

Kansas State Department of Education Mathematics and Science Partnerships Grants

Elementary and Secondary Education Act of 2001

Public Law 107-110

Title II, Part B



Competitive Request for Proposal (RFP)

Overview and Guidance

2016 - 2017

Partnership Applications Due:

Friday, December 9, 2016, 5:00 p.m.

Copies of this application and support materials are on the Kansas Department of Education's Mathematics website at: <http://bit.ly/KSDEMSP>

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I. Introduction and Background

In January of 2002, the No Child Left Behind Act of 2001 (NCLB) became law. Title II Part B of this legislation authorizes a Mathematics and Science Partnership (MSP) competitive grant project. The intent of this project is to encourage institutions of higher education, local school districts, elementary schools, and secondary schools to participate in professional learning activities that increase the subject matter knowledge and teaching skills of mathematics and science teachers. Professional learning activities must be sustained, intensive, classroom focused, and aligned with the Kansas College and Career Ready Standards in Mathematics and Science. These activities must result in a demonstrable and measurable improvement in student academic achievement in mathematics and science. These programs must use scientifically-based professional development as a means for improving student academic performance.

Kansas will focus on mathematics and science with priority given to those grants that incorporate both into their grant focus.

The core of these partnerships must include:

- A. high-need unified school district(s) (USD); and
- B. a mathematics, science (faculty must have strong math background), and/or engineering department of a Kansas institution of higher education (IHE); and
- C. a mathematics and/or science teacher-training department of a Kansas IHE.

Other partners may include public charter schools or other public schools, and nonprofit or for-profit organizations concerned with mathematics and science education.

The Kansas State Department of Education (KSDE) will award approximately \$1,445,445.00 for fiscal years 2017 and 2018 in Mathematics and Science Partnership funds under the Title II, Part B, of the Elementary and Secondary Education Act (ESEA), as amended by the No Child Left Behind Act of 2001 (NCLB). KSDE will award approximately 2-3 new partnership grants. The awards will range from a minimum of \$50,000 to a maximum of \$300,000. **Funding will be based the capacity and sustainability of the grant.** Grant activities may begin only after receipt of the grant approval notice. This is anticipated to be March 1, 2017. **All grant activities for the project must be completed by August 30, 2018.**

II. Timeline and Application Process

- A. An optional Bidders' webinar will be hosted on **November 18, 2016** to answer questions regarding the project and application process. Details concern time and access will be posted on the KSDE MSP webpage. This webinar will be recorded and posted on the [KSDE MSP webpage](#).
- B. All applications must be delivered to Melissa Fast at the Kansas Department of Education by **5:00 p.m. on Friday, December 9, 2016**. Faxed applications will not be accepted.
 - 1) Deliver or Mail to:
Kansas State Department of Education
Attn: Melissa Fast
900 SW Jackson Street, Suite 653
Topeka, KS 66612-1212
 - 2) To be considered, the Kansas State Department of Education (KSDE) must receive an original proposal, **two** copies, and one electronic copy by the date specified above. E-mail the electronic copy to mfast@ksde.org.
- C. December 10 – 16, 2016: Grants reviewed and given preliminary rank by external committee individually. Documents Provided: Review Instructions, Grant Program Overview For Reviewers, and Scoring Guide.
- D. December 15, 2016: Review Committee will select top applicants to be invited to share a short presentation and address clarifying questions on **January 6, 2017**.
- E. January 9, 2017 – January 20, 2017: KSDE Staff will:
 - 1) Compile review forms and recommendations
 - 2) Review applications and budgets for adherence to state and federal requirements
 - 3) Negotiate budgets with recommended applicants
 - 4) Finalize recommendations for grant awards
- F. February 14 – 15, 2017 State Board of Education will receive & act on Review Committee's recommendations for funding.
- G. March 1, 2017 Newly funded MSP Grant Projects begin.
- H. September 30, 2018:
 - 1) MSP Grant Projects Ends.
 - 2) Annual Report due to KSDE for review.
- I. September 30, 2018: Annual Report due to U.S. Department of Education.

Any questions regarding the grant program or application process may be directed to:

Melissa Fast, Math Consultant and MSP Coordinator
Kansas State Department of Education
Phone: (785) 296-3486
E-Mail: mfast@ksde.org

