Illinois State Board of Education

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James T. Meeks
Chairman

Christopher A. Koch, Ed.D.
State Superintendent of Education

TO: Eligible Applicants

FROM: Christopher A. Koch, Ed.D.
State Superintendent of Education

DATE: February 13, 2015

SUBJECT: **REQUEST FOR PROPOSALS (RFP):** Illinois Mathematics and Science Partnerships (IMSP) Illinois Science, Technology, Engineering, and Mathematics (STEM) Network (I-STEM Network) Area Partnership Program (AP)

General Information

Eligible Applicants:

Area Partnerships (AP)
An eligible applicant for I-STEM Network Area Partnership Program (AP) includes (1) an engineering or mathematics institution of higher education (IHE); (2) a high-need local education agency (LEA); (3) a Regional Office of Education (ROE)/Intermediate Service Center (ISC); and (4) a business/industry/nonprofit (BIN) or for-profit organization with demonstrated effectiveness in improving the quality of mathematics teachers. This is a minimum requirement. The proposed partnership may include multiple IHEs, including schools of education; multiple ROEs/ISCs; additional LEAs; and additional BIN or for-profit organizations.

Federal legislation allows the state to designate which entity will serve as the fiscal agent. The ROE/ISC from the funded eligible partnership will be named as the fiscal agent. The fiscal agent for the I-STEM Network Lead Partnership is not eligible to be a fiscal agent for an AP. A partnership proposing to serve Chicago Public Schools (CPS) exclusively does not need an ROE/ISC partner, and as a result, can select another fiscal agent.

Content Designation
Proposed APs must designate a content focus of mathematics or science within their proposal. In the I-STEM Network Area Partnership Program, these partnerships will be known as Mathematics Area Partnerships (MAP) or Science Area Partnerships (SAP).

Area Model
The I-STEM Network will utilize the Areas designated by ISBE and the ROEs/ISCs. As a result, all entities represented in the partnership must be located within the same Area. (See Appendix F for the Area Map.) Furthermore, a partnership both as a whole, as well as its individual entities (IHE, ROEs/ISC, LEA, and BIN or for-profit organization), may only be awarded one (1) Science Area Partnership (SAP) and one (1) Mathematics Area Partnership (MAP) in response to this RFP (except partnerships proposing to serve Chicago Public Schools exclusively).

Grant Award: The anticipated grant to be awarded to each Area Partnership in each year of the grant period may not exceed $250,000 ($750,000 total over a three-year period).

Grant Period: The initial grant period will begin no earlier than April 1, 2015, and will extend from the execution date of the grant agreement until September 30, 2015. Funding will be available via continuing application for two additional fiscal years (i.e., FY 2016 {October 1, 2015, through September 30, 2016} and FY 2017 {October 1, 2016, through September 30, 2017}) contingent upon a sufficient appropriation for the program and satisfactory progress of the grantee in the preceding grant period.

Letter of Intent: Eligible applicants are required to submit a nonbinding letter of intent in order to be eligible to participate in this grant competition. A template for the letter of intent is provided as Attachment 11 and should be submitted electronically to Tara Bell at tbell@isbe.net no later than **Wednesday, March 18, 2015, at 5:00 PM CDT.**

Application Deadline: Mail the original application and two (2) copies and provide an electronic copy on a compact disc (CD) or flash drive to the *Illinois State Board of Education, 100 North First Street, C-215, Springfield, Illinois 62777-0001, Attn: Tara Bell, Illinois Mathematics and Science Partnerships*, to ensure receipt no later than **Wednesday, April 1, 2015, at 5:00 PM CDT**. ***If a partnership prefers to hand deliver their proposal, they may do so at either the ISBE Chicago office or the ISBE Springfield office in accordance with the deadline.*** The original, two (2) copies, and an electronic copy on a compact disc (CD) or flash drive must be received by the due date in order for the proposal to be considered. No late proposals, facsimile proposals, or electronic proposals will be accepted. Substantially incomplete proposals will not be considered for funding.

I-STEM Network Area Partnership Webinar and Online Bidder's Forum: An I-STEM Network Area Partnership Program webinar will take place on **Tuesday, March 3, 2015** at 11:00 AM CDT. Reserve your Webinar seat now at https://attendee.gotowebinar.com/register/3862288943590923266

An online bidder's forum about this RFP is available at http://www.isbe.net/career/html/msp.htm. All questions and answers will remain on the electronic forum until **April 1, 2015**. Applicants are encouraged to review the information posted on the forum before submitting their proposals.

Should the conditions of this RFP change prior to the deadline for submission of proposals; the Illinois State Board of Education (ISBE) will post the changes at http://www.isbe.net/career/html/msp.htm.

Contact Person: For more information about this RFP, contact Tara Bell at (217) 524-4832 or by email at tbell@isbe.net.

Background

The state of Illinois has new learning standards for science and mathematics. In 2010, Illinois joined more than 40 states in a collaborative effort to revise learning standards and improve college and career readiness for all students with adoption of the Common Core State Standards (CCSS) in mathematics and English language arts. Referred to as the New Illinois Learning Standards (New ILS), they establish clear expectations regarding what students should learn in K-12 mathematics.

In February 2014, ISBE adopted the Next Generation Science Standards (NGSS), referred to as the New Illinois Learning Standards in Science (New ILS). The timeline of full implementation occurs during the 2016-17 school year. The New ILS presents a new vision for K-12 science education that includes disciplinary core ideas, cross-cutting concepts, and scientific and engineering practices.

Title II, Part B, Sections 2201-2203, of the Elementary and Secondary Education Act (ESEA) authorizes the Mathematics and Science Partnerships (MSP) program as a means to improve teacher quality in these respective curricular areas. The purpose of the program is to increase the academic achievement of students in mathematics and science by enhancing the content knowledge and teaching skills of classroom teachers. The U.S. Department of Education (ED) provides relevant information about this program at http://www.ed.gov/programs/mathsci/index.html.

