

***No Child Left Behind Act of 2001***  
**Public Law 107-110**  
**Title II, Part B**

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**Arkansas**  
**Mathematics and Science**  
**Partnership Program**



**Request for Proposals**  
**Arkansas Department of Education**

**Technical Assistance Meeting: May 6, 2011**  
**ADE Auditorium: 1:00 – 3:30 p.m.**

**Proposal Applications Due: June 20, 2011**

This Request for Proposals and support materials are available on the Arkansas Department of Education's website: <http://arkansased.org/about/rfp.html>

**Arkansas Mathematics and Science Partnerships Program  
ESEA Title IIB, MSP**

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**Arkansas Mathematics and Science Partnerships Program  
ESEA Title IIB, MSP**

## **GENERAL APPLICATION INFORMATION**

### ***Contact***

**For assistance related to the Arkansas Mathematics and Science Partnerships Program (ESEA Title IIB) application, please contact:**

**Judy Trowell, MSP Program Manager  
Arkansas Department of Education, Room 401B  
Email: [judy.trowell@arkansas.gov](mailto:judy.trowell@arkansas.gov)  
Telephone: 501-682-4228**

### ***Notice***

**The Arkansas MSP is a federally-funded program. Funding and other requirements are contingent upon the Arkansas Department of Education receiving funding from the U.S. Department of Education and are subject to change as federal requirements change.**

## Arkansas Mathematics and Science Partnerships Program ESEA Title IIB, MSP

### Title IIB Mathematics and Science Partnership (MSP) Program Introduction, Background and Purpose

When the *No Child Left Behind Act of 2001* became law in January of 2002 (Public Law 107-110), a section of the Act allocated money to each state to establish a Mathematics and Science Partnership (MSP) competitive grant program. The intent of this program is to encourage scientifically-based professional development as a means for improving student academic performance. The program requires that institutions of higher education and school districts participate in professional development activities that increase the subject matter knowledge and teaching skills of mathematics and science teachers. Professional development activities must be sustained, intensive, classroom focused, and aligned with state and local standards and mathematics and science curricula. These activities must result in a demonstrable and measurable improvement in student academic achievement in mathematics and science.

The Arkansas Department of Education (ADE) is responsible for the administration of the MSP program. Arkansas expects to receive approximately \$1.9 million to fund new Mathematics and Science Partnership grants that begin on or around July 15, 2011. Grants will be awarded on a competitive basis for a 12 month period. A program is expected to continue for three years with the same core participants. Renewed funding for the two additional 12-month periods is dependent upon satisfactory progress toward meeting established goals and continued funding from the United States Department of Education. *Funds must be used to supplement, not supplant, funds that would otherwise be used for proposed activities.*

Grants will be awarded to support successful proposals submitted by institutions of higher education (IHEs), school districts, education cooperatives, or organizations that have formed partnerships focused on the improvement of mathematics instruction in grades 3-8. **The priority emphasis for Arkansas' 2011 MSP program is to develop mathematics initiatives that target three or more grade levels selected from grades 3-8. Initiatives should focus on enhancing teacher content knowledge and teaching skills that prepare students for success in the Common Core State Standards (CCSS). In particular, initiatives should target learning progressions that support the coordination of the Common Core State Standards, curriculum, instructional practices and multiple forms of assessment.**

Participation in the MSP Grant Submission Workshop (May 6, 2011) is strongly encouraged. The deadline to submit the completed proposal is June 20, 2011.

### Program Requirements and Eligibility

MSP projects MUST be designed and implemented by partnerships that include:

- One or more high-need school or district. For the purposes of the Arkansas MSP program, ADE defines a **high-need school or district** as one that has 25% or

more of the students on free or reduced lunch and has one or more schools designated as a school in improvement.

- A team of teachers of mathematics in the partner high-need schools or district;
- One or more institutions of higher education with engaged mathematics and/or engineering faculty;
- Administrators in partner high-need schools, districts, and/or educational service cooperatives;
- The partner district or school staff responsible for ensuring that the evaluator will have access to student achievement data;
- A business officer from the fiscal agent. An education service cooperative, school district, or IHE may serve as the fiscal agent.
- IHE faculty and or service cooperative or school district educators with expertise in teacher professional development;
- An External Evaluator who is an active partner from the planning stages through the completion of final reports. The evaluator designs and manages an evaluation and accountability system that includes measurable objectives related to both process evaluation (implementation) and outcome evaluation. The external evaluator may be affiliated with the partnering IHE, but must not be working in the same department as the participating IHE faculty nor take an active role in the program delivery.

Other partners may include:

- Another engineering, mathematics, science, or education department or mathematics and science center of an institution of higher education.
- Additional local education agencies, including education service cooperatives, Education Renewal Zone directors, public charter schools, public or private schools, or a consortium of such schools.
- A business or organization that has demonstrated that it can improve the quality of mathematics and science instruction.

Partners must engage in the partnership to share goals, responsibilities, and accountability for the grant award. There must be an active and well-defined partnership between IHE faculty and LEAs in all aspects of the grant, including planning, delivery, and evaluation of professional development.

