



Rhode Island Department of Education
MATHEMATICS AND SCIENCE PARTNERSHIP
REQUEST FOR PROPOSALS¹

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

I. MATHEMATICS AND SCIENCE PARTNERSHIP OVERVIEW

The Mathematics and Science Partnerships (MSP) program provides formula grants to states under Title II, Part B of the No Child Left Behind (NCLB) Act of 2001. The purpose of the program is to support the improvement of student achievement in the areas of mathematics and science by encouraging state educational agencies, institutions of higher education, and high-need local educational agencies to partner in high-quality professional development programs.

The Rhode Island Department of Education (RIDE) is responsible for the administration of the MSP program and will award funds to support successful proposals. The MSP program is designed to respond to the needs expressed around mathematics and science statewide. It reflects the feedback and conversations that have taken place among a broad array of stakeholders to collectively identify the best approach to substantial and sustainable reform in mathematics and science.

II. PROGRAM DESCRIPTION

A. Purpose²

The MSP program supports the improvement of student achievement in the areas of mathematics and science by encouraging state educational agencies, institutions of higher education (IHEs), and high-need local educational agencies (LEAs) to partner in high-quality professional development programs, including programs that:

- focus on the education of mathematics and science teachers as a career-long process that continuously stimulates teachers' intellectual growth and upgrades teachers' knowledge and skills; and
- develop more rigorous mathematics and science curricula that are aligned with challenging state and local academic content standards and with the standards expected for postsecondary study in engineering, mathematics, and science.

¹ The "Mathematics and Science Partnership Grant Application" from the Arizona Department of Education and the "Request for Proposal for Mathematics and Science Partnerships Grant" from the Wisconsin Department of Public Instruction were referenced in the development of this RFP.

² U.S. Department of Education, "Part B – Mathematics and Science Partnerships," 2004, <www.ed.gov/policy/elsec/leg/esea02/pg26.html> (March 2009)

B. Rhode Island's Priority

The priorities of the MSP program are aligned to the priorities of RIDE. RIDE's strategic agenda for transforming education in Rhode Island outlines five priorities for preparing all Rhode Island students for success. Among the priorities is to "ensure that all students have access to rigorous curricula aligned to internationally benchmarked standards that are taught through multiple pathways." Overall, the Rhode Island education system wants to bring coherence and consistency to its school improvement efforts, specifically in mathematics and science.

The situation of mathematics and science education in Rhode Island mirrors national trends of urgency around improving student achievement. Statewide, student achievement in mathematics and science is alarmingly low, as indicated on its New England Common Assessments Program (NECAP) test scores. Although the gap between urban and suburban achievement is wide, an urgent call for mathematics and science education reform is being expressed across Rhode Island. In February 2008, Governor Donald L. Carcieri called for the first Rhode Island Mathematics Summit to initiate statewide communication and collaboration to improve mathematics achievement at every level of the system.

Following the Mathematic Summit, Rhode Island LEAs completed a gap analysis of mathematics and science practices in their schools. Resoundingly, the largest barriers to higher level performance in those subject areas were:

- a lack of deep understanding of the content of Rhode Island's state standards;
- incoherent professional development; and
- gaps in curricula.

Improvement will result from strengthening the system from the district level through the schools to the classroom, developing leader and teacher capacity in parallel processes.

Education researcher Robert Marzano³ (2003) identifies and ranks, based on the existing research literature, five school-level factors that influence student academic achievement. He lists a "guaranteed and viable curriculum" as having the most impact on student achievement. Guided by this and similar research, Rhode Island's MSP grant seeks to increase instructional coherence at all levels of the system by aligning curriculum, instruction, and assessment to each other and to the state's standards. Teachers and instructional leaders at various levels of the system are encouraged to participate in an in-depth study of the standards to develop more rigorous curricula, as encouraged in the federal MSP program.

C. Goals and Objectives

Rhode Island's MSP program seeks to increase teacher content knowledge and student achievement by:

- Providing targeted support for LEAs to carry out the work of curriculum alignment within their systems;

³ Robert J. Marzano, *What Works in Schools: Translating Research Into Action* (Alexandria: Association for Research and Curriculum Development, 2003), 22-34.

- Leveraging and aligning the resources necessary to support the work of alignment across all levels of the system; and
- Developing a plan to build capacity and infrastructure at all levels of the system to sustain the alignment work long-term.

