

# MATHEMATICS AND SCIENCE PARTNERSHIP GRANT APPLICATION

# APPLICATION INSTRUCTIONS AND

**INFORMATION ON SCORING** 

9/25/12 THROUGH 12/30/14 COMPETITIVE SUBGRANT AWARDS TO ELIGIBLE LOCAL EDUCATIONAL AGENCIES APPLYING FOR FUNDS UNDER ARIZONA'S MATHEMATICS AND SCIENCE PARTNERSHIP PROGRAM

> In Accordance with Title II, Part B of No Child Left Behind Act of 2001

- DEADLINE -Submission of Applications August 20, 2012

MATHEMATICS AND SCIENCE PARTNERSHIP GRANT APPLICATION

## COMPLIANCE CHECK LIST

**Directions:** An Applicant local educational agency (LEA) that is submitting a Mathematics and Science Partnership (MSP) Application should <u>not</u> submit this check list. The Compliance Check List is included in your Packet so that LEA personnel are informed of actions they are required to take *prior* to having an Application reviewed and scored by Technical Reviewers who represent the Arizona Department of Education (ADE).

Members of an LEA Leadership Team preparing a MSP Application should use the Compliance Check List as a tool to assist in analyzing the quality of the Application being submitted to the ADE.

#### Applicant LEA Name:

All statements (except the last one which applies solely to members of a Consortium) must be verified by ADE staff, where a check mark ( $\checkmark$ ) indicates a "Yes" for each compliance issue.

- LEA Letter of Intent, due on *August 1, 2012*, was submitted to the ADE.
- The Applicant LEA has sent at least one representative to the MSP Grant Application Workshop on *June 25, 2012 (Webinar 10 am-12 pm; workshop in Phoenix 1:30 pm-3:30 pm).* 
  - The Applicant LEA has submitted its Subgrant Application by the deadline of 5:00 p.m. on Monday, August 20, 2012. The Application was submitted in electronic form to <u>suzi.mast@azed.gov</u> and as one (1) Original <u>and</u> three (3) copies that will be made available to ADE Technical Reviewers. Failure to submit the Application electronically and ensure arrival at the ADE of an Original and 3 copies of your Application by the deadline constitutes non compliance and your Application will be excluded from the Technical Review process. (Please review mailing and hand-delivery options provided on the last page of this Application Packet).
  - The Applicant LEA has responded to **all** of the Subgrant Application requirements and/or questions, in their many parts (including Appendix items). (The ADE reserves the right to exclude from Technical Review any Application that fails to address all the requirements/questions).
    - \_\_\_\_\_ The Applicant LEA has satisfied any and all apparent violations of ADE procedures regarding required progress or completion reports or other requisite reporting, such as its submission of the Curricular & Instructional Alignment Declaration, in keeping with its responsibilities for receipt of federal and state funding. *NOTE:* LEAs that are <u>unable</u> to resolve their having been placed on programmatic "hold" and/or having been found to be currently ineligible to receive state or federal funding are <u>not</u> eligible to compete for a Subgrant Award under the MATHEMATICS AND SCIENCE PARTNERSHIP Program.
- The applicant LEA is eligible for funds at this time and has selected schools that meet the criteria of "high need" and has engaged in a viable partnership with the Mathematics, Science, or Engineering Department of an IHE.

#### **CONSORTIUM MEMBERS:**

\_ The fiscal agent designated by LEAs that have chosen to collaborate as members of a single consortium shall assume the role of the Applicant LEA for purposes of submitting the Subgrant Application.

#### APPLICATION INSTRUCTIONS FOR INSTITUTIONS OF HIGHER EDUCATION, HIGH-NEED LOCAL EDUCATIONAL AGENCIES, AND ORGANIZATIONS SEEKING A MATHEMATICS AND SCIENCE PARTNERSHIP GRANT

Arizona Department of Education

#### 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. NCLB programs encourage scientifically-based professional development as a means for improving student academic performance.

Title II, Part B of NCLB authorizes a Mathematics and Science Partnership (MSP) competitive grant program. The intent of this program is to increase academic achievement of students in mathematics and science by enhancing the content knowledge and teaching skills of classroom teachers. Core partners in these grants must include mathematics, science, and/or engineering departments/faculty from institutions of higher education (IHE), including community colleges. Partnerships of higher education, high-need LEAs, and other stakeholders will draw upon the strong disciplinary expertise of the mathematicians, scientists, and engineering faculty from higher education institutions to develop professional development activities that will increase student achievement by providing teachers with strong mathematics and/or science content knowledge.

The Arizona Department of Education (ADE) is responsible for the administration of the MSP Program. Available funds will be awarded by the ADE to support successful proposals submitted by eligible partnerships comprised of departments/faculty of mathematics, science, or engineering at Arizona institutions of higher education and high-need LEAs.

#### **II. Program Description/Key Features**

- A. Purpose: *The Mathematics and Science Partnership Program* supports improved academic achievement of students in the areas of mathematics and science by encouraging state educational agencies, institutions of higher education, local educational agencies, elementary schools, and secondary schools to partner in high-quality professional development programs, including programs that:
  - Improve and upgrade the status and stature of mathematics and science teaching by encouraging institutions of higher education to assume greater responsibility for improving mathematics and science teacher education through the establishment of a comprehensive, integrated system of professional development that continuously stimulates teachers' intellectual growth and upgrades teachers' knowledge and skills;
  - Focus on ways to deepen teachers' content knowledge, increase teachers' knowledge of how students learn particular content, provide opportunities for engaging learning, and establish coherence in teachers' professional development experiences.

#### **B.** Arizona's Priority

After careful review of the emphasis on literacy in the content areas as found in the 2010 ELA Standards, and STEM integration as found in the RTTT3 application, the ADE has targeted 1) science content with literacy emphasis (See the Definitions Section for clarification on literacy in the context of science) or 2) science content with emphasis on the Scientific and Engineering Practices (See Definitions Section for clarification on the the 8 practices identified in A Framework for K-12 Science Education). Grants should target teachers of students in the K-6 grade band or the 6-12 grade band. Arizona will focus on science teacher development due to the implementation of the articulated Arizona Science Standard, as well as the ongoing development of state assessments for science. Each project will be required to implement a model of professional development which includes a minimum of 104 contact hours. The professional development may be designed with sessions occurring both during the academic year and summer, or another comparable structure. The selected structure must dedicate significant time and intensity to deepening teacher content knowledge. Projects may wish to consult the certification requirements for "Appropriately Certified" in the content area of science in Middle School and High School (See Definitions Section for more information).

