact: Roselynn Bittorf, email: roselynn.bittorf@dpi.wi.gov or by telephone:608-267-9279.

Collection of this information is a requirement of ESEA 2001, NCLB Education Act, Title II, Part B—Mathematics and Science Partnerships Program

Refer to detailed instructions and information contained in the handbook.

GENERAL INFORMATION

Applicant School District			Mailing Address <i>Street, City, State, Zip</i>		
Contact Person		Title		Telephone <i>Area/No.</i>	
Principle Investigator <i>If other than contact person. (must be from the primary partners)</i>		Title		Telephone <i>Area/No.</i>	

Principle Investigator's Mailing Address, *Street, City, State, Zip*

Total Mathematics and Science Partnership Funds Requested	No. of Teachers to be Served <i>Including teachers from all partners.</i>	No. of Students to be Served <i>Including students from all partners.</i>
---	--	--

ASSURANCES

Should an award of funds from the Mathematics and Science Partnership Program be made to the applicant in support of the activities proposed in this application, the signatures below certify to the Department of Public Instruction that the authorized official will:

1. Upon request, provide the Department of Public Instruction with access to records and other sources of information that may be necessary to determine compliance with appropriate federal and state laws and regulations;
2. Conduct educational activities funded by this project in compliance with the following federal laws:
 - a. Title VI of the Civil Rights Act of 1964
 - b. Title IX of the Education Amendments of 1972
 - c. Section 504 of the Rehabilitation Act of 1973
 - d. Age Discrimination Act of 1975
 - e. Americans with Disabilities Act of 1990
 - f. Elementary and Secondary Schools Act (No Child Left Behind Act of 2001)
3. Use grant funds to supplement and not supplant funds from nonfederal sources.
4. The focus of the program is on teachers who work with children of color and teachers who work with economically disadvantaged children.
5. Submit, in accordance with stated guidelines and deadlines, all program and evaluation reports required by the U.S. Department of Education and the Department of Public Instruction.

SIGNATURES

WE HEREBY CERTIFY that to the best of our knowledge the information in this application is correct, that the filing of this application is duly authorized by the governing body of the organizations and institutions, and that the applicants will comply with the statement of assurances.

Name of Authorized School District Official

Signature of School District Official ➤	Date Signed
--	-------------

Name of Authorized Higher Education Institution Official

Signature of Authorized Higher Education Institution Official ➤	Date Signed
--	-------------

PRIMARY PARTNER IDENTIFICATION

School District

School District		LEA Code
Project Title		
Principle Investigator	Title	
Address <i>Street, City, State, ZIP</i>	Telephone <i>Area/No.</i>	Fax <i>Area/No.</i>
E-Mail Address		

Higher Education Partner

Primary Contact	Title	
Address <i>Street, City, State, ZIP</i>	Telephone <i>Area/No.</i>	Fax <i>Area/No.</i>
E-Mail	Type of Institution/Organization	

Other Partners Attach additional sheet(s) as necessary.

Partner

Administrator	Title	
Address <i>Street, City, State, ZIP</i>	Telephone <i>Area/No.</i>	Fax <i>Area/No.</i>
E-Mail	Signature ➤	Date Signed

Partner

Administrator	Title	
Address <i>Street, City, State, ZIP</i>	Telephone <i>Area/No.</i>	Fax <i>Area/No.</i>
E-Mail	Signature ➤	Date Signed

Partner

Administrator	Title	
Address <i>Street, City, State, ZIP</i>	Telephone <i>Area/No.</i>	Fax <i>Area/No.</i>
E-Mail	Signature ➤	Date Signed

Partner

Administrator	Title	
Address <i>Street, City, State, ZIP</i>	Telephone <i>Area/No.</i>	Fax <i>Area/No.</i>
E-Mail	Signature ➤	Date Signed

PRIMARY PARTNER IDENTIFICATION (cont'd.)

Other Partners Attach additional sheet(s) as necessary.