III. MSP Definitions and Resources

- A. **Arts & Sciences:** When referring to an organizational unit of an institution of higher education, any academic unit that offers one or more academic majors in disciplines or content areas corresponding to the academic subjects in which teachers teach; and when referring to a specific academic subject, the disciplines or content areas in which an academic major is offered by an organizational unit [*Title II, Part A, section 2102(1)*].
- B. **Evidence of Meaningful Partnerships:** Partnerships that exhibit characteristics including, but not limited to, the following:
- 1) **Sustainability:** A partnership must demonstrate an ability to maintain the targeted activities during and beyond the length of the project and a description of how the partnership will continue the activities funded under this proposal after the original grant period has expired. It is expected that each partnership will establish and continue institutes by and beyond the end of the grant period.
 - 2) **Commitment:** Evidence of active long-term planning and involvement of all partners must be documented.
 - 3) **Capacity:** Evidence of the number and quality of staff to carry out the proposed activities and the institutional resources to support the activities must also be included.
 - 4) **Meaningful Consultation and Equitable Services:** Evidence of meaningful consultation and equitable services with nonpublic schools located in the geographic attendance area of the USD participants in this proposal.
- C. **Schools in Need of Comprehensive Support:** Schools in need of comprehensive support are referred to in this document to match the most recently approved version of the Kansas the Elementary and Secondary Education Act (ESEA) Flexibility Waiver. Schools in need of comprehensive support must be by law 5% of Title I schools in the state. To determine whether or not a school qualifies projects must contact the individual school.
- D. **High Need Unified School District:** A “high need USD” is defined if it meets any of the following:
- 1) Percent of free and reduced lunch is at or above the state average of 48.58%;
 - 2) High percent of teachers who teach mathematics and/or science are not endorsed in the content area;
 - 3) High percentage of School in Need of Comprehensive Support within the district
- E. **Highly Qualified Teacher:**
- 1) When the term “highly qualified teacher” is used with respect to any public elementary school or secondary school teacher teaching in Kansas, it means that:
 - a) The teacher has obtained full Kansas certification as a teacher (including certification obtained through alternative routes to certification) or passed the Kansas teacher licensing examination, and holds a license to teach in Kansas, except that when the term is used with respect to any teacher teaching in a public charter school, the term means that the teacher meets the certification or licensing requirements set forth in the state’s public charter school law; and
 - b) The teacher has not had certification or licensure requirements waived on an emergency, temporary, or provisional basis.

- 2) When the term “highly qualified teacher” is used with respect to:
- a) An elementary school teacher who is new to the profession, it means that the teacher has met the requirements of paragraph (A) above, and;
 - Holds at least a bachelor’s degree; and
 - Has demonstrated, by passing a rigorous state test, subject knowledge and teaching skills in reading, writing, mathematics, and other areas of the basic elementary school curriculum (which may consist of passing a state-required certification or licensing test or tests in reading, writing, mathematics, and other areas of basic elementary school curriculum); or
 - b) A middle school or secondary teacher who is new to the profession, it means that the teacher has met the requirements of paragraph (A) above, holds at least a bachelor’s degree, and has demonstrated a high level of competency in each of the academic subjects in which the teacher teaches by:
 - Passing a rigorous Kansas academic subject test in each of the academic subjects in which the teacher teaches (which may consist of a passing level of performance on a Kansas-required certification or licensing test or tests in each of the academic subjects in which the teacher teaches); or
 - Successful completion, in each of the academic subjects in which the teacher teaches, of an academic major, a graduate degree, coursework equivalent to an undergraduate academic major, or advanced certification of credentialing.
- 3) When the term “highly qualified teacher” is used with respect to an elementary, middle, or secondary school teacher who is not new to the profession, it means that the teacher has met the requirements of paragraph (A) above, holds at least a bachelor’s degree, and:
- a) Has met the applicable standard in the clauses of subparagraph (B), which includes an option for a test; or
 - b) Demonstrates competence in all the academic subjects in which the teacher teaches based on a high objective uniform Kansas standard of evaluation that-
 - Is set by Kansas for both grade appropriate academic subject matter knowledge and teaching skills;
 - Is aligned with challenging Kansas academic content and student academic achievement standards and developed in consultation with core content specialists, teachers, principal, and school administrators;
 - Provides objective, coherent information about the teacher’s attainment of core content knowledge in the academic subjects in which a teacher teaches;
 - Is applied uniformly to all teachers in the same academic subject and the same grade level throughout Kansas;
 - Takes into consideration, but not be based primarily on, the time the teacher has been teaching in the academic subject;
 - Is made available to the public upon request; and
 - May involve multiple, objective measures of teacher competency [*Title IX, Part A, section 9101(23)*].

- F. **High Quality Professional Development:** The term “professional development” means instructional activities that:
- 1) Are based on scientifically-based research and state academic content standards, student academic achievement standards, and assessment;
 - 2) Improve and increase teacher’s knowledge of the academic subjects they teach;
 - 3) Enable teachers to become highly qualified; and
 - 4) Are sustained, intensive, and classroom-focused in order to have a positive and lasting impact on classroom instruction and the teacher’s performance in the classroom.
- G. **Kansas College and Career Ready Standards:**
- 1) Mathematics
 1. [Standards](#)
 2. [Progression Documents](#)
 - 2) Science
 1. [Standards](#)
 2. [The Framework for K-12 Science Education](#): identifies the key scientific ideas and practices all students should learn by the end of high school; it is the research base that underpins the standards.
- H. **Open Education Resources (OER):** teaching and learning materials that reside in the public domain or have been released under an open license.
- 1) [Creative Commons Attribution International 4.0 \(CC BY 4.0\) License](#): type of license that details how developed OER can be shared and adapted using a Creative Commons license.
- I. **Purpose of Part B – Mathematics and/or Science:** The purpose as defined by the Kansas State Department of Education (KSDE) is for K-12 mathematics and/or science to improve the academic achievement of students by encouraging institutions of higher education, local education agencies, elementary schools, and secondary schools to participate in programs that:
- 1) Improve and upgrade the status and stature of mathematics and/or science teaching by encouraging institutions of higher education to assume greater responsibility for improving mathematics and/or science teacher education through the establishment of a comprehensive, integrated system of recruiting, training, and advising mathematics and/or science teachers.
 - 2) Focus on the education of mathematics and/or science teachers as a career-long process that continuously stimulates teachers’ intellectual growth and upgrades teachers’ knowledge and skills.
 - 3) **Bring mathematics and/or science teachers in elementary, middle and secondary schools together with scientists, mathematicians, or engineers** to increase subject matter knowledge of mathematics and/or science and improve such teachers’ teaching skills through the use of sophisticated laboratory equipment and workspace, computing facilities, libraries, and other resources that institutions of higher education are better able to provide than K-12 schools.
 - 4) Develop more rigorous mathematics and/or science curricula that are aligned with challenging KSDE and local academic content standards and with the standards expected for postsecondary study in mathematics, science, and engineering.