#### C. Eligible Schools

To be eligible for a MSP Grant, an applicant LEA must demonstrate a need for improvement in student science performance for which each selected school meets one of the enumerated requirements listed below. The demonstration of need must use recent data on student academic achievement and teacher qualifications related to science and literacy in the science classroom. Science assessment data must be used if available. Further, the proposal must demonstrate that participating teachers serve a sufficient number of students exhibiting this need. Eligible grantees are limited to two MSP grant awards, one in mathematics and one in science.

#### LEAs making proposals on behalf of selected schools:

In order for LEAs to be eligible, the following must be shown:

- (schools must meet the criteria listed in i **OR** ii)
  - i. Evidence of teachers with limited science content knowledge or who are not "appropriately certified" in science and schools have not achieved AYP school wide **OR**
  - Evidence of teachers with limited science content knowledge or who are not "appropriately certified" in science and schools and have a history of low test scores in science (district assessments or NRTs, if available) with 25% or more of students identified in the proposal scoring below state targets (meeting the standard) on assessments of student achievement in science (AIMS scores)

Each proposal must provide adequate data summaries and analyses which clearly and thoroughly substantiate the need within the project setting.

#### **D.** Partnership Eligibility

Partnerships must include an Arizona high-need LEA as defined above and a science or engineering department/faculty of an IHE. The partnership must focus on either elementary teachers (grades K-6) or secondary teachers (grades 6-Other partners may include businesses, colleges of teacher education, 12). additional local educational agencies, public charter schools, public or private elementary or middle schools, a consortium of such schools, local parent organizations, and nonprofit or for-profit organizations with demonstrated effectiveness in improving the quality of science teachers. All partners' contributions must be aligned to the goals, objectives, and targeted content of the project. All parties involved share responsibility, goals, and accountability for project implementation and outcomes. It is acceptable that a representative of the IHE is a project director, but he/she cannot be the sole project director. A representative from the LEA must be designated as a co-director. Grantees need to 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 NCLB. These regulations state that meaningful consultation must occur between the LEA and any private schools within that 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 or private) are able to benefit from the provision of federal funding.

#### **E. Project Requirements**

Projects must also meet the following requirements:

- Projects must focus on science (K-6 or 6-12) with an emphasis on 1) literacy or 2) scientific and engineering practices.
- Projects must address the results of a recent comprehensive assessment of the teacher quality and professional development needs and student needs of selected schools that comprise the eligible partnership with respect to the teaching and learning of science.
- Participating schools must not be involved in a science school reform initiative; or the proposal must clearly articulate how this program will integrate with ongoing reform efforts.
- The six components of scientifically-based research must be employed (See Definitions Section for clarification).
- Alignment to the Arizona Science Standard, (the 2010 English Language Arts Standards for grants with literacy focus), Arizona Professional Teaching Standards (InTASC Teaching Standards), and the Standards for Professional Learning must be well defined. For grades 6-12, alignment to the 2010 ELA standards, must include alignment to standards in the RST and WHST strands.
- Projects must provide opportunities for enhanced and ongoing professional development to improve science and literacy subject matter knowledge including pedagogical content knowledge, for a minimum of 104 contact hours during the project.

- The professional development design must incorporate the following four elements: Learn the Content, Reinforce the Content Learning, Consolidate the Content, and Implement the Content (See Definitions Section for clarification). All offerings (summer and academic year) must contain Learn the Content and Reinforce the Content Learning.
- 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 the professional development. The partnership must create a logic model or theory of action that is linked to the goals and objectives of their project.
- Each project must hire an external evaluator who should be an active partner from the planning stages through completion of the 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 he/she must not be working in the same department as the participating IHE faculty nor take an active role in the program delivery.
- The external evaluator collaborates closely with program staff to collect and analyze data, and to provide feedback to project stakeholders, including the partnership participants, schools, districts, ADE, state evaluators, and the Federal government in the form of a formal evaluation report. Additional responsibilities include implementing state-wide project assessments and ensuring the local evaluation meets the Federal GPRA reporting guidelines. The evaluator, collaborating with the project director, provides quality control and uploads project data to state coordinator and Federal reporting systems as specified by grant requirements. The evaluator must attend the spring technical assistance meeting held by the ADE each year in Phoenix. Individual projects are required to provide scheduled updates and data to the ADE and the U.S. Department of Education regarding progress in meeting the objectives described in the evaluation plan.
- Projects are encouraged to identify and use valid and reliable (researchbased) measurement tools or strategies. So that projects can be compared statewide, each project is required to use measurement tools selected by the state: 1) Appropriate sections of the Reformed Teaching Observation Protocol (RTOP) and 2) teacher content measures (DTAMS). The external evaluator or senior staff member of the project will coordinate the administration of the teacher content measures and the RTOP to project participants at two time points: before professional development begins, and again after all professional development has been completed. The DTAMS content measures, and the RTOP must also be administered to the comparison group at two appropriate time points. Project staff and evaluators will follow a state-developed protocol for administering the instruments and disseminating data so that the proprietary information of the instruments and the personal privacy of

participants are fully ensured. All project staff administering the RTOP must attend training. Training on the Science RTOP will be scheduled in Fall 2012 in Phoenix.

- Individual projects are required to provide scheduled updates and data to the ADE and the U.S. Department of Education regarding progress in meeting the objectives described in the evaluation plan.
- Projects will compile and deliver a professional development packet to the ADE at the conclusion of the grant. The professional development packet will include all participant materials (e.g. handouts, activities, and references), instructor notes, curriculum development, and any other necessary components that would enable replication of all professional development sessions. This requirement should be included as part of the partnership agreement between the LEA and IHE faculty.

#### F. Funding

Grants will be awarded for approximately 27 months. Availability of continued funding is dependent upon federal reauthorization. The level of funding will depend upon the number of teacher participants and the number of students who will benefit.