Partner

Administrator	Title		
Address Street, City, State, ZIP	Telephone Area/No.	Fax Area/No.	
E-Mail	Signature ➤		Date Signed

Partner

Administrator	Title		
Address Street, City, State, ZIP	Telephone Area/No.	Fax Area/No.	
E-Mail	Signature ➤		Date Signed

Partner

Administrator	Title		
Address Street, City, State, ZIP	Telephone Area/No.	Fax Area/No.	
E-Mail	Signature ➤		Date Signed

Partner

Administrator	Title		
Address Street, City, State, ZIP	Telephone Area/No.	Fax Area/No.	
E-Mail	Signature ➤		Date Signed

Partner

Administrator	Title		
Address Street, City, State, ZIP	Telephone Area/No.	Fax Area/No.	
E-Mail	Signature ➤		Date Signed

Partner

Administrator	Title		
Address Street, City, State, ZIP	Telephone Area/No.	Fax Area/No.	
E-Mail	Signature ➤		Date Signed

BUDGET SUMMARY

Fiscal Agent	Grant Period	Initial Request	Date Submitted	
	Beg. Date <i>Mo./Day/Yr.</i>		First Revision	Second Revision
Project Number <i>For DPI Use Only</i>	End Date <i>Mo./Day/Yr.</i>			

Budget Revisions: Submit a copy of this page, with appropriate revisions included. (Attach this to a brief letter of justification.) Note: Submit request at least 30 days prior to expenditure of grant monies.

WUFAR Function	WUFAR Object	Year 1	Year 2	Year 3
Instruction (100 000 Series) Activities dealing directly with the interaction between Higher Education faculty and K-12 staff.	a. Salaries (100s)			
	b. Fringe Benefits (200s)			
	c. Purchased Services (300s)			
	d. Non-Capital Objects (400s)			
	e. Capital Objects (500s)			
	f. Other Objects (e.g., fees) (900s)			
	TOTAL Instruction		\$0	\$0
Support Services—Pupil and Instructional Staff Services (in 210 000 and 220 000 Series) Support services are those which facilitate and enhance instructional or other components of the grant. This category includes staff development, supervision, and coordination of grant activities.	a. Salaries (100s)			
	b. Fringe Benefits (200s)			
	c. Purchased Services (300s)			
	d. Non-Capital Objects (400s)			
	e. Capital Objects (500s)			
	f. Other Objects (e.g., fees) (900s)			
	TOTAL Support Services—Pupil/Instructional Staff Services		\$0	\$0
Support Services—Administration (Associated with functions in 230 000 series and above.) Includes general; building; business; central service administration, and insurances.	a. Salaries (100s)			
	b. Fringe Benefits (200s)			
	c. Purchased Services (300s)			
	d. Non-Capital Objects (400s)			
	e. Capital Objects (500s)			
	f. Insurance (700s)			
	g. Other Objects (e.g., fees) (900s)			
	TOTAL Support Services—Admin.		\$0	\$0
SUBTOTAL		\$0	\$0	\$0
Approved Percentage Rate Maximum 8% of subtotal costs	INDIRECT COSTS			
TOTAL BUDGET		\$0	\$0	\$0
<i>DPI Approval</i>	DPI Reviewer Signature/Date	➤		

ATTACHMENTS

This space is intended for attaching resumes, appendices and additional information.



Wisconsin Department of Public Instruction
MATHEMATICS AND SCIENCE PROGRAM
PARTNERSHIPS APPLICATION / REQUEST
FOR PROPOSAL—RENEWAL
 PI-9550-IIB-Renewal (Rev. 02-09)

INSTRUCTIONS: Applicants must submit the full proposal to the Wisconsin Department of Public Instruction (DPI) electronically by 4:30 pm on May 16, 2009 at: <http://www.dpi.wi.gov/cal/t2bgrant.html>

The signature pages must include the original signatures of all partners and must be delivered to DPI by 4:30 on May 16, 2009 via US mail to

WISCONSIN DEPARTMENT OF PUBLIC INSTRUCTION
DIVISION FOR ACADEMIC EXCELLENCE
 ATTN: Roselyn Bittorf
 PO BOX 7841
 MADISON, WI 53707-7841

Fax and e-mail transmissions are not acceptable. Application must not exceed 10 MB. For Assistance contact: Roselynn Bittorf, email: roselynn.bittorf@dpi.wi.gov or by telephone: 608-267-9279.