The federal legislation identifies five criteria to support the purpose of the MSP program. The purpose of the program is to improve the academic achievement of students in the areas of mathematics and science by encouraging state education agencies (SEAs), IHEs, LEAs, elementary schools, and secondary schools to participate in programs that:

1. improve and upgrade the status and stature of mathematics and science teaching by encouraging IHEs to assume greater responsibility for improving mathematics and science teacher education through the establishment of a comprehensive, integrated system of recruiting, training, and advising mathematics and science teachers;
2. 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;
3. bring mathematics and science teachers in elementary schools and secondary schools together with scientists, mathematicians, and engineers to increase the subject matter knowledge of mathematics and science teachers and improve these teachers' skills through the use of sophisticated laboratory equipment and work space, computing facilities, libraries, and other resources that IHEs are better able to provide than the elementary schools and secondary schools;
4. 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; and
5. improve and expand training of mathematics and science teachers, including training teachers in the effective integration of technology into curricula and instruction.

The Illinois Mathematics and Science Partnerships Program (IMSP) has provided innovative, high-quality professional development opportunities for K-12 math and science teachers since 2005. IMSP has utilized two different models for delivery of services to teachers over the years: a graduate school model in which cohorts of teachers earned a master's degree in teaching mathematics or science and a Workshop Institute Program (WIP), which consists of an 80-hour summer workshop followed by institutes during the school year with a focus on implementation. To date, there have been five rounds

of WIP. The fourth round (WIP4), which began in January 2012, focused on developing an understanding of the New ILS for mathematics for grades 6-12. The most recent grant (WIP5), which began January 1, 2013, provided professional development activities for teachers in grades 6-12 to assist with implementation of the New ILS.

Federal MSP legislation requires an engineering, mathematics, or science department of an IHE and a high-need LEA as the core entities comprising a partnership. However, multiple LEAs comprising the entire K-12 spectrum are also allowed. Additional entities are allowed and described at http://www2.ed.gov/policy/elsec/leg/esea02/pg26.html. Beginning in 2012, IMSP projects were required to include a business/industry/nonprofit (BIN) or for-profit entity as a partner. The purpose of this enhanced partnership was to engage stakeholders in supporting math and science teachers by providing access to greater field-based resources, as well as access to professionals engaged in industry. Teachers collaborating with BIN or for-profit partners can lead to opportunities for students to learn more about the skills necessary to be college- and career-ready. In addition, BIN and for-profit entities must also benefit from the partnership. Though the value of participation in the partnership may not be immediate, BIN and for-profit organizations should experience increased economic and workforce development from the research and talent pool that ensues. While each partnership may be unique in context and stakeholder groups, resources are available to provide examples of the characteristics or hallmarks of successful partnerships.

IMSP projects are required to include ROEs/ISCs for delivery of statewide, consistently high-quality, content-based professional development in math and science. The ROEs/ISCs serve as the statewide delivery system in many other projects and programs and have the experience, infrastructure, relationships, and coverage to ensure participation from K-12 teachers, higher education institutions, and business/industry professionals from across the state.

Some hallmarks of successful partnerships include the following (adapted from Chicago STEM Education Consortium's "Implementing the Next Generation Science Standards: Hallmarks of a Fully Realized School System," which can be found at http://c-stemec.org/wp-content/uploads/2013/10/hallmarks.pdf):

- A partnership with colleges and universities that helps provide a high-quality education aligned with new learning standards is characterized by pre-service teacher preparation programs that are linked tightly with the actual expectations in the classroom with regard to curriculum and instruction;
- A partnership with colleges and universities that helps provide a high-quality education aligned with new learning standards is characterized by in-service professional development programs that are linked tightly with the actual experience of teachers in their classroom as they implement the standards;
- A partnership with informal institutions that helps provide a high-quality education aligned with new learning standards provides both classroom and extracurricular opportunities to facilitate teachers' implementation of the standards;
- A partnership with families and communities that helps provide a high-quality education aligned with new learning standards is characterized by parents and others developing an appreciation of the level of rigor of their students' science education, and helps parents develop an appreciation of the beauty, wonder, and utility of science themselves; and
- A partnership with businesses that helps provide a high-quality education aligned with new learning standards provides resources and opportunities for the study of science, math, and engineering that are not available in a school setting alone.

The central purpose of the MSP program is to provide professional development to teachers in order to increase their mathematics and/or science content knowledge and their pedagogical skills. The guiding principle is that with deeper knowledge of the subject matter and understanding of effective instructional strategies, teachers will be able to impact their students' achievement in mathematics and science. To accomplish this goal, MSP projects work with a variety of teachers across Kindergarten through grade 12. Providing research-based professional development in math and science is the central focus of the I-STEM Network Partnerships Program. An important measure of student achievement in the Network will be utilizing what students experience in mathematics and science as evidence of academic growth. Additionally, the program aims to increase the support structures in place for participating teachers by training teacher leaders and by promoting the instructional leadership of administrators (http://edmsp.net/images/public_documents/document/annual/MSP%20PP11%20Annual%20Final%20Report.pdf).

Purpose

The purpose of this RFP is to identify up to twenty-two (22) Area Partnerships for the IMSP I-STEM Network Program equally distributed between a mathematics focus (MAP) and a science focus (SAP). Eleven (11) APs will be awarded for mathematics (MAP) and eleven (11) APs will be awarded for science (SAP) across Illinois. The AP will consist of at least 1 (one) MAP and one (1) SAP per Area. At least one (1) MAP and one (1) SAP will serve CPS exclusively. However, additional APs may be awarded in any Area (including CPS) based on the quality of the proposals.

The I-STEM Network Program is being implemented in two (2) phases. In phase one (1), ISBE released an RFP in fall 2014 for the purpose of funding a single eligible partnership to be the IMSP I-STEM Network Lead Partnership. Within that RFP, phase two (2) was described as awarding several Regional Workshop Institutes (R-WIPs) throughout the state. Due to an increase in available funding, this RFP increases the scope of the originally proposed R-WIPs, and thus, are named Area Partnership. This RFP will fund up to twenty–two (22) I-STEM Network APs to join the I-STEM Network. These APs will provide Area-wide professional development utilizing math or science resources coordinated by the Lead Partnership with input from the I-STEM Steering Committee.

Program Specifications

Overview

As noted in the "Purpose" section above, the successful applicants for this RFP will be twenty-two (22) Area Partnerships. Eleven (11) APs will be awarded for mathematics (MAP) and eleven (11) APs will be awarded for science (SAP) across Illinois. The AP will consist of at least 1 (one) MAP and one (1) SAP per Area. At least one (1) MAP and one (1) SAP will serve CPS exclusively. However, additional APs may be awarded in any Area (including CPS) based on the quality of the proposals.