#### G. Fund Use

Funds received shall be used to supplement, and not supplant, state and/or local funds that would otherwise be used for proposed activities. Funds may be used for the following:

- support of professional development programs and content development in science and literacy in science
- administrative costs
- stipends for participating teachers, control group teachers, and substitutes (a minimum of \$20/instructional hour for teacher participants is recommended)
- materials for professional development use, program evaluation, etc.
- travel costs and expenses to attend in-state MSP technical assistance meetings and RTOP trainings, and regional USDOE MSP meetings.

No more than 10% of the project budget should be allocated to project evaluation, which may include stipends to control or comparison teachers for their time and effort in evaluation. It is acceptable for the partnership to charge indirect costs. Please refer to the following regulations for guidance: EDGAR Sec. 75.562 - Indirect cost rates for educational training projects, EDGAR 80.30 - Changes, and EDGAR Section 80.36 - Procurement. However, institutions are strongly encouraged to maximize the use of grant funds for direct services. All budgets and budget descriptions must be aligned with the activities described in the proposal narrative and reflect any coordinated uses of resources from other sources. All LEAs who receive federal funds (including MSP funds) must maintain time and effort documentation. This requirement is included in the General Assurances and the MSP Assurances that LEAs must submit.

#### Ineligible Costs:

- costs associated with writing the proposal
- materials for classroom use
- space rental
- expenditures for food at professional development sessions
- supporting the research of individual scholars or faculty members
- computers, projectors, smart boards, cell phones, or other similar equipment
- supporting travel to in- or out-of-state professional meetings/conferences (other than the USDOE Mathematics and Science Partnership Meetings and/or Conferences), unless it is demonstrated that attendance will directly and significantly advance the project

#### H. Review Process

Proposals will be reviewed by ADE staff for completeness and compliance with the requirements set forth in Title II, Part B of NCLB to determine applicant eligibility. Any questions about significant omissions from a proposal or about applicant eligibility will be referred to the proposing organization. If in the judgment of the ADE, a proposal is significantly incomplete, or an applicant cannot establish its eligibility, the proposal will be omitted from the competition.

Grants will be awarded through a competitive review process. The review and scoring of each application will be based on criteria that support sustained and intensive high-quality professional development, based on the most current research. Using a numerical scoring system, this process is intended to identify the applications that meet the needs of Arizona's eligible schools.

An expert panel will evaluate eligible applications according to or against the required application components and the established criteria reflected in the scoring rubric. The review panel will review each eligible application and make recommendations for acceptance. Following the review, the ADE staff will contact selected project directors to discuss any modifications of the project plan and/or budget that may be required. In order to maximize the effects of limited funds, applicants may be asked to revise the project budget and/or scope of work.

#### I. Review Criteria

Complete scoring rubrics will be furnished at the Grant Application Workshop and can be found on the ADE website. The Superintendent of Public Instruction may emphasize specific factors in making decisions to fund proposals, such as evidence that the project will serve specific geographic areas and will facilitate the state in meeting overall professional development and teacher education goals.

#### J. Rejection of Proposals

ADE reserves the right to reject any and all proposals received as a result of this announcement and will do so if the proposal does not adhere to funding specifications or application preparation instructions.

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#### K. Project Administration

Notification of the Award: Once the review process is completed, the project director will be notified of the status of the proposal. Notification is anticipated by August 27, 2012. There will be a short timeline for finalizing budgets. All final budgets will be due by September 4, 2012.

#### Award Conditions:

Approximately \$2.0 million is available for this Mathematics and Science Partnership award competition. Continuation of awards is contingent upon this program receiving funding through the USDOE and upon the State's evaluation of the funded programs.

#### Reporting Requirements:

Each eligible partnership receiving a grant must agree to submit a detailed project evaluation plan and budget. The evaluation plan must identify the instruments and strategies used for formative and summative evaluation, and include a plan for recruiting and retaining participant and comparison/control teachers for the life of the project. MSP applicants, who, by themselves, may not have the required minimum sample of teachers, can propose to partner with other MSP applicants to carry out a cross-site model. Applicants partnering in this way would need to implement the same MSP program (e.g., the same professional development structure providing the same content and format). The evaluation plan must plan for attrition of participants from both groups and describe strategies used to ensure that the design will maintain sufficient sample size, more teachers should be recruited as it is expected that there will be attrition. Use of historical data if available is recommended, but one may assume a 30% attrition rate and increase recruitment strategies accordingly to account for this.

Each eligible partnership receiving a grant must submit a detailed plan of the science professional development topics and participant materials two weeks prior to the first day of planned activities. Instructor notes are not due at this time.

All partnerships are required to report quarterly and annually to the ADE and annually to the USDOE regarding their progress in meeting the objectives and targets described in their accountability plan. Further information regarding reporting requirements and forms will be communicated to the project directors and will be posted on the ADE website when available. Projects will compile and deliver a complete Professional Development packet (as described in Project Requirements) to the ADE at the conclusion of the grant.

For further questions relevant to the MSP Grant Competition, please contact:

Lacey Wieser Science Specialist Arizona Department of Education Phone: 602-364-2332 E-mail: <u>lacey.wieser@azed.gov</u>

#### <u>OR</u>

Suzi Mast MSP Specialist Arizona Department of Education Phone: 602-364-4030 E-mail: <u>suzi.mast@azed.gov</u>

#### <u>OR</u>

Mary Knuck Arizona Department of Education Deputy Associate Superintendent Standards-Based Best Practices Phone: 602-364-2353 E-mail: <u>mary.knuck@azed.gov</u>

#### **III. Definitions**

#### **A. Professional Development**

The term "professional development" means instructional activities that:

- Are based on scientifically-based research and state academic content standards, professional teaching standards, and assessment;
- Improve and increase teachers' content knowledge of the academic subjects they teach;
- Enable teachers to become highly qualified or appropriately certified;
- 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.

#### **B.** 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:

- Employs systematic, empirical methods that draw upon observation or experiment;
- Involves rigorous data analyses that are adequate to test the stated hypotheses and justify the general conclusions drawn;

- 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;
- 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;
- 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;
- Has been accepted by a peer-reviewed journal or approved by a panel of independent experts through a comparably rigorous, objective, and scientific review.