*Equitable participation for private schools applies to the Title IIB MSP program.* Grantees must adhere to regulations 76.652 and 76.656 of the U.S. Department of Education's General Administration requirements (EDGAR) and Section 9501 of ESEA as reauthorized by *No Child Left Behind*. These regulations state that meaningful consultation must occur between the LEA and any private schools within the LEA's attendance area. This consultation must occur prior to submitting a grant proposal. The purpose of this regulation is to ensure that teachers of all students (public and private) are able to benefit from the provision of federal funding.

*Institution Review Board (IRB) requirements apply to the Title IIB MSP program.* An institutional review board (IRB) is a committee that has been formally designated to approve, monitor, and review biomedical and behavioral research involving humans with the aim to protect the rights and welfare of the research subjects. An IRB performs critical oversight functions for research conducted on human subjects that are scientific,

ethical, and regulatory. The IHE must work with the partner LEAs to ensure that IRB requirements are met. For more information, see EDGAR (34 CFR Part 97).

*Family Educational Rights and Privacy Act applies to the Title IIB MSP program.* The Family Educational Rights and Privacy Act (FERPA) is a Federal law that protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education. The partner school districts must ensure the FERPA regulations are met.

### **Authorized Activities for this RFP**

The ultimate goal of this grant is to improve the academic achievement of Arkansas' students in the areas of mathematics. This goal is to be accomplished by improving the mathematics content knowledge of teachers and by developing closer partnerships between the district and the IHE engineering and/or mathematics departments. An eligible partnership shall use funds for one or more of the following activities related to elementary and secondary schools:

- 1) Creating opportunities for enhanced and ongoing professional development to improve mathematics/science content knowledge that is aligned with the CCSS, including pedagogical content knowledge, for a total of no less than 100 contact hours during each year of the project.
- 2) Promoting strong teaching skills for participating teachers, including integrating reliable scientifically-based, research-based, and technology-based teaching methods into the curriculum.
- 3) Establishing and operating mathematics and/or science summer workshops or institutes, including follow-up training, for mathematics teachers from three or more of grade levels 3-8 that
  - A) **Shall:**
    - a) directly relate to the mathematics and/or science areas in which the teacher provides instruction, and focus only secondarily on pedagogy;
    - b) enhance the ability of the teacher to understand and use the challenging State academic content standards (CCSS) for mathematics and/or science to select appropriate curricula;
    - c) examine learning progressions that
    - d) Provide teachers with experiences that lead them to value and effectively use curricula that are based on scientific research, aligned with State academic content standards (CCSS), and are objective-centered, experiment-oriented, and concept- and content-based.;
    - e) Improve and expand training of mathematics and science teachers, including professional development in the effective integration of technology into curricula and instruction
  - B) **MAY include**
    - Instruction in the use of data and assessments to inform and instruct classroom practice; and
    - Professional development activities, including follow-up activities, such as curriculum alignment, distance learning, and activities that train teachers to utilize technology in the classroom.

- 4) Designing programs to prepare a mathematics or science lead teacher/coaches to provide professional development to other mathematics or science teachers at the school or district and to assist beginning and other teachers at the school.

The partnerships are expected to be sustainable. A sustainable partnership means, for example, that there should be indicators of sustained change, such as new courses that have been developed, increased IHE faculty knowledge of the K-12 Mathematics Frameworks and Common Core State Standards, direct involvement with K-12 schools, and increased K-12 faculty use of IHE resources.

### **Uses of Funds**

Funds received shall be used to supplement, and not supplant, state and/or local funds that would otherwise be used for proposed activities. Grantees must be able to spend funds correctly and provide evidence of this (Section 76.702 of EDGAR). Accounting records must be supported by cancelled checks, paid invoices, payroll, time, and attendance records. Costs must be necessary and reasonable, be allocable, and be authorized or not prohibited under State or local laws or federal grant regulations. Lack of documentation is a primary reason for audit findings. Documentation must be available to support each expenditure.

Funds **may** be used for the following:

- 1) Stipend and travel reimbursement for teachers attending summer institutes.
- 2) Release time during the school year for planning activities that connect project activities to district curriculum, lesson planning, and student assessment.
- 3) Stipend and travel reimbursement for teachers attending approved professional development opportunities within the State with a strong alignment to the project goals;
- 4) Higher education faculty salary reimbursement, travel reimbursement, and other project-related costs;
- 5) Project Director expenses to coordinate teacher recruitment, teacher support, faculty retention and support;
- 6) Materials for MSP training that can later be used in the classroom to facilitate implementation of project activities by teachers in the cohort;
- 7) Evaluation service expenses;
- 8) Education consultation services;
- 9) Reasonable expenditures for food at professional development sessions, not to exceed the State per diem, and in compliance with federal regulations;
- 10) Indirect costs, up to 8%. LEAs must adhere to the negotiated restricted indirect cost rate for their district or cooperative listed in the Commissioner's Memo from Finance (FIN-11-xxx) released in late May or early June 2011, up to the 8% maximum allowed by federal regulations.

Funds may not be used for:

- ✓ Costs associated with writing the proposal;
- ✓ Materials for classroom use;
- ✓ Supporting the research of individual IHE faculty;
- ✓ Computers, projectors, smart boards, or other similar equipment;
- ✓ Travel to out of state professional meetings/conferences other than the U.S. Department of Education's Title IIB MSP Conferences unless it is demonstrated that attendance will directly and significantly advance the project.