I-STEM Network Program Goals:

1. improve student performance in math and science through professional development and resource development for K-12 teachers;
2. develop classroom culture with learning opportunities for students and teachers by including high-quality, research-based instructional materials such as ISBE's Model Curriculum for Math and Science as well as others and providing support for the New ILS and *Framework for K-12 Science Education*;
3. promote strong teaching skills by increasing instructors' understanding and application of scientifically based educational research appropriate to math and science teaching and learning; and

4. build the capacity of math and science teacher-leaders within a regional statewide context; and assist teachers in understanding the vision and instructional shifts outlined in the New ILS and the *Framework for K-12 Science Education.*

These goals form the basis for the following deliverables of the IMSP I-STEM Network Area Partnership Program which successful applicants will be expected to implement. Each of the required deliverables is more fully explained in the "Program Deliverables" section below.

As stated in the "General Information" section on page 1 of this RFP, eligible applicants for the I-STEM Network Area Partnership must include the following: an engineering, mathematics, or science department of an IHE; a high-need LEA; a ROE/ISC; and a BIN or for-profit organization. This is a minimum requirement. The proposed partnership may include multiple IHEs, including schools of education; multiple ROEs/ISCs; additional LEAs; and additional BIN or for-profit organizations. (See Appendix A for additional information about each entity in an eligible partnership.)

Additionally, the I-STEM Network will utilize the Areas designated by ISBE and the ROEs/ISCs. As a result, all entities represented in the partnership must be located within the same Area. (See Appendix F for the Area Map.) Furthermore, a partnership both as a whole, as well as its individual entities (IHE, ROE/ISC, LEA, and BIN or for-profit organization), may only be awarded one (1) Science Area Partnership (SAP) and one (1) Mathematics Area Partnership (MAP) in response to this RFP (except for Chicago Public Schools).

Program Deliverables

Teacher Training: Summer workshops or institutes and follow-up professional development activities must include training for teachers to support requisite science and mathematics pedagogical knowledge and skills in mathematics and science. Each funded Area Partnership (AP) will utilize modules of instruction and curricular resources identified and coordinated by the I-STEM Network Lead Partnership.

Summer Workshops in Math or Science

By definition, summer workshop requirements include professional development activities that are conducted for a period of not less than two weeks and consist of a minimum of 80 hours and include, as a component, a program that provides direct interaction between classroom teachers and university faculty. K-12 teachers in the I-STEM AP will participate in capacity-building professional development activities through a synchronous system. This system will feature consistent, high-quality content coordinated by the I-STEM Network Lead Partnership, as well as the I-STEM Steering Committee. Summer workshops will be co-designed and co-facilitated by the Lead Partnership, Next Generation Science Exemplar System for Professional Development (NGSX), Intel Math leaders, as well as the Area Teacher Leaders (ATL).

Institute Dates
Also by definition, institute dates are intended to be follow-up trainings during the academic year for a period of not less than four (4) consecutive or nonconsecutive days and a minimum of four (4) hours in duration. If the follow-up training is for teachers in rural school districts, the follow-up training may be conducted through distance learning. Institutes will be co-designed and co-facilitated by the Lead Partnership and APs, as well as the Area Teacher Leaders (ATL). One (1) or more of the institute days can be used to participate in the annual IMSP I-STEM Network Conference described below.

Area Partnership Teacher Participants for Math or Science
Each Mathematics Area Partnership (MAP) and Science Area Partnership (SAP) must recruit and manage two (2) cohorts of teachers consisting of at least twenty (20) grade K-8 teachers and at least twenty (20) grade 9-12 teachers. Teachers representing grades 7-12 must be teachers of mathematics (for MAP) and science (for SAP). Additionally, it is required that in Areas II, III, IV, V, and VI there is at least one (1) additional LEA involved in a SAP or MAP in addition to the primary high-needs LEA applicant for the proposal. This additional LEA must be located elsewhere in the Area (minimum 50 miles distance between them and the primary high-needs LEA identified in the SAP or MAP proposal). Finally, it is requested that at least one teacher participant represent Special Education, one teacher participant represent Career and Technical Education (CTE) and one teacher participant represent English Language Learners (ELL) in each AP.

A targeted recruitment plan as well as a plan for teacher retention across the duration of the grant must also be included in successful proposals. Each high-needs LEA partner must involve at least three (3) of their teachers as participants. Additionally, all participants from LEAs other than the high-need partnership LEA must have district approval that includes the district commitment to follow all grant requirements. This includes ongoing data collection, release time for professional development activities, access to classrooms for observations of implementation, and other requirements that contribute to the expected success of the project. These assurances are also required of any private school for participation of their teachers.

Building Capacity for Effective Math Instruction
The IMSP I-STEM Network Mathematics Area Partnerships (MAP) will use Intel® Math, a high-quality, content-rich professional development course. The Intel® Math course is a widely used, 80-hour professional development course focused on developing teachers' understanding of K–8 mathematics. The Intel® Math course is a scaled-up adaptation of the Vermont Mathematics Initiative (VMI), a content-intensive professional development program developed by Dr. Kenneth Gross, professor of mathematics and education at the University of Vermont. Intel® Math provides professional development in mathematics for K-8 teacher participants in the Area Partnerships in the form of a course co-facilitated by a practicing mathematician and a mathematics educator. The course "is designed to close the gap between insufficient mathematics training of elementary school teachers and the demands of the contemporary mathematics classroom" and places emphasis on deepening the teacher-participants' understanding of core K-8 mathematics concepts. (See Appendix E and http://download.intel.com/education/math/intel_math.pdf for additional information).

Since Intel Math is designed to be a K-8 program, the program for mathematics professional development for grades 9-12 teacher participants in the I-STEM Network will be identified and coordinated by the Lead Partnership, ATL, and I-STEM Steering Committee and is not otherwise defined in this RFP. Applicants are encouraged to propose professional development activities in their

proposals for high school mathematics that they feel would address the needs of the teachers they intend to serve in their particular MAP.