Specifically, participants will:

- Examine the current K – 12 curriculum, instruction, and assessment practices in the district;
- Study the state standards and their implications for teaching and learning;
- Develop, refine, and come to agreement on a standards-aligned scope and sequence and units of study; and
- Implement a common set of tools and structures for leaders to use in supporting teacher implementation of the curriculum.

The work shall:

- Directly relate to the curriculum and academic areas in which the teacher provides instruction, and focus only secondarily on pedagogy;
- Enhance the ability of the teacher to understand and use the challenging state academic content standards for mathematics and science and to select appropriate curricula; and
- Train teachers to use curricula that are:
 - based on scientific research;
 - aligned with challenging state academic content standards; and
 - object-centered, experiment-oriented, and concept- and content-based.

D. Eligible Partnerships

As defined in Sec. 2201(b) of Title II, Part B, partnerships must include:

- an engineering, mathematics, or science department of an IHE; and
- at least one high-need LEA (as defined below).

Partnerships may also include:

- one or more LEAs that may or may not qualify as high-need;
- other IHE partners that may or may not be a STEM department;
- public charter schools, private schools⁴, or a consortium of such schools; or
- additional business and community partners that support the goals of the project

Based on the current priorities in Rhode Island, the partnership must focus on the development of rigorous K-12 mathematics and science curricula that are aligned with the state’s standards. All parties involved share responsibility, goals, and accountability for project implementation and outcomes. Each partnership must designate a project director, preferably from the LEA. If a representative from the IHE is a project director, then a representative from the LEA must be designated as a co-director. The partnership must be active and well-defined in all aspects of the grant, including planning, delivery, and evaluation of the professional development.

⁴ Title IX of NCLB requires that private schools are eligible to participate in a partnership and should be given equitable opportunity for participation. See **Appendix A** for additional information.

1. LEA Partners

To be eligible for a MSP grant award, an applicant LEA must demonstrate a need for improvement in student mathematics or science performance. Preference will be given to LEAs who demonstrate high-need status or partnerships including at least one high-need LEA. For the purposes of this grant, a high-need district meets at least one of the following conditions:

- (a) At least 20 percent of its students qualify for free or reduced meals.
- (b) At least one school in the district has not met AYP in mathematics/science for a minimum of three years.
- (c) Fewer than 50 percent of students tested scored Proficient or Advanced on the 2009 NECAP test in mathematics/science.

In addition, each LEA must:

- Ensure teacher and leader participation in each session of the project's professional development for the duration of the project;
- Include school and district leaders (to include the superintendent and/or curriculum director) in the work to actively participate and learn how to support the teachers and build community support for the partnership;
- Participate in evaluations to determine the progress and effectiveness of the work;
- Carefully document all MSP activities and the use of MSP funds and complete all necessary reports and updates, as required by RIDE and the U. S. Department of Education; and
- Clearly articulate how this program will integrate with other ongoing mathematics or science school and/or district reform initiatives.

2. IHE Partners

Districts across the state have expressed an interest in partnering with the Dana Center to meet the goals and purposes outlined above. Given the local experience, success, and expertise of the Dana Center, LEA-Dana Center partnerships are strongly encouraged to apply. Other IHE partners with comparable expertise and experience are also invited to apply. More than one IHE partner may be included in a single project to meet the goals of the work. IHE partners must:

- Provide opportunities for enhanced and ongoing professional development to improve mathematics or science achievement;
- Commit to working with teachers, school leaders, district leaders, and all other partners to address the goals of Rhode Island's MSP program;
- Demonstrate knowledge of standards-based teaching and learning and expertise in developing district-level curriculum materials (e.g. scope and sequence documents, units of study, etc).
- Use scientifically-based research to provide professional development to enhance the participants' ability to teach standards-based mathematics and science to all students; and
- Work with all project partners to plan, assess, and refine the professional development throughout the project.