## **Evaluation and Accountability Plan**

The United States Department of Education requires rigorous evaluation and accountability plans for federally funded research. Each project must have an outside evaluator who is not directly involved in the project's activities. The project's external evaluator must participate with the MSP State Program Evaluator to identify and finalize an evaluation and accountability plan that includes rigorous objectives that measure:

- Progress toward meeting the goals and objectives established in the professional development and needs of partner schools or districts;
- The number of mathematics teachers who participate in content-based professional development activities;
- Changes in teacher content knowledge, including the reliability and validity of the measures used;
- Student achievement data in classes of participating teachers.

To meet federal program requirements each partnership must develop and implement an evaluation plan that includes both formative and summative functions. Formative evaluation information should help improve the program during the grant period. This information may identify strengths or weaknesses in the program or activities and help determine what is working or not working effectively. Summative evaluation information provides data that demonstrate the overall success of the program at the end of the grant period. In particular, summative information should answer questions regarding the effectiveness of the program in increasing teachers' knowledge and student achievement.

The selection and/or construction of evaluation instruments, with one exception, is left to individual projects and their evaluators; however, each project is required, whenever feasible, to rely on instruments with proven reliability and validity. (See Appendix J for some suggested instruments for evaluation and research.) Projects are required to assess the teaching skills for participating teachers as a part of their evaluation plan. All projects are required to use the Reformed Teaching Observation Protocol (RTOP) as the observation instrument to provide a standardized means for examining classroom instruction in mathematics. A two-day RTOP training will be provided in August 2011 at the University of Arkansas. Project instructors and mentors who are responsible for classroom visits must participate in the training.

The following items must be addressed in the evaluation and accountability plan.

- Describe how the evaluation plan will measure gains in teachers' content knowledge so that all students will receive rigorous and challenging instruction in mathematics.
- Describe how the evaluation plan will measure improvement in student achievement in mathematics. Student data must be linked to the teachers participating in the program and to teachers used in comparison groups.
- Other information that the applicant believes is important to demonstrate the effectiveness of the program

The project's evaluator is responsible for providing both formative and summative evaluation reports to be included in the Annual Performance Report for the Mathematics and Science Partnership that is submitted annually to the United States Department of Education. In addition the project's evaluator will be expected to provide the MSP State Evaluation team with data upon request to be used as a part of Arkansas' research regarding the results of the MSP projects. In order to comply with federal program requirements, each partnership must collect student achievement data that are associated with the participating teachers. Prior to submitting a proposal, project directors should ensure that participating districts will allow evaluators to collect and analyze achievement data at the student level.

Preference will be given to projects utilizing experimental designs with randomization or quasi-experimental designs with matched comparison groups. Randomization or matching may occur at different levels depending on the project's scope and goals.

## **Reporting Requirements**

**Each eligible partnership receiving a grant must report to:**

### **1. The Arkansas Department of Education**

All partnerships are required to report biannually to activities described in the evaluation plan and annual targets described in the accountability plan. Biannual reports must include fiscal reports outlining expenditures. Further information regarding reporting requirements will be communicated to the Project Directors.

Project directors shall complete annually a two-page brief describing the project on a template that will be provided.

Project directors shall compile a professional development packet or portfolio annually. The professional development packet will include all participant materials (e.g. handouts, activities, and references), instructor notes, curriculum development, and any other components that would enable replication of all professional development sessions. All curriculum developed during the professional development shall be included in the packet. Materials may be provided to the ADE on CD/DVD. This requirement should be included as part of the partnership agreement between the LEA and IHE faculty.

Statewide dissemination of project progress and results is required. Partnerships should present findings and submit articles to state conferences and publications such as the Arkansas Curriculum Conference, the Arkansas T<sup>3</sup> Conference, and mathematics state and/or national journals. Evidence should be included in biannual reports and the required course portfolio.

## **2. The U.S. Department of Education**

All partnerships are required to complete the online Annual Performance Report (APR) providing project information and reporting the partnership's progress in meeting the objectives described in the evaluation and accountability plan. The online reporting form is found at <http://apr.ed-msp.net/users/login>. The APR is due to be submitted to State two weeks after the ending date for the grant period.

### **Monitoring**

The Arkansas Department of Education Title IIB Math Science Partnership Program Manager or designee will monitor all projects on an annual basis to ensure compliance with all requirements. Project directors must submit a list of all scheduled professional development events to the MSP Program Manager so that site visits may be scheduled.

### **Scoring Process and Criteria**

Proposals will be reviewed by ADE staff for completeness and compliance with the requirements set forth in Title IIB to determine applicant eligibility. Any questions about significant omissions will be referred to the proposing organization. If, in the judgment of the ADE, a proposal is late, incomplete, or an applicant cannot establish eligibility, the proposal will be omitted from the competition. Applicants submitting proposals withdrawn due to incompleteness or ineligibility will be notified.

Expert reviewers will score eligible applications. Review will be based on specific criteria listed in this RFP and scored using the scoring rubric provided in the Appendix. Announcement of grant application awards will be made on or around July 1, 2011.

The ADE may require revision of grant proposals and budget prior to approval, award, or release of funds. Decisions of the Arkansas Department of Education will be final.