Building Capacity for Effective Science Instruction

The IMSP I-STEM Network Science Area Partnerships (SAP) will use the Next Generation Science Exemplar System for Professional Development (NGSX), a high-quality, content-rich professional development experience. NGSX is a research project funded by the National Science Foundation (NSF) and will be used as the featured component for professional development in science for the teacher participants in the Science Area Partnerships (SAP). This research-based online professional development system is designed to engage educators in face-to-face communities involving the Area Teacher Leaders and NGSX instructors to implement three-dimensional learning as described in the *Framework for K-12 Science Education*. Educators will gain a deep understanding of the implications of the performance expectations from the New ILS. NGSX consists of eight professional development units that have been piloted in nine states, including Illinois (Chicago), and is the featured professional development system for science in the current Connecticut MSP program. (See Appendix D and http://www.ngsx.org/ for additional information)

Evaluation and Accountability Plan, and Reporting Requirements

The expectation for evaluation in the I-STEM Network Area Partnerships is compliance with the evaluation requirements determined by the Lead Partnership and successful submission of the Annual Performance Report (APR). More information about this Lead Partnership evaluation plan and APR follows:

The I-STEM Network Lead Partnership will design a plan for the evaluation of the statewide I-STEM Network Program that measures the implementation and impact of the goals of the I-STEM Network Program. The evaluation plan will include an experimental or quasi-experimental design conducted by an external evaluator under subcontract to the successful IMSP I-STEM Lead Partnership fiscal agent.

The external evaluator selected by the Lead Partnership will be qualified to conduct a program evaluation for the I-STEM Network that includes the following:

- a rigorous evaluation as described in the Abt Associates' "A Guide for Reporting on Rigorous Evaluations for the U.S. Department of Education Mathematics and Science Partnerships (MSP)," which can be found at http://www.edmsp.net/public_documents/document/resource/Guide%20for%20Reporting%20on%20MSP%20Evaluations.pdf);
- meeting deadlines for state and federal reporting; and
- providing technical support to the I-STEM Network and Area Partnership participants for data collection and reporting.

Additionally, the external evaluator is required to create a profile report and provide a thorough analysis of each IMSP I-STEM Area Partnership in the network. The external evaluator will be expected to provide technical support (e.g., via webinars, conferences, individually) to the Lead Partnership and the Area Partnerships pertaining to data collection as it relates to state and federal expectations. This includes assisting in the development of the Annual Performance Report (APR) required of all MSP grantees. (See Appendix C)

The expectation for evaluation in the I-STEM Network Area Partnerships is compliance with the evaluation requirements determined by the Lead Partnership. Additionally, a successful proposal for an Area Partnership must include the recruitment plan and selection criteria for a .50 full-time equivalent

(FTE) Data Coordinator who will work closely with the evaluation entity identified by the Lead Partnership to ensure his/her respective Area Partnership is compliant with all evaluation components. This person will serve as the point of contact within each Area Partnership to coordinate evaluation requirements, components, and data requests and assist the Project Administrator with uploading data into the APR. It is not necessary that the Data Coordinator have an extensive background in evaluation; however, some experience with statistics and project management is encouraged. Finally, an Area Partnership Project Administrator may not also serve as the Data Coordinator for the Area Partnership.

IMSP I-STEM Network Conference and Website

The IMSP I-STEM Steering Committee will work with ISBE to coordinate an annual statewide conference for math and science. The purpose of this conference is to share relevant topics, resources and updates from the AP and the statewide I-STEM Network, as well as allow teacher participants an opportunity to engage with national, state, and local resources designed to assist with implementation of the New ILS. State and national leaders in math and science education, educational theory, and other experts should be part of the conference, as well as participants in the I-STEM Network AP. The date and location for the conference will be established by ISBE and the I-STEM Network Steering Committee.

An I-STEM Network website with social media components will be established and maintained by the I-STEM Network Lead Partnership with input from the I-STEM Network Steering Committee. This website must meet the standards outlined in Section 508 of the Rehabilitation Act as amended by the Workforce Investment Act of 1998, titled "Electronic and Information Technology." The website will allow for sharing of information about partnership activities in order to provide open access to information and resources provided by the I-STEM Network and all of the APs.

General Requirements

Under this RFP, an eligible partnership ***must*** propose the use of funds for the authorized activities described in Section 2202 (c)(3)(A) of the MSP legislation found at http://www2.ed.gov/policy/elsec/leg/esea02/pg26.html and for state-required activities. Further explanation of the program requirements is provided below.

Comprehensive Needs Assessment: The federal MSP legislation requires a comprehensive assessment of the teacher quality and professional development needs of any schools, LEAs, and SEAs that comprise the eligible Area Partnership with respect to the teaching and learning of mathematics (for Mathematics Area Partnership proposals) and science (for Science Area Partnership proposals). This comprehensive needs assessment must be included in proposals submitted in response to this RFP.

Use of Scientifically Based Research, Data, and Assessments: As indicated above, the MSP federal legislation requires that the project activities be predicated on a review of scientifically based research, with the expectation of improving student academic achievement and strengthening the quality of the mathematics and science instruction. The review of literature must represent a scholarly work product, must include citations from at least five (5) publications.

Fiscal Information

The I-STEM Network Area Partnership Program is a three-year grant program, with an annual award of $250,000 ($750,000 total over a three-year period). Continuation funding will be provided when there is a sufficient appropriation, but will be based on satisfactory progress in the grant. This includes, but is not limited to, maintaining the minimum number of participants in each SAP or MAP (twenty (20) K-8 teachers and twenty (20) grades 9-12 teachers).

Funding may be used for personnel expenses and other associated project costs, as described below. Applicants are advised to refer to the *State and Federal Grant Administration Policy, Fiscal Requirements and Procedures* handbook found at http://www.isbe.net/funding/pdf/fiscal_procedure_handbk.pdf when preparing the proposal.

Allowable Expenditures: (FY 2015 – Year 1) may include the following:

- Five (5) percent (maximum) administrative costs;
- Math resources, including Intel® Math expenses, Intel® Math instructors/experts, high school mathematics professional development program (as determined by the I-STEM Network Lead Partnership and I-STEM Network Steering Committee) and approved materials for the Area Teacher Leaders (for Math Area Partnerships);
- Science resources, including NGSX expenses, NGSX instructors/experts, and approved materials for the Area Teacher Leaders (for Science Area Partnerships);
- Other purchased services (allowable expenditures, e.g., conference, travel, etc.) as needed;
- Illinois Science Teachers Association (ISTA) (for SAP) and Illinois Council of Teachers of Mathematics (ICTM) (for MAP) membership for teacher participants, along with funding for presenting at the ISTA and ICTM annual state conferences;
- Materials and supplies for teacher participants;
- Project Administrator (see budget consideration below);
- Data Coordinator (see budget consideration below);
- Reasonable and customary costs for salary, benefits, and/or stipends for actual time dedicated to partnership activities;
- Project Planning Meetings and Project Leadership Team Meeting expenses, including travel reimbursement, necessary materials, and supplies;
- Expenses to cover a representative team (one or two members) to attend one out-of-state MSP Conference;
- Expenses to cover necessary AP monthly meetings and the I-STEM Annual Conference; and
- LEA team costs, including stipends, substitute reimbursements, and benefits.