- 5) To improve and expand training of mathematics and/or science teachers, including training such teachers in the effective integration of technology into curricula and instruction.

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

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

K. **STEM:** The abbreviation means Science, Technology, Engineering, and Mathematics.

L. **SUMMER INSTITUTE**

The term “summer institute” means a program during the summer, that

- 1) Is conducted for a period of not less than 2 weeks, (with an average of six hours of instruction per day for ten days); If virtual learning is implemented each school impacted must be identified, justification for virtual learning over preferred in person professional training must be provided, and an explanation as to how the virtual learning will maintain the same impact and effectiveness as that delivered in person.
- 2) Includes, as a component, a program that provides direct interaction between teachers and IHE mathematics, science (faculty must have a strong math background), and/or engineering department faculty; and
- 3) Provides for not less than four separate days of follow-up training during the academic year for each teacher in the partnership. If the follow-up training is for teachers in rural school districts, the follow-up training may be conducted through distance learning. If there are only four days of follow-up training:
 - a) One of the four days may be a professional development activity outside the classroom, at least 6 hours in length (individual teachers or with a group of teachers in the partnership)
 - b) At least three of the four days must be a professional development activity involving an observation of one teacher’s classroom by project staff for an entire mathematics and/or science lesson and a follow up discussion about the observation.

IV. Project Description

A. Purpose:

The purpose of this project is to improve the academic achievement of students in the areas of mathematics and/or science, and upgrade the status and stature of mathematics and science teaching, by encouraging state educational agencies, institutions of higher education, local educational agencies, elementary schools, and/or secondary schools to partner in implementing high-quality professional learning projects that:

- 1) Improve and upgrade the status and stature of mathematics and/or science teaching of the Kansas College and Career Ready Standards in Mathematics and Science 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 training and coaching mathematics and science teachers;
- 2) Improve and enhance the abilities of teachers of mathematics and/or science to use the processes of scientific investigation and inquiry to build their own content knowledge and abilities;
- 3) Support partnerships that increase the subject matter knowledge and teaching skills of K-12 teachers of mathematics and/or science. Partnerships will bring together teachers with higher education mathematicians, scientists, and/or engineers to expand teachers' subject matter knowledge of mathematics and/or science teaching.
- 4) Focus on the education of mathematics and/or science teachers as a career-long process that continuously stimulates teachers' intellectual growth and enhances teachers' knowledge and skills; Partnerships will provide opportunities for advanced and ongoing professional development activities that improve K-12 teachers' subject matter knowledge and knowledge of how students learn particular content. Partnerships will also provide teachers with the opportunity to work with experienced teachers and disciplinary higher education faculty in mathematics, science, and/or engineering.
- 5) Provide sustained professional development that is collaborative and reflective, and supports teachers through follow-up activities and classroom mentoring and coaching.
- 6) Implement rigorous mathematics and/or science curriculum that is aligned with the Kansas College and Career Ready Standards for Mathematics and/or Kansas College and Career Ready Standards for Science and local academic content standards.
- 7) Improve and expand training of mathematics and/or science teachers, including training such teachers in the effective integration of technology into curricula and instruction.
- 8) Support the rigorous evaluation of programs regarding the impact of Kansas Title II, Part B, MSP awards on the academic achievement of students of teachers in these programs, and ensure the results are widely accessible through electronic means.
- 9) Develop ongoing relationships with business and industry organizations concerned with mathematics and science education through the means of activities such as: internships, job shadowing, etc.

B. State of Kansas Priority: Mathematics and/or Science Teachers

Based on an analysis of student achievement data, teacher quality data, and revision of Kansas College and Career Ready Standards for Mathematics and Kansas College and Career Ready Standards for Science, the MSP program will support grant applications that target either grade K-8 mathematics and/or science teachers or grade 6–12 mathematics and/or science teachers.

An applicant may choose to target a subset of either group. An applicant may also include some

teachers from the non-targeted grade level, but the number shall not exceed 10% of the participants. Special education and English as Second Language (ESL) Teachers, who teach mathematics and/or science, may also be included.