**Arkansas Mathematics and Science Partnership Program  
ESEA Title IIB, MSP  
Competitive RFP 2011**

**Application Requirements**

The following information details the required components of an application, in the order they must be submitted. Narrative sections, excluding Appendices, must be typed, double-spaced and type no smaller than Arial 12 point font is required. Margins must be one inch on side, top, and bottom. Charts, tables, and graphs may be single spaced with type no smaller than Arial 12 point. Any support charts, tables or graphs should be referenced in the Narrative and placed in the Appendix. The application, not including the Appendix, must not exceed 20 pages. The application must be submitted in Word format.

**Application Sections**

A. Required Documentation (Applications will be scored ONLY if they contain these documents.)

- Cover page
- List of partners
- Signed Statement of Assurances from each partner
- Statement of Commitment – Data Providers
- Documentation showing that equitable participation in grant activities was offered to private schools in the area served by the partner school districts.
- Evidence that the partnership meets the eligibility requirements
- Vitae of key personnel.
- Abstract.

B. Partnership Narrative (65% of score)

The partnership narrative must include the following sections.

1. Needs Assessment (10% of score)
2. Research Base (10% of score)
3. Plan of Work (15% of score)
4. Alignment with Arkansas CCSS Requirements (20% of score)
5. Management Capabilities and Sustainability (10% of score)

C. Evaluation Plan (20% of score)

Each partnership must have an evaluation plan that describes how they will evaluate the success of their project. Specifically, applicants must explain how they will determine whether project activities have improved the academic achievement of students in mathematics and the content knowledge of teachers.

In addition, mentoring and following-up classroom visits by project instructors and other project staff should indicate how the project impacts classroom practice. All classroom visits must utilize the Reformed Teaching Observation Protocol (RTOP) observation instrument to provide a standardized means for examining and reporting on classroom practice. A two-day statewide training for RTOP will be provided to grant recipients in August, 2011.

- ✓ Partnerships must describe clear objectives. (10% of score)  
Specify how teacher content knowledge, students' achievement, teaching practice, and related outcomes will be measured and the degree of improvement expected on each outcome.
- ✓ Partnerships must propose an evaluation design. (10% of score)  
Provide rigorous evidence that project activities result in higher student achievement, increased teacher content knowledge, effective classroom teaching practices, and improvement on related partnership outcomes.

Preference is given to projects that employ experimental design with random assignment in their proposal. If random assignment is not feasible, the project may employ a quasi-experimental design with carefully matched comparison conditions. For experimental design, depending on the partners and the scope of the project, random assignment may occur at the level of teachers, schools, or districts participating in the project. In a quasi-experimental design, teachers, schools or districts that are participating in the project would be matched with comparable teachers, schools, or districts that are not participating in the project. Student and teacher outcome data and other relevant indicators of project success must be collected before, during, and after participation in the project.

Partnerships are strongly encouraged to engage the services of an evaluator with experience conducting random assignment or quasi-experimental design to educational settings. The evaluator should be involved in the design of the partnership to ensure that the evaluation can be conducted effectively.

#### D. Budget and Budget Narrative

The proposal should include a Budget Form for year 1 (Appendix H) along with a budget narrative. The budget narrative should describe how the amounts shown on the budget page were determined. The budget narrative may be single spaced. Both the budget and the narrative should be clearly tied to the plan of work and evaluation plan. The following considerations should be included in planning the budget:

- ✓ Provisions to fund the outside evaluator and key project staff to participate in at least one state technical assistance meeting and one out-of-state regional MSP meeting;
- ✓ Tuition or stipends (but not both) for teacher participants;
- ✓ An IHE fiscal agent may request indirect costs for recovery of no more than eight percent (8%) of a modified total direct cost base. A modified total direct cost is defined as total direct costs less stipends, tuition and related fees.
- ✓ An LEA fiscal agent may request indirect costs for recovery of no more than the Arkansas Department of Education's negotiated restricted cost rate for 2009-2010. Rates are available for districts and education cooperatives in a Commissioner's Memo from the ADE Finance Department around June 1, 2011.
- ✓ Matching funds are encouraged and should be described in the proposal's narrative.

## **Application Submission**

***An envelope containing the original and two copies of the completed grant application must arrive at the Arkansas Department of Education by 4:00 p.m. on June 20, 2011.***

**Faxed applications will not be accepted.**

**Address your application packets to:**

**Judy Trowell  
Arkansas Department of Education, 401B  
Four Capitol Mall  
Little Rock, Arkansas 72201-1019**

Contact Judy Trowell  
Email: [judy.trowell@arkansas.gov](mailto:judy.trowell@arkansas.gov)  
Phone: 501-682-4228 or 501-682-7998

# **MSP Grant Application Appendices**

## Definitions

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

**A. High-Need:** The term “high-need” means a school, district, or regionally-based consortium of small rural schools:

i. that has 25% or more of the students on free or reduced lunch

**-and**

ii. has one or more schools designated as a school in improvement as determined by student performance on the Arkansas Augmented Benchmark Exam

Additionally, a school or district with high-need may also document a low percentage of mathematics teachers teaching in the academic subjects or grade levels that the teachers were trained to teach or that have a high percentage of teachers with emergency, provisional, or temporary certification or licensing.