Budget Considerations and Requirements:

- General administration activities (function 2300) are capped at 5 percent of the total budget;
- Project Administrator salary and benefits are capped at 1.0 FTE (this person cannot also serve as a Data Coordinator);
- Data Coordinator (support) salary and benefits are capped at .50 FTE (this person cannot also serve as a Project Administrator);
- For MAPs - Funding for the two required Intel® Math Course Instructors (Mathematician or Mathematics Educator);
- For SAP - Funding for NGSX Instructors;

- Applicants must allocate 3 percent of the annual grant award for external evaluation costs incurred by the evaluation entity identified by the Lead Partnership;
- Indirect costs are **not** allowed.

When formulating their budgets, applicants should limit proposed costs as follows:

- IMSP funds must be used to supplement, not supplant, local funds that would otherwise be used for activities that are authorized by MSP; and
- Travel expenses will be reimbursed subject to travel cost guidelines published by the Governor's Travel Control Board in the Reimbursement Schedule of the Travel Guide for State Employees, and any annual changes therein, found at http://www2.illinois.gov/cms/Employees/travel/Pages/default.aspx.

For purposes of compliance with Section 511 of P.L. 101-166 (the Stevens Amendment), applicants are advised that one hundred (100) percent of the funds for this program are derived from federal sources. The total amount of federal funding involved for the three-year grant will not exceed $750,000.

Proposal Format

Each proposal must be submitted in the format outlined below. Please use the following as a checklist in assembling your completed proposal. **Incomplete proposals will not be reviewed.** Applicants will not be allowed to correct deficiencies and resubmit their applications for consideration.

Please ensure that all pages requiring a signature(s) are signed by the appropriate individual(s). Assemble the proposal in the order each section is presented below and number pages (starting with the cover page) sequentially. When completed, staple the proposal in the upper left corner (no covers or bindings). Official ISBE forms are **required** and are available as PDF files found at http://www.isbe.net/career/html/msp.htm.

____ **1.** **Cover Page** (Attachment 1): To be completed by the applicants and signed by the officials authorized to submit the proposal and bind the applicants to its content. Additionally, the check boxes in the upper left hand corner must be completed as this identifies the content focus (MAP or SAP) as well as the Area of the proposal.

____ **2.** **Partnership Member Commitment Form** (Attachments 2A, 2B, 2C, and 2D): To be completed by each entity (LEA, IHE, ROE/ISC, and BIN or for-profit organization, as applicable) in the proposed partnership and signed by the officials authorized to submit the proposal and bind the applicant to its content. Duplicate as needed.

____ **3.** **Abstract:** Provide a summary of the proposal narrative highlighting the partnership, I-STEM Network Area Partnership content focus (MAP or SAP), deliverables, goals, and scope of work. (250 word maximum)

____ **4.** **I-STEM Network Area Partnership Narrative**: To be completed in accordance with the "Narrative Requirements" section of this RFP. The proposal narrative may not exceed twenty-five (25 pages), as specified in the "Narrative Requirements" section below.

____ **5.** **FY 2014 Budget Summary** (Attachment 4): Must be submitted on the form provided and signed by the official authorized to submit the proposal. For planning purposes, the proposal may include FY 2015 and FY 2016 Budget Summary and Budget Summary Breakdown

information. The budgets submitted for planning purposes should be clearly identified with the appropriate fiscal year and may be submitted in a Word or an Excel document. Duplicate as needed.

____ **6.** **FY 2014 Budget Narrative** (Attachment 5): Must include descriptions of the anticipated expenditures, correlated to the line items set forth on the Budget Summary. Must include subcontract information, if applicable. (See item 7 of Attachment 6.)

____ **7.** **Certifications and Assurances**: Each applicant, ***including each entity that is participating in the partnership***, is required to submit the certifications and assurances forms listed below and attached to this RFP. For LEA partners, the certifications and assurances must be signed by the district superintendent; for all other partners, they must be signed by the official legally authorized to submit the proposal and to bind the applicant to its contents.

a. Program-Specific Terms of the Grant (Attachment 6)
b. Certifications and Assurances, and Standard Terms of the Grant (Attachment 7)
c. Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion – Lower Tier Covered Transactions (Attachment 8)
d. Certifications Regarding Lobbying and Lobbying Activities (Attachment 9, 9A, 9B, and 9C)
e. Federal Funding Accountability and Transparency Act (FFATA) (Attachment 10)
f. General Education Provisions Act (GEPA) (Attachment 13)

____ **8.** **I-STEM Network Area Partnership Equitable Participation of Private Schools** (Attachment 12): This form must be completed and signed by each private school within the school district boundaries of partnership member school districts. Duplicate as needed.

____ **9.** **Appendices**: Include with the proposal the following appendices (these are **required** but will not be scored):

a. Roles/Timeline: Provide a chart describing the roles of the proposed participants, their duties and responsibilities and a timeline of events and activities;
b. Résumés/ Curriculum Vitae: Include brief résumés/ curriculum vitae of each member of the partnership team; and
c. Meeting Documents (Optional): Include documents, such as meeting agendas and sign-in sheets, to provide evidence of collaborative planning.

Narrative Requirements for the I-STEM Network Area Partnership Program

Applicants must provide the following information in the order presented below. Please refer to the "Program Specifications" section of this RFP and any relevant appendices when completing the proposal narrative and provide evidence of meeting each of the requirements specified in the relevant section below. Total must not exceed twenty-five (25) pages, at least 1.5 line spaced, 12 point font, with 1-inch margins except in tables/charts.

I. Literature Review and Needs Assessment (maximum of five (5) pages)

A. Review of Scientifically Based Research

Discuss and cite the current body of scientifically based research relevant to the goals of the proposed I-STEM Network Area Partnership Program. This literature review should explain how the proposed activities are expected to improve student academic achievement and strengthen the quality of math and science instruction utilizing the New

Illinois Learning Standards, the ISBE Model Mathematics Curriculum, or the ISBE Model Science Curriculum. The literature review must ground the proposal in the current research on learning math and science, must include citations for five (5) different properly cited sources in mathematics and science.