Projects will identify one of three areas for their project focus: Mathematics, Science or a combination of mathematics and Science. **Priority will be given to those grants that incorporate both math and science into their grant focus.** KSDE's MSP priorities for each area are focused on supporting educators and students in quality instruction and learning that supports career- and college-ready learning standards. Projects are encouraged to include an administrative leadership component to support school and district ownership and ongoing sustainability of projects.

1) **Mathematics**

With the adoption and implementation of the Kansas College and Career Ready Standards for Mathematics (KCCSRM) in 2010; there is an opportunity to strengthen and target professional learning for teachers that focuses on solid learning of the mathematics standards, integration of the key shifts within instruction, and that shifts instructional practices to foster a classroom culture of reasoning and discourse. All MSP mathematics projects must focus on increasing teachers' understanding of mathematical content and pedagogical content knowledge in order to support educators to make these shifts in pedagogy and to align curriculum and instruction in their classrooms.

MSP mathematics professional learning programs should include:

- a) Integration of mathematics content and Standards for Mathematical Practice supported through experiences that engage teachers as learners in specific content and practices. A successful MSP project provides opportunities for mathematics educators to engage with both the KCCSRM content and the KCCSRM practices in a focused, integrated way;
- b) Opportunities for teachers to deepen their understanding of specific mathematical content with an emphasis on making sense of the mathematics (conceptual understanding and connections between concepts and mathematical procedures) and the progression of learning in the grades before and after the grade level they teach, and within their grade level, as described in the [Progressions Documents](#);
- c) Emphasis on developing classroom instructional practices that support the three shifts within the mathematics standards: Focus, Coherence, and Rigor;
- d) A focus on equity with the conviction that all students can learn the mathematics deeply, and that instruction should include research-based, culturally responsive strategies that support students of all backgrounds and abilities;
- e) Professional learning programs that strengthen the teaching and learning of mathematics in all classrooms, focusing on the following Mathematics Teaching Practices:
 - Establish mathematics goals to focus learning
 - Implement tasks that promote reasoning & problem solving.
 - Use and connect mathematical representations
 - Facilitate meaningful mathematical discourse
 - Pose purposeful questions
 - Build procedural fluency from conceptual understanding
 - Support productive struggle in learning mathematics

- Elicit and use evidence of student thinking

2) **Science**

With the adoption and implementation of the Kansas College and Career Ready Standards for Science (KCCRSS) in 2013, there is an opportunity to strengthen and target professional learning for teachers that focuses on solid learning of science standards, and that supports implementation of the new science standards across grades K-12.

The focus of MSP projects should reflect a systemic approach for transitioning to and implementing the KCCRSS and [The Framework for K12 Science Education](#), including an ongoing collaboration of ideas, resources, and lessons learned.

MSP elementary level professional learning programs should include:

- a) Providing opportunities for teachers to deepen content knowledge related to practice and grounded in research on how students learn science;
- b) Using the EQuIP rubric to help teachers better select, refine, build, and implement three dimensional lessons in their classrooms;
- c) Using the science and engineering practices as key leverage points for student access to science and engineering focusing on equity and strategies that are research based, relevant, culturally responsive, and inclusive in their support of all backgrounds and abilities;
- d) Supporting teachers to build student proficiency in all three dimensions of the KCCRSS throughout the year; and
- e) Developing tools and/or refining professional learning for existing tools that support MSP priorities and explicitly support cross-content connections.

MSP secondary level professional learning programs should include:

- a) Providing opportunities for teachers to deepen content knowledge related to practice and grounded in research on how students learn science;
- b) Using the EQuIP rubric to help teachers better select, refine, build, and implement three dimensional lessons in their classrooms;
- c) Making explicit connections across content standards, including: KCCRS-ELA Technical Reading and Writing in Science, KCCRSM Connections as indicated in the KCCRSS;
- d) Using the science and engineering practices as key leverage points for student access to science and engineering focusing on equity and strategies that are research based, relevant, culturally responsive, and inclusive in their support of all backgrounds and abilities;
- e) Supporting teachers to build student proficiency in all three dimensions of the KCCRSS throughout the year and across years in their school
- f) Developing tools and/or refining professional learning for existing tools that support MSP priorities and explicitly support cross-content connections; and
- g) Developing a systemic approach to professional learning using contextualized lessons.

V. Key Project Components

A. Partnerships

Collaboration among partners is an important and required aspect of all funded MSP proposals. A keystone of the MSP program is creating and maintaining strong partnerships with institutions of higher education, districts, private schools, industry entities, external evaluators, and educational organizations. Evaluators are required in each project and serve as an objective collaborator with the partnership regarding issues of planning, executing, and reporting on findings; it is encouraged to involve the evaluator as a working member of the project team from the earliest stages of proposal development through the completion of a final cumulative report. Eligible projects must include identified required partners and one must be identified as the Lead Partner. The Lead Partner identifies a project director from this organization and submits the MSP proposal on behalf of the partnership. The Lead Partner accepts management and fiduciary responsibility for the project. Additional partners are optional. Either a high need unified school district or a Kansas institution of higher education may submit an application.