#### C. Literacy Defined in the Context of Science

Research on children's learning in science shows that children develop science knowledge through both everyday and school-based experiences. Students need the opportunity to do science in order to understand the concepts, processes, and nature of science (NSES, 1994, 2000). Today's science learners need to develop expertise in multiple dimensions of literacy practice. These dimensions include the need to--

- Access and critically evaluate complex information that is rapidly changing and expanding;
- Recognize and begin to use the informational structures (such as taxonomy) and language forms unique to science (text density, technical grammar, objective and authoritative "voice," and logical argument);
- Systematically and collaboratively manage the physical tools, activities and practices of science (using laboratory or field equipment, planning a strategy for data collection, collecting, organizing, and accessing data once it has been collected);
- Identify, select, and organize data to support an explanation of how the natural world works;
- Communicate explanations and conceptual understanding with others (including scientists and the "texts" of science);
- Think "beyond the information given" (first-hand, sense-based data) to identify larger (abstract, inferential) patterns, trends, principles and theories;
- Represent and interpret ideas in multiple modes beyond. linguistic text (mathematical symbols, formulas and graphs, as well as charts, diagrams, maps, animation, hypertext and multimedia);

- Use appropriate technical vocabulary, speaking registers, and presentational genres depending on purpose and audience; and
- Identify and position themselves as capable of doing science regardless of gender, linguistic, or cultural background.

#### **D.** Scientific and Engineering Practices

The Scientific and Engineering Practices focus on how science and engineering are actually done, both in the short term (e.g., studies of activity in a particular laboratory or program) and historically (studies of laboratory notebooks, published texts, eyewitness accounts).

The focus here is on important practices, such as modeling, developing explanations, and engaging in critique and evaluation (argumentation), that have too often been underemphasized in the context of science education. In particular, critique is an essential element: as all ideas in science are evaluated against alternative explanations and compared with evidence, acceptance of an explanation is ultimately an assessment of what data are reliable and relevant and a decision about which explanation is the most satisfactory.Engaging in argumentation from evidence about an explanation supports students' understanding of the reasons and empirical evidence for that explanation, demonstrating that science is a body of knowledge rooted in evidence.

1. Asking Questions and Defining Problems			
Science begins with a question about a	Engineering begins with a problem, need, or desire that		
phenomenon, such as "Why is the sky blue?" or	suggests an engineering problem that needs to		
"What causes cancer?," and seeks to develop	be solved. A societal problem such as reducing the		
theories that can provide explanatory answers to	nation's dependence on fossil fuels may engender a		
such questions. A basic practice of the scientist is	variety of engineering problems, such as designing		
formulating empirically answerable questions	more efficient transportation systems, or alternative		
about phenomena, establishing what is already	power generation devices such as improved solar cells.		
known, and determining what questions have yet	Engineers ask questions to define the engineering		
to be satisfactorily answered.	problem, determine criteria for a successful solution,		
	and identify constraints.		
2. Developing	and Using Models		
Science often involves the construction and use of	Engineering makes use of models and simulations to		
a wide variety of models and simulations to help	analyze existing systems so as to see where flaws		
develop explanations about natural phenomena.	might occur or to test possible solutions to a new		
Models make it possible to go beyond observables	problem. Engineers also call on models of various sorts		
and imagine a world not yet seen. Models enable	to test proposed systems and to recognize the strengths		
predictions of the form "if then therefore"	and limitations of their designs.		
to be made in order to test hypothetical			
explanations.			
3. Planning and Car	rying Out Investigations		
Scientific investigation may be conducted in the	Engineers use investigation both to gain data essential		
field or the laboratory. A major practice of	for specifying design criteria or parameters and to test		
scientists is planning and carrying out a systematic	their designs. Like scientists, engineers must identify		
investigation, which requires the identification of	relevant variables, decide how they will be measured,		
what is to be recorded and, if applicable, what are	and collect data for analysis. Their investigations help		
to be treated as the dependent and independent	them to identify how effective,		
variables (control of variables). Observations and	efficient, and durable their designs may be under a		
data collected from such work are used to test	range of conditions		
existing theories and explanations or to revise and			
develop new ones.			

4. Analyzing and Interpreting Data			
Scientific <b>investigations</b> produce data that must be analyzed in order to derive meaning. Because data usually do not speak for themselves, scientists use a range of tools—including tabulation, graphical interpretation, visualization, and statistical analysis—to identify the significant features and patterns in the data. Sources of error are identified and the degree of certainty calculated. Modern technology makes the collection of large data sets much easier, thus providing many secondary sources for analysis.	Engineers analyze data collected in the tests of their designs and investigations; this allows them to compare different solutions and determine how well each one meets specific design criteria—that is, which design best solves the problem within the given constraints. Like scientists, engineers require a range of tools to identify the major patterns and interpret the results.		
5 Using Mathematics a	nd Computational Thinking		
In science, mathematics and computation are fundamental tools for representing physical variables and their relationships. They are used for a range of tasks, such as constructing simulations, statistically analyzing data, and recognizing, expressing, and applying quantitative relationships. Mathematical and computational approaches enable predictions of the behavior of physical systems, along with the testing of such predictions. Moreover, statistical techniques are invaluable for assessing the significance of patterns or correlations.	In <b>engineering</b> , mathematical and computational representations of established relationships and principles are an integral part of design. For example, structural engineers create mathematically based analyses of designs to calculate whether they can stand up to the expected stresses of use and if they can be completed within acceptable budgets. Moreover, simulations of designs provide an effective test bed for the development		
6 Constructing Explana	tions and Designing Solutions		
The goal of <b>science</b> is the construction of theories that can provide explanatory accounts of features of the world. A theory becomes accepted when it has been shown to be superior to other explanations in the breadth of phenomena it accounts for and in its explanatory coherence and parsimony. Scientific explanations are explicit applications of theory to a specific situation or phenomenon, perhaps with the intermediary of a theory-based model for the system under study. The goal for students is to construct logically coherent explanations of phenomena that incorporate their current understanding of science, or a model that represents it, and are consistent with the available evidence.	<b>Engineering design,</b> a systematic process for solving engineering problems, is based on scientific knowledge and models of the material world. Each proposed solution results from a process of balancing competing criteria of desired functions, technological feasibility, cost, safety, esthetics, and compliance with legal requirements. There is usually no single best solution but rather a range of solutions. Which one is the optimal choice depends on the criteria used for making evaluations		
7. Engaging in Argument from Evidence			
In science, reasoning and argument are essential for identifying the strengths and weaknesses of a line of reasoning and for finding the best explanation for a natural phenomenon. Scientists must defend their explanations, formulate	In <b>engineering</b> , reasoning and argument are essential for finding the best possible solution to a problem. Engineers collaborate with their peers throughout the design process, with a critical stage being the selection of the most promising solution among a field of		