**B. Highly Qualified Teacher:** The term “highly qualified teacher” means the teacher has not had certification or licensure requirements waived on an emergency, temporary, or provisional basis. The teacher has obtained full state certification and endorsements in science or mathematics, or passed the state teacher licensing examinations and holds a license to teach in Arkansas.

**C. High Quality Professional Development:** The term “professional development” means instructional activities that:

i. Are based on scientifically-based research and align with the **Arkansas mathematics and/or science Common Core State Standards**, and enable teachers to prepare students to meet the **Arkansas Diploma requirements**, teach students at different developmental levels, and/or effectively teach students with various demographic backgrounds;

ii. Improve and increase teachers’ knowledge of the academic subjects they teach;

iii. Enable teachers who fall under the designation of not highly qualified to become highly qualified; and

iv. 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.

**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:

i. 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;

ii. 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;

iii. 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;

iv. 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

v. Can be submitted to a peer-reviewed journal or gain approval from a panel of independent experts through a comparably rigorous, objective, and scientific review.

**E. Summer Institute:** The term “summer institute” means an institute, conducted during the summer, that:

i. Is conducted for a period of not less than 2 weeks;

ii. Includes, as a component, a program that provides direct interaction between teachers and current or retired disciplinary Arts and Sciences faculty; and

iii. 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.

*The professional development may include a summer training or seminar that is fewer than 10 days. However, the overall design should include more days during the school year so that the overall training is equal to or exceeds the time specifically defined for “summer institute” and clearly meets the requirements of long-term, sustained professional development.*

**Arkansas Department of Education  
Mathematics and Science Partnership Program  
COVER PAGE**

<b>Arkansas Department of Education Mathematics and Science Partnership Program COVER PAGE</b>					
<b>Applying Institution</b>					
<b>Address</b>					
<b>City</b>		<b>State:</b>	Arkansas	<b>Zip Code</b>	
<b>MSP Contact Person</b>					
<b>Title</b>		<b>Phone #</b>			
<b>Address</b>					
<b>City</b>		<b>State</b>	Arkansas	<b>Zip Code</b>	
<b>FAX</b>		<b>E-mail</b>			
<b>Title- Proposed Project</b>					
<b>Estimated # Participants</b>				<b>Content Focus</b>	
<b>Grade Level(s)</b>		<b>Graduate Credit Hours (if any)</b>			
<b>Requested MSP Funds \$ (Yr. 1)</b>				<b>MSP Cost per Participant</b>	
<b>Name and Address of Applying Institution's Financial Officer:</b>					
<b>List all partner organizations (Mark high-need schools or districts with *.)</b>					
<p><b>Statement of Assurances:</b> <i>The authorized official of the applying institution or organization certifies that:</i></p> <ul style="list-style-type: none"> <li>▪ Title II, Part B funds will be used to supplement and not supplant funds from non-federal sources.</li> <li>▪ Upon request, the ADE will be provided access to records and other sources of information that may be necessary to determine compliance with appropriate federal and state laws and regulations.</li> <li>▪ Education activities funded by the project will be conducted 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) Improving America's Schools Act of 1994.</li> <li>▪ The development of programming will take into account the need for greater access to and participation in the targeted disciplines by students from historically underrepresented and underserved groups.</li> <li>▪ Timely and meaningful consultation with appropriate private school officials during the design and development of the programs has occurred and that continued consultation throughout the implementation of this program will occur;</li> <li>▪ All program and evaluation reports will be submitted, in accordance with stated guidelines required by the United States Department of Education and the Arkansas Department of Education.</li> <li>▪ All records of the program will be retained for five years and access to those records will be available for the purposes of review and audit.</li> <li>▪ Funding and other requirements are contingent upon the Arkansas Department of Education receiving funding from the U.S. Department of Education and are subject to change as federal requirements change.</li> </ul>					
<b>Certification:</b> <i>I hereby certify that to the best of my knowledge, the information in this application is correct, that the filing of this application is duly authorized by the governing body of this organization or institution, and that the applicant will comply with the assurances listed above.</i>					
<b>Printed or Typed Name of Authorized Official Grants Officer or Superintendent of Applying Institution</b>					
<b>Title of Authorized Official</b>					
<b>Signature: Authorized Official</b>			<b>Date</b>		

## Mathematics and Science Partnership List of Partners

	<b>Name</b> Please print.	<b>Title</b> Please print.	<b>Organization</b> Please print.	<b>Role/Responsibilities</b> Please print.
1.				
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13.				
14.				
15.				
16.				