B. Comprehensive Needs Assessment (including local and state/national needs analysis). Describe the process used to conduct the comprehensive assessment of teacher quality and professional development needs of the high-need LEAs proposed in the I-STEM Network Area Partnership. Indicate the data analyzed to determine need and final selection of the SAP or MAP being proposed. Summarize the results of the local needs assessment and how that information was used to develop the proposed project. This section must include at least the following information.

- Specific gaps or weaknesses in teacher math or science content and pedagogical knowledge, as related to the I-STEM Network Area Partnership Program goals.
- Data supporting the partnership's selection to focus on mathematics (MAP) or science (SAP).
- Evidence that the schools and LEAs have populations of students that are underrepresented and underserved.
- Relevant student achievement and performance data.
- Analysis of state and national level needs, as determined by achievement data and research, should be included. More specifically, applicants should demonstrate knowledge of current trends and issues in the field as it relates to state and national needs. The state- and national-level analysis may include findings that can be applied to the strategies to strengthen a statewide support system, such as the I-STEM Network.

II. I-STEM Network Area Partnership Structure, Qualifications, and Capacity (maximum of five (5) pages)

A. Describe the proposed Area Partnership entities and the qualifications and experiences of the personnel from the partnerships who will be responsible for the development and implementation of the I-STEM Network Area Partnership. (See Appendix A for partnership responsibilities.)

B. Describe the recruitment plan for the Area Partnership teacher participants that include representation from elementary, middle, and high schools, along with a plan for retention of the teachers (to include incentives) throughout the grant period.

C. Describe the proposed Area Partnership entities that exemplify the capacity, commitment, and relationships to lead the development and delivery of the components of this program for three years in their local area.

III. I-STEM Network Area Partnership Program Deliverables (maximum of ten (10) pages)

A. Mathematics Area Partnership (MAP) or Science Area Partnership (SAP) plan including content, resources, and strategies.

- Describe proposed activities that will support the MAP or SAP, including required I-STEM and Area Partnership proposed content, resources, and strategies. For the MAP, the required content and resources will include coordinating the implementation of Intel® Math, the high school professional development program, and professional development on the ISBE Model Math Curriculum. For the SAP, the required content and resources will include the implementation of NGSX and professional development on the ISBE Model Science Curriculum. Include additional

activities, content, or resources according to partnership strengths and local participants' needs.

B. Mathematics Area Partnership (MAP) or Science Area Partnership (SAP) timeline and logistics.

- Detail a timeline for delivery of the plan that includes specific dates, locations, persons responsible, and other details that clearly describe the partnership's preparations that will likely result in successful delivery of the summer institutes and school year follow-ups according to the requirements of this RFP and needs of the participants.

C. Coordination with the Area Teacher Leaders (ATL) from the Lead Partnership.

- Eligible applicants will propose the activities and logistics to be included in their 2015-17 MAP and/or SAP that include the ATL. Describe specific activities between the MAP or SAP and ATL for the design and delivery of the summer workshops and school year institutes throughout the state.

D. Representation at the I-STEM Network Statewide Conference and involvement in the I-STEM Network Website.

- Propose activities to be included in the annual statewide I-STEM Network conference, along with contributions to the I-STEM website and other social media resources created by the Lead Partnership.

IV. I-STEM Network Area Partnership Program Evaluation and Accountability Plan, and Reporting Requirements. (Maximum of three (3) pages)

A. Identify the individuals who will serve as the Area Partnership Data Coordinator (.50 FTE) and Area Partnership Project Administrator (maximum 1.0 FTE), if known. Detail the qualifications of those individuals or the qualifications that will be used by the partnership to select these key personnel. Due to past audit findings, these positions may not be the same individual.

B. Describe the proposed evaluation compliance plan for the proposed Area Partnership according to the information given regarding the Lead Partnership Evaluation requirements.

C. Provide the proposed strategies for collecting the data required from the LEAs and methodologies to include appropriate communications and timely submission of required evaluation components to the Lead Partnership evaluation team.

V. Sustainability Plan (maximum of two (2) pages)

Clearly outline how the partnership program will be sustained and supported during and after the grant expires. Discuss how the AP will continue to impact student achievement in K-12 mathematics and science. If needed, clearly describe the collaborative plan to maintain program participants, objectives, and activities through the ROE/ISC consolidation on July 1, 2015. More information about ROE/ISC consolidation can be found at http://www.isbe.net/regionaloffices/html/consolidation.htm.

Criteria for Review and Approval of Proposals

Each proposal submitted will be evaluated in accordance to the criteria listed in the rubric released with this RFP by an expert panel of external reviewers. The panelists will carefully consider the extent to which each applicant has provided evidence that the proposed project is of sufficient quality and scope to carry out the purposes of the I-STEM Area Partnership effectively.

Refer to Rubric (Appendix G) for scoring of I-STEM Network Area Partnership Proposals. Total possible points are 75 as outlined below. However, proposers are strongly encouraged to ensure that their proposals are closely aligned to the rubric provided.

I. Literature Review/Needs Assessment (maximum of ten (10) points)

A. Review of Literature

Discuss the current body of scientifically based research relevant to the goals of the proposed I-STEM Network Area Partnership Program. This literature review should explain how the proposed activities are expected to improve student academic achievement and strengthen the quality of math or science instruction utilizing the New Illinois Learning Standards and the ISBE Model Mathematics or the Model Science Curriculum.

B. Comprehensive Needs Assessment (including local and state/national needs analysis)

Describe the process used to conduct the comprehensive assessment of teacher quality and professional development needs of the high-need LEAs proposed in the I-STEM Network Area Partnership. Indicate the data analyzed to determine need and final selection of the SAP or MAP being proposed. Summarize the results of the local needs assessment and how that information was used to develop the proposed project. This section must include at least the following information.

- Specific gaps or weaknesses in teacher math or science content and pedagogical knowledge, as related to the I-STEM Network Area Partnership Program goals.
- Data supporting the partnership's selection to focus on mathematics (MAP) or science (SAP)
- Evidence that the schools and LEAs have populations of students that are underrepresented and underserved.
- Relevant student achievement and performance data.
    - Analysis of state and national level needs, as determined by achievement data and research, should be included. More specifically, applicants should demonstrate knowledge of current trends and issues in the field as it relates to state and national needs. The state and national level analysis may include findings that can be applied to the strategies to strengthen a statewide support system such as the I-STEM Network.