E. Project Requirements

The details of the partnership should respond to the unique needs of a district and its students. Eligible partnerships will choose a subject area (mathematics or science) according to need and capacity, then submit the appropriate application. In addition to the requirements for partnerships and the goals and objectives mentioned above, MSP projects must meet the following requirements:

- Projects must focus on K-12 mathematics or science.
- Project details must address the results of a comprehensive needs assessment, specifically around curriculum, instruction, and assessment practices.
- Projects must have a strong leadership component. Driven by common goals and objectives, there should be separate work for leaders and teachers (with some participants fitting into both categories).
- District leadership teams should include:
 - One or two central office administrators, including the superintendent and/or assistant superintendent;
 - Principal or assistant principal from each level: elementary, middle, and high school;
 - Teachers, teacher-leaders⁵, and content-area coaches representing each grade level or subject area⁶ (numbers will depend on the size and capacity);
 - Additional district and building administrators, teachers, and content-area specialists, depending on the size of the district and the space available in the professional development sessions.
- Projects should include opportunities for participants to share experiences and lessons learned from the project with colleagues to support its goals and objectives in the district.
- Project participants must commit to all professional development sessions, according to whether they are in the leaders strand or the teachers strand.

The intensive district work is a three-year commitment, with the expectation that those three years of work will lay a foundation of standards-based practice that is sustainable. Applicants are strongly encouraged to partner with other districts for collaboration and shared best practices.

F. Evaluation

RIDE will contract with an external research and evaluation organization to conduct the evaluation of all MSP projects. The evaluator should be an active partner from the planning through completion of the final reports. The evaluation and accountability system must include measurable objectives related to the goals of the project, assessing both implementation and impact. It must include an analysis of student performance and achievement on the New England Common Assessment Program (NECAP) state assessment and may include additional assessment tools, as designed and managed by the evaluator. Project participants must take part in all components of the evaluation.

⁵ Teacher-leaders must be current classroom teachers who exhibit the qualities identified in Rhode Island's "Standards for Educational Leaders."

⁶ In the case of multi-school or multi-district partnerships, there should be equal representation.

III. FUNDING

A. Grant Awards

Grants will be awarded for a 36-month period with initial budget allocation for 12 months. Subsequent years of funding will be dependent upon successful completion of project requirements, quarterly reports, and reporting deadlines. Availability of continuation of funding beyond the initial year is also dependent upon federal reauthorization of Title II, Part B.

B. Fund Use

Grantees are strongly encouraged to maximize the use of MSP grant funds for direct services. Funds received must be spent exclusively on costs associated with providing professional development programs and content development in mathematics or science that is directly related to the goals and objectives of Rhode Island's MSP program. Funds may be used for:

- Higher education consultants
- Substitute costs at an approved rate per day when MSP training sessions take place during teacher contract time, up to \$30,000 and distributed equally among participating districts
- Materials and supplies to facilitate professional learning of teachers
- Registration and hotel costs for MSP regional conferences (any additional workshops/conferences must be directly related to the MSP work and approved by RIDE)
- Evaluation, recommended not to exceed 10% of the project budget
- Indirect costs, not to exceed a rate of 8%

Funds may not be used for:

- Materials for classroom use
- Equipment

All budgets and budget descriptions must be aligned with the activities described in the proposal narrative.

IV. APPLICATION AND REVIEW

The review process is intended to identify the applications that best meet the needs of Rhode Island's schools. Proposals will be reviewed by RIDE staff for completeness and compliance with the regulations set forth in this RFP and Title II, Part B of NCLB to determine applicant eligibility. Grants will be awarded through a competitive review process, according to criteria outlined below. The scoring rubric is provided in **Appendix B**.

A. Letter of Intent

Please submit a letter stating your intent to submit an application for an MSP grant by Monday, April 12, 2010. In this letter, please include a list of the anticipated project's partners (LEA, IHE, and other) and a brief description of the proposal. Please submit the letter electronically to:

Heather Johnson (Mathematics Specialist) – heather.johnson@ride.ri.gov

or

Kate Nigh (Science Specialist) – kate.nigh@ride.ri.gov

B. Non-Public School Participation Form

In accordance with federal MSP regulations, applicant LEAs must consult with all nonpublic schools that:

- a. Reside in the attendance area of the public school partners;
- b. Have students in the grade span of the project; and
- c. Wish to receive federal funds.

Refer to **Appendix A** for the document that must be submitted.

C. Application

There are 8 required components of the application, in the order they must be submitted. Narrative sections must be typed, single-spaced, and no larger than size 12 font. They may include charts or graphs, where appropriate. Sections should not exceed one page unless otherwise noted.