# Arkansas Department of Education Mathematics and Science Partnership Program

## Statement of Assurances for Partnership Members

<b>Project Name:</b>							
<b>Applying District, Co-op or IHE:</b>							
<b>Partner Organization:</b>							
<b>Contact Name:</b>							
<b>Mailing Address:</b>							
<b>City:</b>				<b>State: Arkansas</b>		<b>Zip:</b>	
<b>Phone:</b>				<b>FAX:</b>		<b>Email:</b>	
<p><b>Statement of Assurances:</b> <i>The authorized official of the Local Education Agency (LEA) or the Institution of Higher Education (IHE) partnering in this grant proposal agrees to work collaboratively with the applying institution to assure that:</i></p> <ul style="list-style-type: none"> <li>▪ <i>Title II, Part B funds will be used to supplement and not supplant funds from non-federal sources.</i></li> <li>▪ <i>Upon request, the ADE will be provided access to records and other sources of information that may be necessary to determine compliance with appropriate federal and state laws and regulations.</i></li> <li>▪ <i>Education activities funded by the project will be conducted 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) Improving America's Schools Act of 1994.</i></li> <li>▪ <i>The development of programming will take into account the need for greater access to and participation in the targeted disciplines by students from historically underrepresented and underserved groups.</i></li> <li>▪ <i>Timely and meaningful consultation with appropriate private school officials during the design and development of the programs has occurred and that continued consultation throughout the implementation of this program will occur;</i></li> <li>▪ <i>All requested data/information related to grant activities will be provided in a timely manner;</i></li> <li>▪ <i>All program and evaluation reports will be submitted, in accordance with stated guidelines required by the United States Department of Education and the Arkansas Department of Education.</i></li> <li>▪ <i>All records of the program will be retained for five years and access to those records will be available for the purposes of review and audit.</i></li> </ul>							
<p><i>I hereby certify that to the best of my knowledge, the information in this application is correct, that the filing of this application is duly authorized by the governing body of this organization or institution, and that the partnering agency will comply with the assurances listed above.</i></p>							
<p><i>Please explain the role of this partner in the proposed MSP project, contribution that this partner will make, and assurance that the proposed activities are integral to the partner's educational plan. Use reverse side if needed.</i></p>							
<b>Printed or Typed Name of Authorized Official in the Partnering LEA or IHE</b>							
<b>Signature: Representative</b>						<b>Date</b>	

**Arkansas Department of Education  
Mathematics and Science Partnership Program  
Needs Assessment Form for High Needs LEA Partner(s)**

<b>LEA (District)</b>			
<b>POVERTY STATUS OF LEA. Complete the information below.</b>			
<b>Total # of LEA K-12 students</b>		<b>Total Number of Low Income LEA Students, K-12. Use free and reduced lunch data.</b>	<b>Percentage of LEA students classified as Low Income.</b>
<b>NCLB AYP STATUS for Partnering LEA: Provide Information below.</b>			
<b>Number of District Schools:</b>		<b>Number of District Schools In School Improvement</b>	
<b>Attach page 1 of the NCLB Adequate Yearly Improvement (AYP) Report for each school that includes one or more of the grade levels targeted by the proposal.</b>			
<b>TEACHER PREPARATION AND BACKGROUND. Include all teachers in grade level(s) targeted by the proposal.</b>			
	<b>Mathematics</b>		
<b>Total Number</b>			
<b>New to School in last 2 years</b>			
<b>New to Teaching (3 years or less)</b>			
<b>Meet HQT Status</b>			
<b>Bachelor's Degree</b>			
<b>Master's Degree or Higher</b>			
<b>Provide a summary of additional data to support the identified needs(s) of the proposed project.</b>			
<i>(One additional page, if needed, may be attached to this document.)</i>			
<b>Printed or Typed Name of Authorized LEA Official</b>			
<b>Title of Authorized Official</b>			
<b>Signature - Authorized Official</b>		<b>Date</b>	

Arkansas Mathematics and Science Partnerships Program  
Title IIB MSP Competitive RFP 2011  
**STATEMENT OF COMMITMENT**  
**School District Student Assessment Data Provider**

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Contact Name (Please print):

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School District:

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Mailing Address:

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City:

State: Arkansas

Zip:

---

Phone:

FAX:

Email:

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**Statement of Assurances**

- **The district agrees to provide student assessment data as required by the project accountability and evaluation plan detailed in this application.**
- The district assures and certifies compliance with the regulations, policies and requirements as they relate to the acceptance and use of federal funds for programs included in this application.
- The district assures that timely and meaningful consultation with appropriate private school officials during the design and development of programs has occurred and that continued consultation throughout the implementation of these programs will occur.
- The district agrees to carry out the project as proposed in the application.
- None of the monies received through Mathematics and Science Partnerships Program (Arkansas Title IIB MSP) Grants shall be used to replace funds for existing programs that are a responsibility of the school district. Arkansas Title IIB MSP Funds may be used to **supplement not supplant** regular education programs.
- The applicant certifies that to the best of his/her knowledge the information in this application is correct; that the filing of this application is duly authorized by the governing body of this organization, or institution, and that the applicant will comply with the general statement of assurances.
- The applicant certifies to the best of his/her knowledge the guidelines for Family Educational Rights and Privacy Act (FERPA) (20 U.S.C. § 1232g; 34 CFR Part 99) are being followed. It is a Federal law that protects the privacy of student education records. The law applies to all schools/districts that receive funds under an applicable program of the U.S. Department of Education.