Collection of this information is a requirement of ESEA 2001, NCLB Education Act, Title II, Part B—Mathematics and Science Partnerships Program

Refer to detailed instructions and information contained in handbook.

GENERAL INFORMATION

Applicant School District		Mailing Address <i>Street, City, State, Zip</i>	
Contact Person	Title	Telephone <i>Area/No.</i>	
Principle Investigator <i>If other than contact person.</i>	Title	Telephone <i>Area/No.</i>	

Principle Investigator's Mailing Address, *Street, City, State, Zip*

Total Mathematics and Science Partnership Funds Requested	No. of Teachers to be Served <i>Including teachers from all partners.</i>	No. of Students to be Served <i>Including students from all partners.</i>
---	--	--

ASSURANCES

Should an award of funds from the Mathematics and Science Partnership Program be made to the applicant in support of the activities proposed in this application, the signatures below certify to the Department of Public Instruction that the authorized official will:

1. Upon request, provide the Department of Public Instruction with access to records and other sources of information that may be necessary to determine compliance with appropriate federal and state laws and regulations;
2. Conduct educational activities funded by this project in compliance with the following federal laws:
 - a. Title VI of the Civil Rights Act of 1964
 - b. Title IX of the Education Amendments of 1972
 - c. Section 504 of the Rehabilitation Act of 1973
 - d. Age Discrimination Act of 1975
 - e. Americans with Disabilities Act of 1990
 - f. Elementary and Secondary Schools Act (No Child Left Behind Act of 2001)
3. Use grant funds to supplement and not supplant funds from nonfederal sources.
4. The focus of the program is on teachers who work with children of color and teachers who work with economically disadvantaged.
5. Submit, in accordance with stated guidelines and deadlines, all program and evaluation reports required by the U.S. Department of Education and the Department of Public Instruction.

SIGNATURES

WE HEREBY CERTIFY that to the best of our knowledge the information in this application is correct, that the filing of this application is duly authorized by the governing body of the organizations and institutions, and that the applicants will comply with the statement of assurances.

Name of Authorized School District Official

Signature of School District Official ➤	Date Signed
--	-------------

Name of Authorized Higher Education Institution Official

Signature of Authorized Higher Education Institution Official ➤	Date Signed
--	-------------

PARTNER IDENTIFICATION			
School District			
School District			LEA Code
Program Title			
Principle Investigator		Title	
Address Street, City, State, ZIP		Telephone Area/No.	Fax Area/No.
E-Mail Address			
Higher Education Partner			
Primary Contact		Title	
Address Street, City, State, ZIP		Telephone Area/No.	Fax Area/No.
E-Mail		Type of Institution/Organization	
<i>Other Partners Attach additional sheet(s) as necessary.</i>			
Partner			
Administrator		Title	
Address Street, City, State, ZIP		Telephone Area/No.	Fax Area/No.
E-Mail	Signature ➤		Date Signed
Partner			
Administrator		Title	
Address Street, City, State, ZIP		Telephone Area/No.	Fax Area/No.
E-Mail	Signature ➤		Date Signed
Partner			
Administrator		Title	
Address Street, City, State, ZIP		Telephone Area/No.	Fax Area/No.
E-Mail	Signature ➤		Date Signed
Partner			
Administrator		Title	
Address Street, City, State, ZIP		Telephone Area/No.	Fax Area/No.
E-Mail	Signature ➤		Date Signed

RENEWAL APPLICANT ABSTRACT

Describe the goals and objectives of it funded proposal. Delineate how the project budget was spent during the first year of funding. Include the number of teachers it intended to serve (as evidenced in the funded proposal) as well as the number it actually served. Describe the progress towards goals through a thorough description of the work that was performed and evaluated. (Limit to one page.)

PARTICIPANT

List all participants involved. Tab from within the last cell to add additional rows.