evidence based on a solid foundation of data,	competing ideas. Engineers use systematic methods to
examine their own understanding in light of the	compare alternatives, formulate evidence based on test
evidence and comments offered by others, and	data, make arguments from evidence to defend their
collaborate with peers in searching for the best	conclusions, evaluate critically the ideas of others, and
explanation for the phenomenon being	revise their designs in order to achieve the best solution
investigated.	to the problem at hand.
8. Obtaining, Evaluating, a	nd Communicating Information
Science cannot advance if scientists are unable to	<b>Engineers</b> cannot produce new or improved
communicate their findings clearly and	technologies if the advantages of their designs are not
persuasively or to learn about the findings of	communicated clearly and persuasively. Engineers
others. A major practice of science is thus the	need to be able to express their ideas, orally and in
communication of ideas and the results of	writing, with the use of tables, graphs, drawings, or
inquiry—orally, in writing, with the use of tables,	models and by engaging in extended discussions with
diagrams, graphs, and equations, and by engaging	peers. Moreover, as with scientists, they need to be
in extended discussions with scientific peers.	able to derive meaning from colleagues' texts, evaluate
Science requires the ability to derive meaning	the information, and apply it usefully. In engineering
from scientific texts (such as papers, the Internet	and science alike new technologies are now routinely
symposia, and lectures), to evaluate the scientific validity of the information thus acquired, and to integrate that information.	available that extend the possibilities for collaboration and communication.

National Academy of Sciences. A Framework for K-12 Science Education: Practices, Crosscutting Concepts, and Core Ideas

#### Four Elements of the Professional Development Design

The four elements are described below:

- During "Learn the Content" teachers are actively engaged in doing mathematics. Teachers view the content in terms of problem-solving and reasoning. Teachers are involved in a content-based workshop each day of the professional development. Content is taught by the IHE mathematics faculty/mathematics educator team. The workshop portion of the day involves a mixture of whole group instruction and small group activity that provides teachers with a supportive learning environment.
- During "Reinforce the Content Learning" teachers work in small groups on a set of problems or an activity based on the topic of the workshop. Participants begin developing their discourse in both spoken and written forms of communication. They learn precision in language as they are expected to explain and defend their thinking among peers and they experience that scientific thinking can occur without the instructor. Each small group is expected to share some of their findings with the whole group.
- During "Consolidate the Learning" teachers experience different ways of learning the content in the context of doing mathematics so that they understand the different learning styles of their students. Journal writing can be used as a means to experience quiet introspection. Participants reflect and write about their learning. In addition to individual introspection, learning is enhanced through acknowledgement of content that remains

unclear and continued discussions about the content. Alternative ways of thinking about the content are also explored during this time.

• During "Implement the Content" teachers are given the opportunity to experience teacher-tested, age appropriate classroom demonstrations and/or lessons on the topics they just learned, and to discuss other ways of bringing the content into their classrooms. Teachers may examine their adopted science programs during this time to determine how their new content knowledge/materials will integrate with their required teaching materials. Teachers may also study the AZ Science Standard and the 2010 English Language Arts Standards to see how the content relates to their grade level performance objectives. Connections to others strands and concepts and curricular areas can also be explored at this time. Analyzing student work would be an appropriate strategy to use during this time.

#### E. External Evaluator; Formative vs. Summative Evaluation

Formative or "process" evaluation describes the "what" and the "how" of a project's implementation from the perspective of various stakeholders, most importantly, from its participants. Formative evaluation verifies what the program is, and whether or not it is delivered to the participants effectively. Process data provide feedback on program delivery and quality, and whether the program is reaching its targeted audiences. Formative evaluation is also used in the process of designing and monitoring the components of a program. Formative evaluation is much like formative assessment in a classroom, where the instructor frequently monitors and "checks in" with participants for understanding, and adjusts instruction, or participants receive formative feedback on their performance so they recognize and address gaps between their performance and the expected goals. Finally, formative evaluation data provide vital information needed to interpret outcomes measured by summative evaluation. Formative evaluation data describe the conditions under which a program has an impact on participants.

Summative evaluation activities determine the impact and value of the program by measuring program outcomes. Outcome measures describe "what happened, for whom, under what conditions?" In the MSP program, it is hypothesized that providing high-quality, content-based professional development to teachers will result in increases to teachers' content knowledge, changes in teaching practice, and improvement of student learning and achievement. The Federal MSP Program requires an outcome evaluation and strongly encourages an experimental or quasi-experimental research study to measure the impact of project activities on student achievement and teacher performance. A rigorous outcome evaluation design compares participants to a control group or matched comparison group of similar teachers/students. The measures required by the ADE are central components in the MSP program outcomes evaluation. Each project may also determine other summative outcomes to be measured in addition to these required tools.

#### F. Role and responsibilities of the local external evaluator

The external evaluator is an active member of the MSP partnership who serves as an objective observer. The external evaluator may be affiliated with the partnering IHE, but he/she must not be working in the same department as the participating IHE faculty nor take an active role in the program delivery. The external evaluator collaborates closely with program staff to collect and analyze data, and to provide feedback to project stakeholders, including the partnership participants, schools, districts, ADE, state evaluators and the Federal government. This includes responsibility for implementing state-wide project assessments and ensuring the local evaluation meets the Federal GPRA reporting guidelines.

The local evaluator and project director maintain close contact with the ADE and the state level evaluators. The evaluator must attend the spring technical assistance meeting held by the ADE each year in Phoenix. The local evaluator is responsible for designing, coordinating, and ensuring the quality of formative and summative evaluation data collection, reporting, and feedback to project stakeholders. The evaluator, collaborating with the project director, provide quality control and upload project data to state coordinator and Federal reporting systems as specified by grant requirements.