1. Partner Information – Pages may be duplicated as needed
2. Needs Assessment – This section may be up to 2 pages, including the chart
This section should indicate a clear understanding of the results of a needs assessment. Specific data from multiple sources (NECAP, local assessments, etc) should be cited. The needs assessment should include specific gaps or weaknesses in teacher and student mathematics and/or science knowledge and achievement to be addressed by the proposed MSP program. In the case of a multi-district partnership, both collective and individual needs should be addressed.
Applicants must also complete the chart provided in this section to document the last three years of NECAP data.
3. Goals and Objectives – This section may be up to 2 pages
This section should describe the specific long-term and short-term goals of the program, with an emphasis on the first 12 months of the project. The description should indicate a timeline and an estimate of the number, type, duration, and intensity of professional development activities and the responsibility of each of the partners. Indicate measureable objectives that will be accomplished. A strong connection should be made between the goals and activities of the program and the needs outlined above. Link the goals and objectives also to the purpose and priorities of the Rhode Island MSP grant.

4. Capacity – This section may be up to 2 pages

The project description must clearly demonstrate that each partner has the capacity to manage the project and meet the goals and requirements of the proposal. Please address the following points in your narrative:

- Describe the role of each of the partners in the collaborative relationship.
- Describe the partnership’s governance structure specific to decision-making, communication, and fiscal responsibilities.
- Indicate the personnel/resources needed for various aspects of the work (e.g. logistics, attendance, etc) and include evidence that the expertise, time, and resources of the partnership can meet those needs.
- In the case of a multi-district partnership, provide a brief description of how the partnership was formed and the characteristics (e.g. geography, demographics, mathematics program, etc) that make it a strong partnership.
- Describe the institutional resources available to conduct and support the project’s activities, such as common planning time, teacher release, or union relations.

5. Sustainability

Provide a detailed description of how the partnership will continue the work of this project after the grant period has expired. Include a plan for building leadership capacity at each level of the system.

6. Readiness

Describe prior efforts to improve teacher content knowledge and student achievement in mathematics/science (according to the subject area you are applying for), including work with the standards and/or curriculum. Describe the lessons learned from these prior efforts and explain how this project will relate to and build on those efforts. Also describe in detail any current mathematics/science initiatives (according to which subject you are applying for) that are going on in your district(s) and explain how that work relates to the proposal.

7. Evaluation and Accountability Plan

RIDE will contract with an external research and evaluation organization to conduct the evaluation of all MSP projects. However, there should be plans for an internal evaluation component. Indicate plans for formative and/or summative evaluation. Formative 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. Briefly describe your internal evaluation plan.

8. Budget and Cost Effectiveness

The budget should be tied to the scope and requirements of the project. A 12-month project draft budget must be submitted on the form provided in the application. All projects must set aside 10% of the project budget for external evaluation costs. Applicants may plan to send one to three key partnership representatives to one regional MSP conference. Matching and in-kind contributions

are taken into positive consideration during review for project funding. Include descriptions of all such contributions in the brief narrative section.

D. Program Administration

1. Submission

All proposals must be received by **5pm on Monday, April 26, 2010**. The application can be emailed, faxed, or hand-delivered. Applications are not accepted via mail. Applications are available to download from the RIDE website at <http://www.ride.ri.gov/instruction/mathsci.aspx>.

2. Notification

Once the review process is completed, the Project Director will be notified of the status of the proposal. RIDE staff will contact the Project Director to discuss any modifications of the project plan and/or budget that may be required to maximize the effect of funds. All applicants should be notified by early May.

3. Reporting

All partnerships are required to report annually to RIDE and to the U.S. Department of Education regarding their progress in meeting project objectives and targets. Quarterly reports to RIDE will also be required. Further information regarding reporting requirements and forms will be communicated to the Project Directors.

Appendix A

Non-Public School Participation Form

Title IX of No Child Left Behind Act includes the following consultation requirements concerning the participation of nonpublic schools in Title II: Part B: Mathematics and Science Partnership Program.