Name of Participant	District	Grade Assignment

EVALUATION

Describe the evaluation design, the assessment instruments, and provide timelines.

a. Evaluation Design

b. Assessment Instrument

1. Teachers:
2. Students:

c. Timelines

Teachers		Students	
Pretest	Post-Test	Pretest	Post-Test

BUDGET SUMMARY

Fiscal Agent	Grant Period		Date Submitted		
	Beg.	Initial Request	First Revision	Second Revision	
Project Number <i>For DPI Use Only</i>	End				

Budget Revisions: Submit a copy of this page, with appropriate revisions included. (Attach this to a brief letter of justification.) Note: Submit request at least 30 days prior to expenditure of grant monies.

WUFAR Function	WUFAR Object	Year 3	Revision 1	Revision 2
Instruction (100 000 Series) Activities dealing directly with the interaction between Higher Education faculty and K-12 staff.	a. Salaries (100s)			
	b. Fringe Benefits (200s)			
	c. Purchased Services (300s)			
	d. Non-Capital Objects (400s)			
	e. Capital Objects (500s)			
	f. Other Objects (e.g., fees) (900s)			
	TOTAL Instruction		\$0	
Support Services—Pupil and Instructional Staff Services (in 210 000 and 220 000 Series) Support services are those which facilitate and enhance instructional or other components of the grant. This category includes staff development, supervision, and coordination of grant activities.	a. Salaries (100s)			
	b. Fringe Benefits (200s)			
	c. Purchased Services (300s)			
	d. Non-Capital Objects (400s)			
	e. Capital Objects (500s)			
	f. Other Objects (e.g., fees) (900s)			
	TOTAL Support Services—Pupil/Instructional Staff Services		\$0	
Support Services—Administration (Associated with functions in 230 000 series and above.) Includes general; building; business; central service administration, and insurances.	a. Salaries (100s)			
	b. Fringe Benefits (200s)			
	c. Purchased Services (300s)			
	d. Non-Capital Objects (400s)			
	e. Capital Objects (500s)			
	f. Insurance (700s)			
	g. Other Objects (e.g., fees) (900s)			
TOTAL Support Services—Admin.		\$0		
Indirect Cost	Approved Rate % Maximum 8% of subtotal costs			
TOTAL BUDGET		\$0		
<i>DPI Approval</i>	DPI Reviewer Signature/Date	➤		

BUDGET SUMMARY (cont'd)

Fiscal Agent

PART B—BUDGET DETAIL

Purchased Service Object

Item Name	Date(s) Service to be Provided	Unit Cost	Quantity	Total Cost	Function Code
				\$0.00	
				\$0.00	
				\$0.00	
				\$0.00	
				\$0.00	
				\$0.00	
				\$0.00	
				\$0.00	
			Total >	\$0.00	

Capital Object

Item Name	Unit Cost	Quantity	Total Cost	Function Code
			\$0.00	
			\$0.00	
			\$0.00	
			\$0.00	
			\$0.00	
			\$0.00	
			\$0.00	
			\$0.00	
			Total >	\$0.00

Non-Capital Object

Item Name	Unit Cost	Quantity	Total Cost	Function Code
			\$0.00	
			\$0.00	
			\$0.00	
			\$0.00	
			\$0.00	
			\$0.00	
			\$0.00	
			Total >	\$0.00

BUDGET SUMMARY (cont'd)

Fiscal Agent

Part B—Budget Detail (cont'd)

Personnel Summary Object—Fringe

List all personnel of the fiscal agent to be paid from MSP Funds. If a vacancy exists which will be filled indicate "Vacant."

Name	Position Title	FTE	Date(s) Service to be Provided	Total Cost	Function Code
			Total >	\$0	

ATTACHMENTS

Add any pertinent attachments here.



Wisconsin Department of Public Instruction
**MATHEMATICS AND SCIENCE PROGRAM
 PARTNERSHIPS APPLICATION / REPEAT**
 PI-9550-IIB-Repeat (Rev. 02-09)

INSTRUCTIONS: Applicants must submit the full proposal to the Wisconsin Department of Public Instruction (DPI) electronically by 4:30 pm on May 16, 2009 at: <http://www.dpi.wi.gov/cal/t2bgrant.html>

The signature pages must include the original signatures of all partners and must be delivered to DPI by 4:30 on May 16, 2009 via US mail to

**WISCONSIN DEPARTMENT OF PUBLIC INSTRUCTION
 DIVISION FOR ACADEMIC EXCELLANCE
 ATTN: Roselyn Bittorf
 PO BOX 7841
 MADISON, WI 53707-7841**

Fax and e-mail transmissions are not acceptable. Application must not exceed 10 MB. For Assistance contact: Roselynn Bittorf, email: roselynn.bittorf@dpi.wi.gov or by telephone:608-267-9279.