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**Print Name of Authorized Official:**

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**Title:**

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**Signature of Authorized Official**

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**Date:**

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**Arkansas Department of Education  
 Mathematics and Science Partnership Program  
 EXTERNAL EVALUATOR INFORMATION FORM**

<i>Name of Evaluator</i>					
<i>Title/Organization</i>					
<i>Address</i>					
<i>City</i>		<i>State</i>	Arkansas	<i>Zip</i>	
<i>E-mail</i>					
<p><i>Briefly list credentials and experience relevant to evaluating a project of this nature. Please include any responsibilities you have had or currently have with other MSP grant projects.</i></p>					
<i>Signature of Evaluator</i>				<i>Date</i>	

Arkansas Department of Education  
 Little Rock, Arkansas 72201-1019  
**PROPOSED BUDGET – YEAR 1**

**Budget for 2011-2012  
 MSP Partnership Funding Request**

**Program Title:** \_\_\_\_\_

**Institution:** \_\_\_\_\_

Funding Requested for Project	YR 1 (2011-2012)
1. Salaries & Wages (Professional and Clerical)	
2. Employee Benefits	
3. Travel in State	
4. Travel Out of State (attach justification)	
5. Participant Costs (Materials, Books, etc.)	
Tuition _____	
Books _____	
Materials _____	
Participant Travel _____	
Stipends _____	
Other _____	
TOTAL = _____	
6. Consultants (training)	
7. Contracts (evaluation)	
8. Training Materials and Supplies	
9. Equipment (Purchase)	
10. Other (Equipment Rental, Printing, Etc.)	
<b>B. Indirect Costs* (if appropriate)</b>	
<b>Total</b>	
<b>Cost per participant</b>	

EDGAR 75.563 stipulates that LEA grantees must not exceed the restricted indirect cost rate negotiated by the state agency (Commissioner's Memo FIN-released in late May 2011), up to a maximum of 8%. The indirect cost rate for IHE partners shall not exceed eight percent (8%) of the total modified direct costs. A modified total direct cost is defined as total direct costs less stipends, tuition and related fees. This form is a required element of the grant application. Justification for the amounts shown for each of the categories shall be included in the budget description/narrative portion of the application.

## Arkansas MSP Competitive Application Scoring Rubric

REQUIRED DOCUMENTATION	YES	NO
Cover page (including assurances) is complete and signed by the district Superintendent or IHE official		
List of partners and their role		
Signed statement of assurances from each partner		
Documentation showing that equitable participation was offered to private schools in the partnership area		
Evidence that the partnership meets the eligibility requirements that include: <ul style="list-style-type: none"> <li>• One or more eligible high-need school or district must be a partner</li> <li>• One or more higher education institution with engaged mathematics and/or engineering faculty must be a partner</li> </ul>		
Needs assessment for each partner district is completed and signed		
Evidence showing key personnel are qualified to lead the project is included: <ul style="list-style-type: none"> <li>• Evaluator form is completed and signed;</li> <li>• Vitas (max of 2 pages each) are included for other key personnel – project director, instructors, etc.</li> </ul>		

SCORING SCALE	
0	NONE of the criteria addressed
1	SOME of the criteria are met but there are many areas that are incomplete or underdeveloped
2	MOST of the criteria are met but there are some areas that are incomplete or underdeveloped
3	MEETS criteria
4	EXCEEDS criteria

PARTNERSHIP NARRATIVE (65% of Score)	
Provide explanations that are clear, concise, and thorough. 15 page maximum, double-spaced; no smaller than 12-pt Arial font; one-inch margins.	
A.	Needs Assessment Criteria (summary) (10%) <ul style="list-style-type: none"> <li>• Provides evidence of the alignment of the projects goals and objectives with the results of the needs assessment.</li> </ul>
B.	Research-based criteria (10%) <ul style="list-style-type: none"> <li>• Cites and discusses current state of knowledge relevant to the partnership program.</li> <li>• Literature review clearly indicates how the proposed work was selected or designed.</li> <li>• The narrative indicates what has been learned from previous work and how the lessons learned are incorporated.</li> </ul>
C.	Plan of Work Criteria (15%) <ul style="list-style-type: none"> <li>• Clearly describes the goals and objectives for the program that are based on the needs assessment and the responsibility of each of the partners.</li> <li>• A timeline showing the work of the partners leading up to the grant activities, including acquiring necessary resources for state and nation reporting requirements.</li> <li>• A summary of the proposed activities that are detailed in the syllabus in the</li> </ul>

proposal's appendices.

- The plan for reporting the data and the degree to which the plan uses data for improvement of the project over time.
- Describes the duration, type, and intensity of the professional development opportunities, including the number of teachers engaged and students served.

**D. Management Capabilities and Sustainability (10%)**

- Provides evidence of capability to manage the project and organize the work by describing past grant management experience, or similar experience.
- Provides evidence that the partnership is willing to manage the project for at least three years should funds become available.
- Describes the activities that will provide evidence of sustainability over time.
- Describes how the partners will modify project goals in response to changes in measurable data.

**E. Alignment with Arkansas Common Core State Standards (20%)**

- Clearly describes the connection between the academic content selected for the professional development activities and alignment to preparing students to meet the Common Core State Standards.

**EVALUATION PLAN (20% of Score)**

Provide explanations that are clear, concise, and thorough. (5 page maximum; double-spaced; no smaller than Arial 12-pt font; one-inch margins. Single spaced tables allowed where indicated by an (\*).)