II. I-STEM Network Area Partnership Structure, Qualifications, and Capacity (maximum of fifteen (15) points)

A. Describe the proposed Area Partnership entities and the qualifications and experiences of the personnel who will be responsible for the development and implementation of the I-STEM Network Area Partnership. (See Appendix A for partnership responsibilities.)

B. Describe the recruitment plan for the Area Partnership teacher participants that includes representation in elementary, middle, and high schools, along with a plan for retention of the teachers throughout the grant period that includes providing incentives for completion of the project;

C. Describe the qualifications of proposed Area Partnership entities that exemplify the capacity, commitment, and relationships needed to lead the development and delivery of the components of this program in their local area.

III. I-STEM Network Area Partnership Program Deliverables (maximum of twenty (20) points)

A. Mathematics Area Partnership (MAP) or Science Area Partnership (SAP) plan, including content, resources, and strategies.
   - Describe proposed activities that will support the MAP or SAP, including required I-STEM and Area Partnership proposed content, resources, and strategies. For MAPs, the required content and resources will include coordinating the implementation of Intel® Math, the high school professional development program, and professional development for the ISBE Model Math Curriculum. For the SAP, the required content and resources will include the implementation of NGSX and professional development on the ISBE Model Science Curriculum. SAP and MAP proposals may include additional activities, content, or resources according to partnership strengths and local participants' needs.

B. Mathematics Area Partnership or Science Area Partnership timeline and logistics. Detail a timeline for delivery of the plan that includes specific dates, locations, persons responsible, and other details that clearly describe the partnership's preparations that will likely result in successful delivery of the summer institutes and school year follow-ups according to the requirements of this RFP and needs of the participants.

C. Coordination with the Area Teacher Leaders (ATL) with the Lead Partnership. Eligible applicants will propose the activities and logistics to be included in their 2015-17 MAP and/or SAP that include the ATL. Describe specific activities between the MAP or SAP and ATL for the design and delivery of the summer workshops and school year institutes throughout the state.

D. Representation at the I-STEM Network Statewide Conference and involvement in the I-STEM Network Website.
   Applicants are encouraged to propose activities to enhance the annual statewide I-STEM Network conference, along with participation in the I-STEM website and other social media resources created by the Lead Partnership.

IV. I-STEM Network Area Partnership Program Evaluation and Accountability Plan, and Reporting Requirements (maximum of fifteen (15) points)

A. Identify the individuals who will serve as the Area Partnership Data Coordinator (.50 FTE) and Area Partnership Administrator (maximum 1.0 FTE), if known. Detail the qualifications of those individuals or the qualifications that will be used by the partnership to select these key personnel.

B. Describe the proposed evaluation compliance plan for the Area Partnership according to the information given regarding the Lead Partnership Evaluation requirements.

C. Provide the proposed strategies for collecting the data required from the LEAs and participants along with methods for appropriate communications and timely submission of required evaluation components to the Lead Partnership evaluation team.

V. I-STEM Network Area Partnership Sustainability Plan (maximum of five (5) points)

Clearly outline how the partnership program will be sustained and supported after the grant expires. Discuss how the MAP or SAP will continue to impact student achievement in K-12 mathematics and science. If needed, clearly describe the collaborative plan to maintain program participants, objectives, and activities through the ROE/ISC consolidation on July 1, 2015. More information about ROE/ISC consolidation can be found at http://www.isbe.net/regionaloffices/html/consolidation.htm.

VI. Overall I-STEM Area Partnership Budget (5 points)

The partnership budget shows the allocation of partnership resources as customary and reasonable in terms of distribution, scope, and accuracy, in addition to being in alignment with the partnership's goals and the participants' needs.

VII. Overall High-Quality I-STEM Area Partnership Plan for Delivery (5 points)

The proposal describes a clear, well-thought-out plan by committed partners to deliver a successful systemic, multi-year federal professional development project focusing on high-quality math or science content, aligned to the New ILS, in which many teachers will participate and their students will benefit.

Composition of I-STEM Network Area Partnerships (AP)

Partnership Composition

An eligible partnership includes (1) an engineering, mathematics, or science department of an institution of higher education (IHE); (2) a high-need local education agency (LEA); (3) a Regional Office of Education (ROE)/Intermediate Service Center (ISC); and (4) a business/industry/nonprofit (BIN) or for-profit organization with demonstrated effectiveness in improving the quality of mathematics and science teachers. The eligible partnership may include multiple IHEs, including schools of education; additional ROEs/ISCs; additional LEAs; and additional BINs or for-profit organizations.

Federal MSP legislation allows the state to designate which entity will serve as the agent. The ROE/ISC will be named as the fiscal agent for the I-STEM Network Area Partnerships.

The I-STEM Network will utilize the Areas designated by the ISBE.. As a result, all entities represented in the partnership must be located within the same Area. (See Appendix F for the ISBE Area Map.) Furthermore, a partnership both as a whole, as well as its individual entities (IHE, ROEs/ISCs, LEA, and BIN or for-profit organization), may only be awarded one (1) Science Area Partnership (SAP) and one (1) Mathematics Area Partnership (MAP) in response to this RFP (except Chicago Public Schools). The awarded partnership's fiscal agent must agree to collaborate with the Statewide System of Support ROE/ISC Fiscal Agent in their respective Area throughout the grant period. A listing of those entities can be found at http://www.isbe.net/sos/htmls/state_sys_support.htm.

High-Need Local Education Agency(s) (LEA) Encompassing K-12 Grade Students

For purposes of this RFP, an eligible high-need LEA is one or more K-12 district(s) identified as meeting each of the following three (3) criteria:

- Annual or trend data from the Illinois Standards Achievement Test (ISAT), norm-referenced tests, and/or criterion-referenced tests that show achievement in mathematics and/or science is falling below fifty (50) percent of students meeting or exceeding the Illinois Learning Standards (ILS), as disaggregated by factors such as socioeconomics, gender, ethnicity, etc.
- Minimum of fifteen (15) percent of the children served by the LEA are from low-income families, or 6,500 children served by the LEA are from low-income families.
- The LEA struggles with teacher quality, as evidenced by not all teachers of mathematics and science holding full or appropriate endorsements, or being placed in teaching assignments that are beyond their expertise and experience levels.