Collection of this information is a requirement of ESEA 2001, NCLB Education Act, Title II, Part B—Mathematics and Science Partnerships Program

Refer to detailed instructions and information contained in the handbook.

GENERAL INFORMATION

Applicant School District	Mailing Address <i>Street, City, State, Zip</i>
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Contact Person	Title	Telephone Area/No.
----------------	-------	--------------------

Principle Investigator <i>If other than contact person. (must be from the primary partners)</i>	Title	Telephone Area/No.
---	-------	--------------------

Principle Investigator's Mailing Address, *Street, City, State, Zip*

Total Mathematics and Science Partnership Funds Requested	No. of Teachers to be Served <i>Including teachers from all partners.</i>	No. of Students to be Served <i>Including students from all partners.</i>
---	--	--

ASSURANCES

Should an award of funds from the Mathematics and Science Partnership Program be made to the applicant in support of the activities proposed in this application, the signatures below certify to the Department of Public Instruction that the authorized official will:

1. Upon request, provide the Department of Public Instruction with access to records and other sources of information that may be necessary to determine compliance with appropriate federal and state laws and regulations;
2. Conduct educational activities funded by this project in compliance with the following federal laws:
 - a. Title VI of the Civil Rights Act of 1964
 - b. Title IX of the Education Amendments of 1972
 - c. Section 504 of the Rehabilitation Act of 1973
 - d. Age Discrimination Act of 1975
 - e. Americans with Disabilities Act of 1990
 - f. Elementary and Secondary Schools Act (No Child Left Behind Act of 2001)
3. Use grant funds to supplement and not supplant funds from nonfederal sources.
4. The focus of the program is on teachers who work with children of color and teachers who work with economically disadvantaged children.
5. Submit, in accordance with stated guidelines and deadlines, all program and evaluation reports required by the U.S. Department of Education and the Department of Public Instruction.

SIGNATURES

WE HEREBY CERTIFY that to the best of our knowledge the information in this application is correct, that the filing of this application is duly authorized by the governing body of the organizations and institutions, and that the applicants will comply with the statement of assurances.

Name of Authorized School District Official

Signature of School District Official ➤	Date Signed
--	-------------

Name of Authorized Higher Education Institution Official

Signature of Authorized Higher Education Institution Official ➤	Date Signed
--	-------------

PRIMARY PARTNER IDENTIFICATION

School District

School District		LEA Code
Project Title		
Principle Investigator	Title	
Address Street, City, State, ZIP	Telephone Area/No.	Fax Area/No.
E-Mail Address		

Higher Education Partner

Primary Contact	Title	
Address Street, City, State, ZIP	Telephone Area/No.	Fax Area/No.
E-Mail	Type of Institution/Organization	

Other Partners Attach additional sheet(s) as necessary.

Partner

Administrator	Title	
Address Street, City, State, ZIP	Telephone Area/No.	Fax Area/No.
E-Mail	Signature ➤	Date Signed

Partner

Administrator	Title	
Address Street, City, State, ZIP	Telephone Area/No.	Fax Area/No.
E-Mail	Signature ➤	Date Signed

Partner

Administrator	Title	
Address Street, City, State, ZIP	Telephone Area/No.	Fax Area/No.
E-Mail	Signature ➤	Date Signed

Partner

Administrator	Title	
Address Street, City, State, ZIP	Telephone Area/No.	Fax Area/No.
E-Mail	Signature ➤	Date Signed

PRIMARY PARTNER IDENTIFICATION (cont'd)

Other Partners Attach additional sheet(s) as necessary.