1) **Required Partners (Must have all three):**

- a) **Institution of Higher Education (IHE)**-- A science, math or engineering department of an accredited two–or four–year college or university.
- b) **Institution of Higher Education (IHE)** (See Appendix H Table 2 for a list of eligible institutions): -- A mathematics and/or science teacher-training department of an accredited two–or four–year college or university.
- c) **High Need Lead Education Agency (LEA)**-- A “high need USD” is defined if it meets any of the following (See Appendix H Table 1 for a list of eligible schools):
 - Percent of free and reduced lunch is at or above the state average of 49.32 percent;
 - High percent of teachers who teach mathematics and/or science are not endorsed in the content area;
 - High percentage of Schools in Need of Comprehensive Support.

2) **Additional Partners –Optional:**

- a. Additional local education agencies, public charter schools, public or private schools, or a consortium of such schools;
- b. Additional math, science or engineering department within an accredited institution of higher education (IHE).
- c. Additional education department of the same or another institution of higher education (IHE)
- d. **Priority will be given to projects that incorporate multiple institutes of higher education and multiple high need school districts.**
- e. A nonprofit or for–profit organization with demonstrated effectiveness in improving the quality of math and/or science teachers.
- f. Industry or business partnerships.
- g. Industry partners are strongly encouraged as they support connections between content and applications of the content within local industries. Industry partnerships also support K-12 students towards Career and College readiness as teachers integrate the content applications within mathematics and/or science courses and curricula.

B. Content Based Professional Learning

1) Teachers

The foundation of the federal MSP program is demonstration of positive impact of deepening teachers' content knowledge to support quality instructional practices. Successful MSP projects will focus on using professional learning opportunities and materials that explicitly address the mathematics content and practices of KCCRS and the three dimensions of KCCRS. Successful projects will provide professional learning experiences that support shifts in instructional practice as teachers deepen their understanding of important math and or science content consistent with KCCSM and KCCRS.

One of the main reasons that maximum funding has been increased is to allow projects to employ a person who is experienced and highly qualified in mathematics to work directly with classroom teachers throughout the year. **Priority will be given to projects that include a person who will work directly with classroom teachers to improve their mathematical and/or scientific knowledge and teaching skills.** That proportion of the person's time paid for by the grant must be directly related to this activity.

Teacher professional learning within funded MSP programs will:

- a) Focus on science and mathematics content knowledge that teachers need for effective instruction, assessment, and evaluation;
- b) Emphasize research-based instructional practices that support the content shifts of KCCSM and KCCRS.
- c) The application must include a plan for any non-highly qualified participants to become highly qualified.
- d) Increase student learning and opportunities for students to engage in math and science that promote reasoning and integrate the mathematics content and practices of KCCRS and/or science content and practices of KCCRS.
- e) Ensure a program design that supports the longevity of professional learning over the full, 18 month grant period for **all** teachers.
- f) Collaboration opportunities for teachers (e.g. PLCs, virtual meetings, online blogging, classroom observations of colleagues) to support ongoing learning, reflection and implementation of learning within project workshops
- g) Each project will be required to incorporate a 2-week summer institute combined with 4 days of follow-up during the academic year:
 - 2 week summer institute:
 - ✓ A program during the summer, that is conducted for a period of not less than 2 weeks, (with an average of six hours of **interactive** instruction per day for ten days); and
 - ✓ Includes, as a component, a program that provides **direct interaction** between teachers and **IHE mathematics** and/or **science** (faculty must have a strong math background), and/or **engineering department faculty**.
 - Four Day Follow-up
 - ✓ Activities that provide learning experiences on at least four separate days during the academic year for each teacher in the partnership. If

the follow-up training is for teachers in rural school districts, the follow-up training may be conducted through distance learning.

- ✓ If there are only four days of follow-up training:
 - One of the four days may be a professional development activity outside the classroom of at least 6 hours in length (individual teachers or with a group of teachers in the partnership)
 - At least three of the four days must be a professional development activity involving an observation of one teacher's classroom by project staff for an entire math lesson and a follow up discussion about the observation.
- h) Identify participating teachers by asking them to apply to be involved in the project to ensure their 18 month commitment, apply what they learn in the professional learning opportunities to change their instructional practices, work collaboratively with colleagues in a cycle of ongoing learning and improvement.

2) **District and School Leadership**

While not a required component of the federal MSP project, Kansas State MSP projects are strongly encouraged to include building and district administrator participation in project activities. Administrator involvement demonstrates a commitment to engagement among with district and school leadership and MSP participating teachers to ensure continuity and alignment of project activities and sustainability of project outcomes. Project partners are encouraged to build relationships and collaborate with building leadership to ensure the MSP professional learning supports existing professional learning initiatives. Successful MSP projects have fostered support from district and school leadership to create and sustain school structures, culture, and environments supportive of the implementation and sustainability of the project.

MSP project expectations for school and district leadership:

- a) Collaborate with the MSP project team to ensure there is a clear understanding about how the work of the MSP grant will align with and support the district and school's implementation plan for KCCSM and KCCRSS;
- b) Participate in periodic meetings throughout the school year to evaluate the project and analyze MSP data to help inform successful practices and identify challenges to address;
- c) Commit to involvement in the MSP project and collaboration with the project team to develop a long-term plan for sustained professional learning and continuation of the project beyond funding; and
- d) Establish structures that support collaboration between classroom teachers and administrators characterized by regular opportunities and expectations for conversations centered around student learning and reflective inquiry on instructional practice.