IHE faculty and project staff may design and carry out data collection related to the project or research studies in addition to the core program evaluation. It is required that the external evaluator include methods and results of these studies in his/her plan and analysis, and that all partners coordinate their communications and requests for data with each other and with districts, schools, and teachers to minimize administrative burden on participants.

Other responsibilities for the local external evaluator include:

- Ensure compliance with Federal Human Subjects Protection regulations as well as with any district or LEA IRB requirements if appropriate;
- Clearly inform all treatment and control/comparison participants of their roles and responsibilities in evaluation data collection for the life of the project, regardless of whether they continue to work in participating districts;
- Help project managers and partners to build buy-in and commitment to the need for evaluation data to inform future program designs and ensure future funding;
- Plan to share their instruments, collaborate, and communicate with other partnerships and with state-level evaluators on a regular basis;
- Collaborate with IHE, LEA, and/or district and school administrators to align with other local initiatives, use or align with local tools when possible, and develop agreements with schools and districts for data access and collection according to the MSP timeline;
- Include formative (process) evaluation to inform the design and adjustment of professional development and other project interventions at each stage of project implementation;

- Assist with communicating state- or federal-level evaluation changes or requests to program partners;
- Plan to be an active and contributing member of the program partnership, communicating regularly with all stakeholders.

#### **IV.** Proposal Requirements

Proposals must be submitted by the deadline of 5:00 p.m. on Monday, August 20, 2012. The Application must be submitted in electronic form to lacey.wieser@azed.gov and as one (1) Original and three (3) copies that will be made available to ADE Technical Reviewers. Applications will be available to download from the ADE Fund Alert on or before June 20, 2012 and the ADE MSP Page on or before June 20, 2012.

#### A. Letters of Intent

Please send a letter stating your intent to submit an application for an MSP grant by *August 1, 2012*. In this letter, please provide a brief description of the proposal, including the MSP project's anticipated activities (goals and objectives and professional development interventions or models). In addition, list the anticipated project's partners, targeted schools/districts, the anticipated number and grade levels of teachers who will receive the intervention, the approximate number of students who will be impacted, and an estimate of the funds needed. Please send this letter, electronically to Suzi Mast at <u>suzi.mast@azed.gov</u>.

**B.** The following (1-8) lists the required components of an application, in the order they must be submitted. Narrative sections must be type written, double-spaced and the font used must not be smaller than 12 point. Arial, Courier, or Calibri are permitted font types. There must be one inch side, top, and bottom margins. Charts, graphs, and tables may be single spaced with type no smaller than 10 point. Any supporting charts, graphs, and tables must be placed in the Appendix and referenced in the narrative. The application, not including the Appendix, shall not exceed 25 pages. Only approved projects will transfer their applications to the ADE online Grants Management System. A formatting sheet that matches the online application is provided at the Grant Application Workshop. Please use the formatting sheet as a guide when writing your application and adhere to the 7500 character limit for each section. This will allow an easy transfer to the online system if your project is approved.

#### 1. Cover Page

Use the form provided in the Appendix of this request for proposals.

#### 2. Abstract

Provide an abstract of the proposal that briefly and concisely describes the MSP project's anticipated activities and timeline during the sixteen months. Please include the partnership participants (students, teachers, schools, and other partners), project goals and objectives, activities, key

features (model of delivery), and the project's intended results. The abstract should be no more than 1,000 words and can be single-spaced. The abstract is not included in the page limit.

#### 3. Partnership Needs Assessment (Rubric Section 1)

This section shall include a description and the results of a comprehensive assessment (multiple sources) of the teacher professional development needs with respect to the teaching and learning of science and literacy in science with selected schools that comprise the partnership. Partners must collectively identify and prioritize the baseline professional development needs of involved teachers and the academic needs of their students, including:

- The number and percentage of K-6 or 6-12 teachers in the selected schools that comprise the partnership who have sufficient and insufficient science content knowledge. This data should be disaggregated by grade level;
- Specific student learning needs in selected schools that comprise the partnership based on student achievement data from multiple sources (this achievement data may include literacy measures);
- The number and percentage of students to be impacted by this partnership.

This baseline data must be determined using a relevant assessment of teacher professional development needs and student needs. This section will include a description of the methods used to collect this information. The results of this comprehensive assessment must be used in the establishment of the goals and objectives for this proposal.

#### 4. Partnership Project Goals and Objectives (Rubric Section 2)

Describe the specific long-term and short-term goals and objectives of the program. Link these goals and objectives to the professional development needs of the teachers. This section must include timesensitive measurable objectives that will be accomplished and indicate progress toward:

- Reducing the number of teachers who are not adequately prepared to teach science with an emphasis in literacy, while increasing the number of teachers who are adequately prepared to teach science with an emphasis in literacy;
- Increasing the academic achievement of students taught by the teachers involved in the program (due to the timing of this grant, use of both pre and post AIMS student scores are required at the tested grade levels);
- A theory of action plan or logic model that is linked to the goals and objectives of the project.

5. Research/Evidence Base and Efficacy of Plan to Increase Student Achievement (Rubric Section 3)

Partnership implementation plans must include:

- A description of prior efforts to improve teacher content knowledge and student achievement in science, lessons learned from these prior efforts, and how this project will relate to and build on those efforts;
- Evidence that the planned activities will address identified measurable outcomes through clear strategies that provide roadmaps to achieving both the long and short-term goals and objectives of the project;
- A description of how the activities to be carried out by the eligible partnership will be based on a review of scientificallybased research, and an explanation of how the activities are expected to improve student academic achievement and strengthen the quality of science instruction;
- A description (outlining the targeted concepts) and timeline of all the professional development activities including the number, types, duration, intensity, and responsible party;
- An explanation of how these activities will be aligned with the targeted concepts within the Arizona Science Standard, the 2010 English Language Arts Standards (if applicable), the Arizona Professional Teaching Standards, and the National Staff Development Council Standards;
- A description that illustrates how the design of the professional development provides for work-embedded application of new learning, continuous reflection, and ongoing support;
- Evidence that the professional development is rigorous and challenging in academic content and also develops pedagogical content knowledge (Evidence of rigor and challenge should be in the sample lesson plan, description, and timeline);
- Evidence that the design includes the following elements: Learn the Content, Reinforce the Content Learning, Consolidate the Learning, and Implement the Content. The sample plan (in Appendix) must address all four elements.