**Evaluation Plan Criteria:**

Each partnership's plan must describe how they will evaluate the success of their project. Specifically, applicants must explain how they will determine whether project activities have improved the academic achievement of students in mathematics and the content knowledge of the teachers. In addition, partnerships should explain what additional related outcomes are expected and how they will be measured. Those additional outcomes may include numbers of teachers who attain high-quality teacher status; increased capability of teachers to teach advanced concepts to underrepresented groups; increased participation by a diverse student population in advanced courses in mathematics. A biannual report on progress related to these outcomes will be reviewed by the project evaluator and provided to the Arkansas Department of Education. Annual reports will be provided to the U.S. Department of Education

- Partnerships must describe clear objectives that specify how students' achievement, teacher content knowledge, and related partnership outcomes will be measured and the degree of improvement they expect on each outcome. Arkansas augmented Benchmark data is a required source for measuring student outcomes. The Reformed Teaching Observation Protocol (RTOP) is a required instrument for observing teachers in a classroom setting. (10%)
- Partnerships must propose an evaluation design (\*) that will provide rigorous evidence whether project activities result in gains in student achievement, teacher content knowledge, and classroom practice. (10%)

Preference is given to projects that employ experimental design with random assignment or a quasi-experimental design with carefully matched comparison condition in their proposal.

## Arkansas Department of Education: Resources and References

The resources and references provided in this document are intended to assist partnerships in finding information needed to plan and develop an MSP proposal. This list is intended to provide samples, not to be exhaustive.

### **Websites**

Arkansas Department of Education with links to Mathematics and Science Frameworks, Common Core Standards and to Student Achievement information: <http://ArkansasEd.org>

The National Center for Improvement of Educational Assessment: <http://www.nciea.org>

Common Core State Standards: <http://ccssarkansas.pbworks.com>

The National Staff Development Council's Standards for Teacher Professional Development: <http://www.nsd.org/standards/about/index.cfm>

*8 Smooth Steps* (NSDC article) <http://www.nsd.org/library/publications/jsd/JKillion244.pdf>  
NATIONAL STAFF DEVELOPMENT COUNCIL (800) 727-7288 VOL. 24, NO. 4 FALL 2003

United States Department of Education: <http://www.ed.gov/programs/mathsci/index.html>  
Use the search engine to find scientifically based research on effective teaching and learning strategies.

Teacher Education Materials Project (TE-MAT): A database for K-12 mathematics and science professional development providers. <http://www.te-mat.org>

National Science Resource Center: <http://www.nsrconline.org/>

National Council of Teachers of Mathematics: <http://www.nctm.org>

### **Instruments for measuring teacher content knowledge**

Learning Mathematics for Teaching (LMT)

Number and Operations; Patterns, Functions and Algebra; Geometry  
University of Michigan: <http://sitemaker.umich.edu/lmt/home>

Diagnostic Mathematics Assessments for Elementary Teachers and for Middle School Teachers  
Elementary: Whole Number/Computation; Rational Number/Computation; Geometry/Meaning; Probability/Statistics;  
Middle Level: Number/Numeration; Geometry/Meaning; Probability/Statistics; Algebraic Ideas  
University of Louisville University of Louisville: <http://louisville.edu/edu/crmstd/>

Knowledge of Algebra for Teaching (KAT)

Expressions, Equations, and Inequalities; Functions and Their Properties  
Michigan State University: <http://www.msu.edu/~kat/index.htm>

# PROPOSAL CHECKLIST

## Arkansas Department of Education Grant Competition No Child Left Behind Act – Title II, Part B

Do not send this page with your proposal.

Use this form as a checklist to be certain that you have completed proposal requirements!

### PROPOSAL

1. Cover Page - See Appendix B of the RFP
  - All blocks completed.
  - Designated signature completed
2. Table of Contents
  - List sections of proposals with page numbers
3. Project Abstract
  - May not exceed one (1) page
  - Concisely describe goals and program activities
  - Summarize intended results of the program and evaluation measures
4. Project Narrative and Evaluation Plan
  - Arial, 12-point font, double-spaced, one-inch margins, and does not exceed a total of 15 pages. Include Budget Page and description/narrative in the Appendices. Maximum page numbers for each section of the narrative are listed below.
  - The narrative should identify partners and describe targeted teacher needs that are identified in the Needs Assessment data. (1 partner form for each partner should be included in the Appendices along with the needs assessment form for each high-needs partner.)
  - List specific project goals and objectives, and describe the project activities and follow-up activities for achieving them. (4 pages maximum in the narrative.)
  - Describe the qualifications and role(s) of each partner in planning, delivery and management of the project. (2 pages maximum) Note: Vitae – maximum of two pages each - of key personnel must be included in the proposal's appendices.
  - Describe the evaluation plan. Include the measurable objectives and annual targets that respond to the Needs Assessment. Designate instrument(s) to measure improvement/change in teachers' content knowledge. Identify measurable objectives for improved student academic achievement. (3 pages maximum)
  - Provide a project timeline. (2 pages maximum)
  - The complete Budget Form and budget description for the proposed Year 1 budget should be included in the Appendices. (Budget Form plus 2 pages maximum for budget description – in the Appendices.
  - Evaluation Plan (5 pages maximum)
5. Appendices
  - Partnership Form for each LEA and/or IHE partner.
  - Needs Assessment Form for each participating high needs LEA district.
  - Evaluator Information Form
  - Vitae of key personnel (Maximum of 2 pages each)
  - Course Syllabus (Maximum of 3 pages)
  - Bibliography documenting research supporting the proposal (2 pages maximum)
  - Other related documentation that directly supports the proposal.
  - Budget and budget narrative.