Administrator participation in MSP activities, such as teacher workshops, classroom observations, and PLCs, support strong and engaged leadership as described above. MSP funds through this RFP can pay for travel and other costs for administrators to attend any activities that participating teachers attend (such as MSP professional learning workshops), but can only pay stipends for time worked outside of regular work hours. MSP funds cannot pay for

workshops or meetings specifically for administrators, or other instructional leadership activities during the regular work day (such as classroom observations). If MSP projects plan to support administrator involvement, the MSP Budget Narrative and Project Plan should clearly outline how administrators will be involved in the project. **Additional points will be awarded for administrator involvement.**

C. **Theory of Action**

Proposals should provide a Theory of Action (TOA) that supports their project design and is informed by recent research and studies on teaching and learning. This research base should provide a rationale for the chosen professional learning framework and activities and demonstrate a succinct pathway of how the chosen professional learning model will have an impact on student achievement in mathematics and science. The TOA can be revised throughout the project and should support district efforts around implementation of the KCCSM and KCCRSS.

D. **Sustainability Plan**

A key component to lasting, significant change in instructional practices is intensive and sustained professional learning. MSP projects should be intentionally designed to support a 18 month professional learning cycle critical for sustained improvement. The MSP projects will invest a considerable amount of time and money within participating schools and with participating teachers and it is expected that the MSP investments have an ongoing impact on participants' instructional practice beyond the end of grant funding.

Proposals should include a Sustainability Plan, which is section H of the RFP. Throughout the project, funded projects will create, update and revise the plan for the duration of project. The Sustainability Plan should include details on sustaining project activities beyond the end of grant funding, building capacity for reaching additional teachers in the school, and/or district and creating Open Educational Resource (OER) resources and materials to support replicating aspects of the professional learning in other districts throughout Kansas. MSP program managers will review and provide feedback and technical assistance periodically on the sustainability plans.

E. **Project Website**

Funded MSP projects will be required to create a project website within the **six months** of the project to communicate and disseminate partnership activities, successes, learnings, and professional development materials. This online resource library/website will be an avenue to disseminate materials created and used with MSP funds. This resource library/website must be updated **monthly** and have open access. KSDE will post the link on the MSP webpage. Examples of quality websites from previous MSP projects: STEM-IT <http://www.stem-it.org/> and Northwest Assessing with Learning Progressions in Science (NW ALPS) <https://www.nwesd.org/nwalps>.

F. **Professional Learning Materials – Open Educational Resources, Access, and Licensing**

Resources produced with the Kansas MSP grant are considered Open Educational Resources (OER) and will be licensed under the Creative Commons Attribution International 4.0 (CC BY 4.0) License. All derivative works made from others' existing OER must follow the terms of the open license on those works. Previously copyrighted materials that are incorporated into the materials produced or delivered for this project will remain copyrighted by the original owner.

Projects should expect to share copies of professional development materials and resources throughout the project duration with KSDE leadership. KSDE will conduct periodic reviews of materials, collaborate with the project team, and provide peer reviews to ensure resources are complete and able to be replicated in other districts or schools. Upon completion of the MSP project, all materials and resources developed by the project must be sent to KSDE.

VI. Previous MSP Grantees

MSP grant grantees that have previously received MSP program funding from KSDE between 2008—2016 must explain how this proposed project differs from, builds on, and is informed by the prior project by responding to the questions in *Appendix E: Previous MSP Grantees*. Previous MSP Grantees are those who are replicating the work with new partners or continuing to build on the work with the same partners. Explanation should describe the previous MSP project's goals and evidence of impact on reaching those goals including qualitative and quantitative data clearly showing evidence of progress and impact towards goals. Previous grantees will be expected to reflect on specific challenges experienced in previous projects and how those challenges would be mitigated with this new project (including, but not limited to recruitment and/or attrition of participants, partnership relationships, change in leadership). This information will be reviewed using the *Reviewer Look-fors and Comments for Previous MSP Grantees* section of the *Scoring Rubric* and be used to provide context for reviewers and the KSDE MSP leadership team.

VII. Needs Assessment and Goals

MSP projects must ensure the focus of their project addresses identified needs within the participating schools. Goals and objectives for proposal must be based on the results of a needs assessment that identifies gaps and needs pertaining to mathematics and/or science.

Each proposal is required to include a needs assessment that consists of the following components:

A. Audience

The needs assessment should include various stakeholders, such as district personnel, participating school principal and other school administrative/leadership staff, teachers, students, parents, local industry, and community members who will be involved in the project. There must be evidence of teacher and student voices identifying their needs and how the proposed project will help support those needs.