#### 6. Partnership Evaluation and Accountability Plan (Rubric Section 4)

The federal program requires that each partnership develop and implement an evaluation plan that serves both formative and summative functions.

Rigorous evaluations and accountability have become central aspects of programs funded by the United States Department of Education (USDOE). In particular, the USDOE strongly encourages the use of random assignment evaluation designs for summative evaluations in

which intervention and comparison groups are constructed by randomly assigning some teachers to participate in the program activities and others to not participate. Random assignment from a pool of volunteers to intervention and comparison groups (at least 30 participants in each group) is an acceptable form of randomization for the purposes of this evaluation. Adequate recruitment must take place to compensate for attrition rates.

In cases where random assignment is not practical, USDOE suggests the use of a comparison group of teachers that are carefully matched (prior to the implementation of the intervention) to the targeted population. Matching characteristics might include: teacher and school demographics; number of undergraduate or graduate course credits completed in the content area, educational degree, years of teaching, current grade level band, education specialization, other professional development hours or work experience in related content areas, AEPA status, etc. At a minimum, the teachers should be matched for length of time teaching (0-3 years, 4-6 years, 7-8 years, or 9 or more years), the grade band that they are currently teaching, their educational degree, and their area of education specialization (topic or focus). Comparison groups should not be comprised of teachers that had the opportunity to participate in the intervention but declined.

Regardless of the evaluation design chosen, reporting on the equivalence of the groups in the evaluation report is required. This will include at minimum a comparison between the groups on the teacher characteristics listed above.

The USDOE MSP website includes a guiding document on the criteria for classifying designs of MSP evaluations. The link to the website is: http://www.ed-msp.net/ The partnership will report quarterly and annually to the ADE and annually to the USDOE regarding its progress in meeting the objectives and annual targets described in the partnership's accountability plan. Local evaluation must include tools that will be used to assess the program's progress and measure the impact of the professional development. The annual performance report will follow specific guidelines/formats for reporting content and data, which will be communicated during technical assistance meetings and/or via email.

Grantees are expected to participate in the state's overall evaluation of Arizona's MSP Program. Participation includes meeting at designated times during the year and working with the state's MSP Coordinator, MSP staff, and external evaluator (e.g. using common data tools, providing data collection timelines, data, and submitting quarterly and annual performance reports (APR) and a formal evaluation report

coinciding with the APR. Each project must use the required state instruments. This requirement includes pretesting and post- testing using the designated teacher content measures (DTAMS) and RTOP with both intervention and comparison groups. The test administration should occur in similar ways between the two groups (i.e. given in a one on one setting, given in a group session, etc.). The timeframes for collecting data from the participant and comparison groups should also be similar. In order to ensure inter-rater reliability, all project personnel responsible for administering the RTOP must attend designated RTOP sessions provided at the Technical Assistance Meetings. In addition, each grantee must provide required data to the USDOE.

**Describe the experimental design** in detail including implementation. The plan will include evaluation procedures that measure:

- Progress toward meeting the goals and objectives established in response to the identified needs;
- Student academic achievement in science;
- Teacher content knowledge and implementation efforts.

Applicants should include a short statement of the research questions that the project seeks to answer (e.g., "Does the MSP project increase teacher science content knowledge; if so, by how much?")

Include plans for both formative and summative evaluation. In the formative sense, evaluation should provide evidence of the strengths and weaknesses of the project, informing the partnership's understanding of what works and what does not in order to guide project modifications as needed. The evaluation should be designed to respond to the summative need for an objective analysis of data in order to determine the effectiveness of the project in contributing to student and teacher growth. A description of the statistical tests that the evaluator plans to use for analyzing the outcomes of the project should be provided in the narrative.

Identify and describe the qualifications of the organization and/or individuals responsible for executing the evaluation plan both internally and externally. The evaluation plan must also clearly articulate how the activities will help the MSP Program build a rigorous, cumulative, reproducible, and usable body of findings. Due to the significance of this section, if any indicators are scored below "Meets Standard" (See Rubric), the grant proposal may be rejected.

#### 7. Commitment and Capacity of Partnership (Rubric Section 5)

This section must show evidence of meaningful partnerships that exhibit characteristics including, but not limited to, the following:

- Evidence that all partners participated in long-term planning for and development of this proposal;
- Evidence that all partners will play a role in the ongoing planning, delivery, and evaluation of the proposed project;
- Identification of all staff that will carry out the proposed activities and the specific institutional resources to support the activities. Vitas for each key partner's staff will be submitted along with the completed form, Partner Contributions and Commitments for each participating partner (See Appendix). Include a narrative of the roles of the partners and their duties and responsibilities related to the goals and the objectives of the project;
- Recruitment of teacher participants must begin by the LEA before submitting the proposal. Evidence of a good faith effort of recruitment by the partners must be submitted using the Teacher Assurance Form (See Appendix);
- Description of the partnership's governance structure specific to decision-making, communication, and fiscal responsibilities;
- Description and evidence of how the private schools were informed;
- A detailed description of how the partnership will continue the activities funded under this proposal after the grant period has expired (*December 30, 2014*). This description must include a plan for building leadership capacity.

#### 8. Partnership Budget and Cost Effectiveness (Rubric Section 6)

The budget should be tied to the scope and requirements of the project and provide sufficient detail for each partner. Two budgets covering the 27-month project should be submitted (9/25/12 through 12/30/13; 1/1/14 through 12/30/14) using the form found in the Appendix.

The budget must include detailed line item descriptions. The amount contained in each budget category must be commensurate with the services or goals proposed, and the overall cost of the project must match the professional development provided and the number of teachers served. All budgets must fund an evaluation and key partnership staff to participate in at least four state technical assistance meetings (Fall 2012, Spring 2013, Fall 2013 and Spring 2014) and two regional MSP meetings (Spring 2013, Spring 2014), and an external evaluator to attend the spring state technical assistance meetings. Funds must also be allocated for staff to attend the RTOP training if needed. Project directors must attend all ADE and USDOE Meetings.