Partner

Administrator	Title		
Address Street, City, State, ZIP	Telephone Area/No.	Fax Area/No.	
E-Mail	Signature ➤		Date Signed

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REPEAT APPLICANT SUMMARY

Describe the goals and objectives of the funded proposal. Delineate how the project budget was spent during each year of funding. Include the number of teachers it intended to serve (as evidenced in the funded proposal) as well as the number it actually served. Describe the progress towards goals through a thorough description of the work that was performed and evaluated. **Limit response to two pages.**

ABSTRACT

Briefly describe the project vision, goals, activities, and key features that will be addressed and expected benefits of the work. Limit response to the space provided below.

NARRATIVE

1. **Needs Assessment** The project description should indicate a clear understanding of results of a needs assessment and how the goals and activities of the program are directly related to those needs.

 2. **Scientifically Based Research** The project description should discuss and cite the current state of knowledge to support the project. This brief literature review should clearly indicate why the proposed activities were selected or designed. If the proposal builds on prior work, the project description should indicate what was learned from this work and how these lessons learned are incorporated in the project.

 3. **Plan of Work** The proposal must clearly describe the goals and objectives for the project and the responsibility of each of the partners. The project description should indicate a timeline and an estimate of the number, type, duration, and intensity of professional development activities.

 4. **Commitment and Capacity of Partnership** The project description must clearly demonstrate that the submitting entity has the capability of managing the project, organizing the work, and meeting deadlines.

 5. **Evaluation of MSP Program** Each application should provide a description, identify the research and evaluation methods that the project will use, and explain why those methods are appropriate to the issues or questions that the proposal addresses. DPI encourages applicants to use experimental or quasi-experimental designs. The proposal must make a compelling case for the activities of the project and describe how the activities will help the MSP Program build a rigorous, cumulative, reproducible, and usable body of findings.

 6. **Budget Justification** The budget must clearly be tied to the scope and requirements of the project. The budget narrative should describe the basis for determining the amounts shown on the project budget page. All proposals should include provision for evaluation of the activities in an annual performance report.
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BUDGET SUMMARY

Fiscal Agent	Grant Period		Date Submitted	
	Beg. Date <i>Mo./Day/Yr.</i>		Initial Request	First Revision
Project Number <i>For DPI Use Only</i>		End Date <i>Mo./Day/Yr.</i>		

WUFAR Function	WUFAR Object	Year 1	Year 2	Year 3
Instruction (100 000 Series) Activities dealing directly with the interaction between Higher Education faculty and K-12 staff.	a. Salaries (100s)			
	b. Fringe Benefits (200s)			
	c. Purchased Services (300s)			
	d. Non-Capital Objects (400s)			
	e. Capital Objects (500s)			
	f. Other Objects (e.g., fees) (900s)			
	TOTAL Instruction		\$0	\$0
Support Services—Pupil and Instructional Staff Services (in 210 000 and 220 000 Series) Support services are those which facilitate and enhance instructional or other components of the grant. This category includes staff development, supervision, and coordination of grant activities.	a. Salaries (100s)			
	b. Fringe Benefits (200s)			
	c. Purchased Services (300s)			
	d. Non-Capital Objects (400s)			
	e. Capital Objects (500s)			
	f. Other Objects (e.g., fees) (900s)			
	TOTAL Support Services—Pupil/Instructional Staff Services		\$0	\$0
Support Services—Administration (Associated with functions in 230 000 series and above.) Includes general; building; business; central service administration, and insurances.	a. Salaries (100s)			
	b. Fringe Benefits (200s)			
	c. Purchased Services (300s)			
	d. Non-Capital Objects (400s)			
	e. Capital Objects (500s)			
	f. Insurance (700s)			
	g. Other Objects (e.g., fees) (900s)			
	TOTAL Support Services—Admin.		\$0	\$0
SUBTOTAL		\$0	\$0	\$0
Approved Percentage Rate Maximum 8% of subtotal costs		INDIRECT COSTS		
TOTAL BUDGET		\$0	\$0	\$0
<i>DPI Approval</i>	DPI Reviewer Signature/Date	➤		

ATTACHMENTS

This space is intended for attaching resumes, appendices and additional information.