- 1) **Teacher Needs** - The needs assessment should provide data to show specific gaps or needs in teacher mathematics and/or science knowledge to be addressed by the proposed MSP Project. Actual needs must be identified in the grant application. A plan to do so is not adequate. It is recommended that this analysis take into account the changing content knowledge needs of teachers making the transition to the Kansas College and Career Ready Standards for Mathematics and/or Kansas College and Career Ready Standards for Science.
- 2) **Student Needs** - The needs assessment should provide data to show specific gaps or needs in student mathematics and/or science knowledge and achievement to be addressed by the

proposed MSP Project. Actual needs must be identified in the grant application. A plan to do so is not adequate.

B. Identified Need

- 1) Opportunity gaps for students of special populations
- 2) Limited access to or recipient of quality math and science professional learning
- 3) Limited access to or recipient of quality KCCSRM and/or KCCRSS professional learning
- 4) Low student achievement in math and/or science
- 5) Evidence of district commitment and initiatives focusing on student achievement in math and science
- 6) Identification of rural schools that have received limited professional learning opportunities

C. Equity

The needs assessment should provide data to show where the gap exists and how the project will target students identified as being underserved to help to reduce the opportunity gap. Evidence of how the project will support equitable access to high-quality professional learning opportunities should be addressed to ensure equity of participation across the state and regions, attending to support of teachers in small rural schools.

D. Highly Qualified

The needs assessment should provide data to include the number of mathematics and/or science teachers in these districts who do not meet the KSDE's definition of a highly qualified teacher.

E. Special Circumstances

Provide any information that describes unique and special circumstances. Examples include high poverty, large minority population, or large English Learner population.

F. Goals

Write goals to address the identified needs in increasing (A) teacher content knowledge and improving (B) student achievement.

G. School Data

The needs assessment must include various measures (as determined by project partners) of school and district data to provide evidence of the identified needs of the schools. State test scores **must** be one of a variety of measures.

VIII. Private Schools Consultation

Consultation between public school districts and private schools is required by NCLB before any decision is made that affects the opportunities of eligible private school students and teachers to participate. The consultation must be timely and meaningful. Title I, Part A, requires written confirmation of consultation. New requirements have expanded Title I, Part A, consultation topics to include professional development. If a partnership includes districts with private schools within their boundaries, then the partnership must consult with private school officials regarding the participation of private school teachers in MSP professional development opportunities. This must be done during the planning stages of the application.

IX. **Accountability, Evaluation, and Communication**

1) **Accountability**

During the grant period, KSDE will conduct site visits to summer workshops, school year workshops, and classroom visitations, to ensure alignment to project goals and success of project activities. Project leads will be notified of visits in advance. Site visit debriefs will be scheduled soon after the visit to provide reflection and feedback from the visitation. Projects will also have periodic formal check-ins, as well as informal conversations with project team members throughout the project. Suggestions given during these debriefs/check-ins regarding stronger alignment to project and MSP goals should be evident in future site visits.

Projects will be expected to complete a Continuation Application each year for approval of continued funding. Funds are never guaranteed and are based upon successful adherence to project and MSP goals, responsiveness of reporting, and available funding from the federal government.

2) **Evaluation**

MSP Partnerships are required to hire an evaluator. The evaluator can be an organization or an individual and must be selected to be an objective collaborator with the partnership regarding issues of planning, executing, and reporting on findings from both formative and summative evaluations of the program. The evaluator must be a working member of the project team from the earliest stages of proposal development through the completion of a final cumulative report. The evaluator shall develop an evaluation and accountability plan that includes alignment to the project's Theory of Action and objectives that measure the impact of activities using an experimental design as outlined in the USDoE [A Guide for Reporting on Rigorous Evaluations](#). The evaluation plan serves both formative and summative functions; it should include measurable objectives and identify the multiple measures to be used to show an improvement in student academic achievement and an increase in teacher content knowledge and shifts in instructional practices given their participation in content-based professional development activities.

3) **Communication**

It is the responsibility of the project leads to communicate with KSDE the dates, place, and times of all professional learning activities soon after the dates have been finalized by the project team. MSP projects are expected to respond to requests from KSDE in a timely manner, for quarterly budget actual reports, sustainability plans, etc. Projects are expected to communicate with KSDE regarding any significant changes to the project such as change in team members, request to change budget allocations, change in professional development plans, etc.

MSP projects may be asked to accommodate visitations from education and/or government officials. Projects may be asked to support creation of informational documents to highlight impact of the MSP project, provide interviews, writing articles for publication, etc. to build visibility and support for MSP projects and funding.

MSP projects should consider how they will create awareness and exposure to the project and impact of the project to participating districts and non-participating districts in the region, to school board members, parents, the community and local industry.

X. Reporting Requirements

MSP partnerships will be expected to complete the following reports each year. These reports will identify the project's progress in meeting the objectives and targets described in the MSP partnership's evaluation plan. Failure to complete and submit these reports on time could result in projects losing their funding.

A. Annual Performance Report

Annual Performance Report (APR) to be submitted to Department Of Education through the MSP website at the project's yearly reporting date. The Grantee will use the reporting procedures established by the US DoE. APR deadlines are hard deadlines and no extensions will be granted.

B. Continuation Application

Projects must complete and submit a continuation application set deadlines to receive approval for the next year's funding.