A brief summary of the budget outlining the costs of each category with totals for each partner must be provided in the narrative portion. Matching and in-kind contributions are taken into positive consideration during review for project funding. Include descriptions of all such contributions in the narrative.

(Appendix items can be found on pages 23-31).



MATHEMATICS AND SCIENCE PARTNERSHIP GRANT APPLICATION

**Applying Institution or Organization:** 

**Project Title:** 

**Project Director** 

Name:

Title:

Address:

Telephone:

Fax:

E-mail:

**Amount of MSP Funds Requested:** 

Number of Teachers to be Served Directly:

Approximate Number of Students to be Served: Approximate Number of Title I Students to be Served:

Certification by Authorized or Institutional Official:

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.

Typed/Printed Name of Authorized Official	Title
Signature of Authorized Official (Blue Ink)	Date

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Arizona Department of Education

## **Partner Contributions and Commitments**

### I. REQUIRED PARTNERS

Science or Engineering Department/Faculty of an Institution of Higher Education

Institution:

**Department:** 

**Contact:** 

Title:

Mailing Address:

**Phone:** 

Fax:

E-mail:

Describe what supports the institution will provide to enhance partnership activities; such as: faculty to plan, present, and evaluate professional development, onsite support for teachers during school year, etc.

Printed Name and Authorized Signature of <u>Chairperson</u> of the Science or Engineering Department of partner institution:

**Printed Name** 

Department

24

Signature (Blue Ink)

## **Partner Contributions and Commitments**

## **II. REQUIRED PARTNERS - continued**

High Need LEA (Duplicate this form for each partner)

**District (Schools):** 

**Contact:** 

Title:

Mailing Address:

Phone:

Fax:

#### E-mail:

Describe how the high need LEA will support the partnership activities, such as: assist with identifying and recruiting teachers who need to increase content knowledge, provide detailed teacher and/or student data to the partnership for purposes of analysis/evaluation, supply materials for classroom use, link MSP content work to individual teachers' professional development plans, provide time for teachers to meet and plan, or arrange for release time for teachers to take pretests and post-tests, meet with other administrators and teacher partners to assess future professional development needs, etc.

Printed Name and Authorized Signature of Superintendent or Administrator:

**Printed Name** 

**District/School** 

Signature (Blue Ink)

## **Partner Contributions and Commitments**

III. ADDITIONAL PARTNERS (Duplicate this form for each additional partner.)

**Partner:** 

**Contact:** 

Title:

**Mailing Address:** 

**Phone:** 

Fax:

E-mail:

Describe the role of this partner and describe specific ways that this partner will support the partnership activities.

Printed Name and Authorized Signature of Superintendent /CEO/Dean/Chair:

Printed Name	District/S	District/School/Organization		
Signature (Blue Ink)	Title			
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## Teacher Assurance Form for Review of the LEA's Mathematics and Science Partnership Plan

Please complete one form for each selected school meeting "high need" criteria.

School Name: LEA Name:

The following teachers have reviewed, discussed, and agreed to their part in implementing the MSP Plan that is being proposed by their LEA:

\_\_\_\_\_

	Name	Title	Signature (Blue Ink)
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PROPOSED BUDGET: LINE ITEMS DESCRIPTION (8/25/12 through 12/30/14)				
Function Code	Object Coc	le Descrip	otion Budgeted Amount	
Instruction 100	0			
Salaries	6100			
Employee Bene	fits 6200			
Purchased Professional Services	6300			
Purchased Property Service	es 6400			
Other Purchase Services	d 6500			
Supplies	6600			
Other Expenses	6800			
Support Service	s 2100, 22	00, 2600 , 2700		
Salaries	6100			
Employee Bene	fits 6200			
Purchased Professional Services	6300			
Purchased Property Service	es 6400			
Other Purchase Services	d 6500			
Supplies	6600			
Other Expenses	6800			
Support Service	es – Admin	2300, 2400, 2500, 2900		
Salaries	6100			
Employee Bene	fits 6200			
Purchased Professional Services	6300			
Purchased Property Service	es 6400			
Other Purchase Services	d 6500			

Supplies	6600			
Other Expenses	6800			
Operation of Non-	Instruc	tional Services 3000		
Salaries	6100			
Employee Benefits	6200			
Purchased Professional Services	6300			
Purchased Property Services	6400			
Other Purchased Services	6500			
Supplies	6600			
Other Expenses	6800			
Indirect Cost				
Restricted Indirect Cost Rate	6910			
Capital Outlay				
Property	6700 et. al.			
Total Budget Amount				

*END PAGE* 

An envelope containing the LEA's MSP Application and three additional copies must *physically* arrive at the ADE by **5 p.m.** on *Monday, August 20, 2012* according to the options below:

<u>U.S. Postal Service Delivery</u> (Return-receipt-requested) Postmarked: *August 17, 2012* To: Arizona Department of Education c/o Mary Knuck AZ Academic Standards Unit 1535 W. Jefferson Street, Bin 5 Phoenix, AZ 85007 <u>Hand-delivered w. Receipt Issued</u> Hand to: Ms. Krystall Nesbitt OR Mr. Randy Huckabone – Fourth Floor 2005 N. Central Avenue, STE 420 Phoenix, AZ Deadline: **5 p.m. on** *Monday, August 20, 2012* 

- <u>U.S. Postal Service Delivery</u> <u>FedEx</u> <u>UPS, etc.</u> Mail Date: *August 17, 2012*
- To: Arizona Department of Education c/o Mary Knuck AZ Academic Standards Unit 1535 W. Jefferson Street, Bin 5 Phoenix, AZ 85007
- *NOTE:* All Applicant LEAs must satisfy all potential and apparent violations of ADE procedures regarding required progress or completion reports or other requisite reporting, such as its submission of the Curricular & Instructional Alignment Declaration, in keeping with its responsibilities for receipt of federal and state funding. [LEAs that <u>cannot</u> successfully resolve their having been placed on programmatic "hold" and/or having been found to be currently ineligible to receive state or federal funding are <u>not</u> eligible to compete for a Subgrant Award under the Mathematics and Science Partnership Program.]

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