1. **In general** - To ensure timely and meaningful consultation, a local educational agency, educational service agency or consortium of such agencies shall consult with appropriate private school officials in the geographic attendance area of the LEAs participating in this proposal. This consultation must occur during the design and development of the program, under this Act and before the grant application is submitted to DESE, on issues such as:
 - (A) how the children’s needs will be identified;
 - (B) what services will be offered;
 - (C) how, where, and by whom the services will be provided;
 - (D) how the services will be assessed and how the results of the assessment will be used to improve those services;
 - (E) the size and scope of the equitable services to be provided to the eligible private school children, teachers, and other educational personnel and the amount of funds available for those services; and
 - (F) how and when the agency, consortium, or entity will make decisions about the delivery of services, including a thorough consideration and analysis of the views of the private school officials on the provision of contract services through potential third-party providers.
2. **Timing** - Such consultation shall occur before the agency or consortium makes any decision that affects the opportunities of eligible private school children, teachers, and other educational personnel to participate in programs under this Act.
3. **Discussion required** - Such consultation shall include a discussion of service delivery mechanisms that the agency or consortium could use to provide equitable services to eligible private school children, teachers, administrators, and other staff.

Must be completed by all participating public schools with state accredited private schools in their district.

Non-public school name	Non-public consulted?		Non-public participating?		Date of consultation	Person contacted	Comments
	Y	N	Y	N			

Appendix B Application Rubric

<p><u>Needs Assessment</u> <i>An analysis of science or math needs. Based on school data (NECAP, local assessments, etc.) with specific gaps identified.</i></p>	<p>20 Partnership has clearly articulated district need based on RFP parameters. Data provided specifically confirms such need in terms of math/science gaps or weaknesses.</p>	<p>15 Partnership has articulated district need based on RFP parameters. Data partially supports need/ is incomplete in terms of math/science gaps or weaknesses.</p>	<p>10 Partnership has articulated some need based on RFP parameters. Data is unrelated, unclear or irrelevant.</p>	<p>0 Not completed or needs documented do not match RFP parameters and/or no data given.</p>
<p><u>Goals and Objectives</u> <i>Specific long and short term goals of the project.</i></p>	<p>30 Timeline of professional development activities is clearly outlined. Measurable objectives are indicated. Goals and objectives are linked directly to the purpose and priorities of MSP grant and district needs.</p>	<p>20 Timeline of professional development activities is clearly outlined. Some measurable objectives are indicated. Goals and objectives are tentatively linked to the purpose and priorities of the MSP grant and district needs.</p>	<p>10 Timeline of professional development activities is not clearly outlined OR Measurable objectives are missing. OR Goals and objectives are not linked to the purpose and priorities of the MSP grant and district needs.</p>	<p>0 No timeline, objectives, goals or outline.</p>
<p><u>Capacity</u> <i>Demonstration of a partnership's ability to carry out work.</i></p>	<p>20 Role of partners is clear and defined with solid governance structure. Instructional resources have been identified and allotted to project. <i>In case of multiple districts:</i> Additional description is clear and includes all details (history, strengths, etc.).</p>	<p>15 Partnership has outlined key personnel and some responsibilities. Adequate time and staff has been allotted for most tasks/goals. <i>In case of multiple districts:</i> Additional description is present but could use more detail.</p>	<p>10 Partnership has outlined leaders for some but not all responsibilities. Time allotment is inadequate or unrealistic. <i>In case of multiple districts:</i> Additional description is unclear or missing significant pieces.</p>	<p>0 Partnership has not identified key personnel or responsibilities. Time and staff have not been allotted. <i>In case of multiple districts:</i> Additional description is irrelevant or missing.</p>

<u>Sustainability</u> <i>Plan for continuing the work past the grant.</i>	15 Partnership outlines structures, plans or created materials that will remain in use after work is complete. Future resources to sustain work (money, staff, other) have been positively and specifically identified.	10 Partnership outlines structures, plans or created materials that will remain use after work complete. Future resources have been tentatively identified, unconfirmed or unclear.	5 Partnership has vague outline of structures, plans or created materials that will remain in use after work is complete. Future resources are sketchily identified, if at all.	0 Partnership has no outline or plan for sustainability. Future resources are unidentified.
	15 Past efforts to improve science/math have been described and related to new work. Lessons learned are detailed. Current efforts are described and connected to new MSP work.	10 Past and current efforts are generally described with general lessons learned. Past and current connections to MSP work are mentioned but not complete.	5 Either past or current efforts are described. Connections of past and current work to MSP effort are vague or incomplete.	0 Not complete or missing significant pieces.
<u>Readiness</u> <i>Building on past work for the future.</i>				