C. End of Year Expense Report

Projects must complete and submit end of the year expenses reports to verify where funds were spent.

D. Request for Budget Revision

Any change in budget allocation over \$1,000 requires a budget revision form to be submitted for approval by the set deadlines.

XI. Fiscal

1) Budget and Budget Narrative

The partnership budget must reflect the goals and objectives of the overall project and should align with the proposed work plan. Partnerships must complete a budget with supporting narrative for each identified expenditure, for the entire proposed project, that identifies costs for each year of the grant. The estimated cost in each budget category must be commensurate with the proposed activities. The amounts requested in each line item must be documented and justified in the budget narrative. This budget and supporting narrative are subject to KSDE approval.

2) Uses of Funds

- 1) A partnership **shall use** funds provided for the following activities:
 - a) Develop and implement a **content-focused** mathematics and/or science 2-week summer institute for teachers of grades K-8 or 6-12;
 - b) Develop on Open Educational Resource (OER) online site to share project plan, resources (PowerPoints, lesson plans, agendas, training protocols, etc.) to deliver said plan, and all results from the project.

- c) Create opportunities for enhanced and ongoing professional development of mathematics and/or science teachers that improves the subject matter knowledge of such teachers;
 - d) Provide follow-up training throughout the year to the institute’s mathematics and/or science teachers that shall:
 - Directly relate to the curriculum and academic areas in which each teacher provides instruction, and focuses only secondarily on pedagogy;
 - Enhance the ability of each teacher to understand and use the Kansas College and Career Ready Standards for Mathematics and/or Kansas College and Career Ready Standards for Science and to select appropriate curricula;
 - Train each teacher to use curricula that are based on scientifically-based research and aligned with the Kansas College and Career Ready Standards for Mathematics and/or Kansas College and Career Ready Standards for Science;
 - Provide on a regular basis in-class mentoring and coaching to enhance and support regional and summer workshop or institute professional development experiences.
- 2) A partnership **shall not** use funds for the following activities:
- a) To supplant funds that would otherwise be used for activities authorized under the MSP program;
 - b) Purchase of material for student use, (one example of classroom material may be purchased for each teacher in the program for training purposes);
 - c) Supporting travel to out-of-state professional meetings/conferences (other than the USDOE Mathematics and Science Partnership meetings and/or conferences).
 - d) Acquisition of real property or for construction.

Teacher or classroom materials, supplies, and equipment purchased with project funds remain the property of the partner school district(s) unless the fiscal agent is an IHE and a plan is included and approved as a part of the application for their use in future training of math educators.

- 3) **Indirect Costs:**
 If the fiscal agent is an IHE, the rate may not exceed 8%. If the fiscal agent is a USD, the rate must not exceed the rate approved by KSDE. (Indirect cost rates change each year; for the latest rate go to: <http://bit.ly/KSDEIndirectCostRates>.)

XII. MSP Partnership Selection

A. Review Process

Proposals will be reviewed by staff for completeness and compliance with the requirements set forth in Title II, Part B, of No Child Left Behind (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 KSDE, a proposal is late, significantly incomplete, or an applicant cannot establish eligibility, the proposal will be omitted

from the competition. The decision of KSDE is final. Applicants submitting proposals that are withdrawn due to incompleteness or ineligibility will be notified in writing.

An expert review panel (Grant Review Committee) will evaluate eligible applications in light of the required application components and the established criteria. The Grant Review Committee will review each eligible application and make recommendations to KSDE. The programmatic review and scoring of each proposal will be based on criteria designed to support high-quality professional development.

An objective review panel will evaluate eligible proposals using the established criteria reflected in the scoring rubric. Each proposal will be scored by multiple reviewers utilizing several rounds of review. The review panel will review each eligible proposal and select applicants who will be invited to the next round of review, which will include a short presentation and clarifying questions. Following the second review, reviewers will consider multiple factors, such as: reviewer scores, comments, and recommendations; proposal components (e.g. budgets and other components); finalist presentations; questions raised about the project; and geographic distribution of projects, to determine awards and level of funding. KSDE reserves the right to ask clarifying questions and reject proposals as a result of this process.

KSDE staff will contact the project director of awarded projects to discuss any modifications of the project plan and/or budget that may be required. In order to maximize the effects of limited funds, projects may be asked to revise the project budget and/or scope of work. Recommended projects not needing revisions and projects making satisfactory revisions will be recommended to the State Board of Education for funding.

The Kansas State Board will make the final decision for awarding grants. Consideration is based upon the following criteria:

- Final score assigned each proposal by the Grant Review Committee
- A cost-effectiveness ratio determined by the relationship between the number of teachers served, the actual amount of teacher-faculty instructional contact time, and the total cost of the Project
-

B. Proposal Review Components

Review Category	Possible Points
Demonstration of Need and Research Base	40
Alignment of Goals/Objectives with Professional Learning Needs	24
Efficacy of Plan	24
Evaluation and Accountability Plan	30
Commitment and Capacity of Partnership	24
Budget and Cost Effectiveness	30
Priority Scoring Points	35
Previous MSP Grantee Comments	unscored
Final Score:	207