The I-STEM Network Area Partnership must have designated at least one high-need LEA that covers K-12 grade Additionally, it is required that in Areas 2, 3, 4, 5, and 6 there is at least one (1) additional LEA involved in a SAP or MAP in addition to the primary high-needs LEA applicant for the proposal. This additional LEA must be located elsewhere in the Area (minimum 50 miles distance between them and the primary high-needs LEA identified in the SAP or MAP proposal). The partnership may identify additional high-need LEAs to be members of the partnership and each must commit to the required activities for participation described in this RFP and in the partnership member commitment forms (Attachments 2 A-D).

One (1) requirement of the named high-need LEA is to meet equitable participation requirements in Subpart 1 of Part E of Title IX of the Elementary and Secondary Education Act (ESEA) that apply to the IMSP programs authorized under Title II, Part B of that act. Private school participation requirements

cannot be satisfied simply by inviting private schools to participate in programs and/or activities designed for public school students, teachers, or other educational personnel. Consultation must occur during the planning process as well as during the implementation of the grant. Consultation must occur before the school district makes any decisions that affect the opportunities of eligible private school children, teachers, and other educational personnel. For more information pertaining to equitable participation, district personnel should read pages 5 through 9 of the guidance titled "Equitable Services for Eligible Private School Students, Teachers, and Other Educational Personnel" found at http://www.ed.gov/policy/elsec/guid/equitableserguidance.doc. Applicants must have all private schools that are eligible to participate in the grant sign Attachment 12.

Institution of Higher Education (IHE)
MSP federal legislation requires membership in the partnership of faculty from an engineering, mathematics, or science department of an IHE. The I-STEM Network Area Partnership may also include multiple IHEs, including schools of education.

The IHE partner(s) is expected to bring a high level of disciplinary and pedagogical content expertise, research, and knowledge of best practices to the partnership. In order to meet the IHE partnership federal requirement, faculty from an engineering, mathematics, or science department must be included. Additionally, faculty from schools of education should also play a prominent role in the planning and delivery of I-STEM resources and support. Science, technology, engineering, and mathematics (STEM) faculty from community colleges can be included in the partnership as well. Along with the BIN and for-profit partner(s), IHEs will play an important role in providing access to scientists, mathematicians, STEM faculty, and their sophisticated facilities and equipment.

Regional Office of Education (ROE)/Intermediate Service Center (ISC) Fiscal Agent
As previously stated, federal legislation allows the state to designate which entity will serve as the fiscal agent. The ROE/ISC will be named as the fiscal agent for the I-STEM Network Area Partnerships. Partnerships proposing to serve Chicago Public Schools (CPS) exclusively do not need an ROE/ISC partner, and as a result, can select its fiscal agent. The ROE/ISC will provide leadership and support to the partnership in many capacities. Further, ROEs/ISCs have direct lines to all LEAs and have a clear understanding of the needs of teachers in their respective areas. This positive relationship will be very important in recruiting and nurturing teachers in the I-STEM Network. Managing the I-STEM Network Area Partnership budgets and expenditure reports will be a critical task assigned to the ROE/ISC. Thorough knowledge of federal grant rules and procedures is imperative, along with demonstrating statewide capacity, accuracy, and long-term stability in fiscal management.

Business/Industry/Nonprofit (BIN) and For-profit Organizations
This requirement improves the partnerships and the entire IMSP program by bringing a level of expertise and understanding of the needs of students and teachers in providing "real world" experiences that did not previously exist in former IMSP programs. As a result of including BINs and for-profit organizations with demonstrated experience in supporting teachers and their students, greater access to scientists, mathematicians, engineers, and their facilities and equipment occurred. BINs and for-profit partners have also provided important insight into developing or revising curriculum, lessons, and classroom practices for teachers in previous IMSP programs. The suggested BIN or for-profit entity for the I-STEM Network should have a statewide presence.

It is expected that a new level of cooperation and collaboration will emerge in partnering with interested STEM BINs and for-profit organizations in the statewide I-STEM Network In addition, this partnership will provide a clearer understanding of college and career readiness for all students.

Commitments for Each Required Partnership Entity
See Attachments 2 A-D "Partnership Member Commitment Forms" for specific commitments.

Collaboration with ISBE IMSP Staff: The I-STEM Network Area Partnerships will fully collaborate with, and provide necessary documentation to, ISBE IMSP staff. This relationship will be important in order to maintain consistency and strong coherence within the I-STEM Network. This collaboration will align grant activities with related ISBE (and other state and national) initiatives related to the goals of the I-STEM Network Program.

Appendix B

IMSP I-STEM Network Area Partnership Deliverables

This RFP requires the Area Partnerships, regardless of whether they are a Science Area Partnership (SAP) or Mathematics Area Partnership (MAP), to recruit and establish two cohorts of teacher participants.

Mathematics Area Partnership (MAP)
Each Mathematics Area Partnership (MAP) must recruit and manage two (2) cohorts of teachers consisting of at least twenty (20) grade K-8 teachers and at least twenty (20) grade 9-12 teachers. Teachers representing grades 7-12 must be teachers of mathematics. Additionally, it is required that in Areas II, III, IV, V, and VI there is at least one (1) additional LEA involved in a SAP or MAP in addition to the primary high-needs LEA applicant for the proposal. This additional LEA must be located elsewhere in the Area (minimum 50 miles distance between them and the primary high-needs LEA identified in the SAP or MAP proposal). Finally, it is requested that at least one teacher participant represent Special Education, one teacher participant represent Career and Technical Education (CTE), and one teacher participant represent English Language Learners (ELL) in each AP.

Science Area Partnership (SAP)
Each Science Area Partnership (SAP) must recruit and manage two (2) cohorts of teachers consisting of at least twenty (20) grade K-8 teachers and at least twenty (20) grade 9-12 teachers. Teachers representing grades 7-12 must be teachers of science. Additionally, it is required that in Areas II, III, IV, V, and VI there is at least one (1) additional LEA involved in a SAP or MAP in addition to the primary high-needs LEA applicant for the proposal. This additional LEA must be located elsewhere in the Area (minimum 50 miles distance between them and the primary high-needs LEA identified in the SAP or MAP proposal). Finally, it is requested that at least one teacher participant represent Special Education, one teacher participant represent Career and Technical Education (CTE), and one teacher participant represent English Language Learners (ELL) in each AP.

The establishment of the I-STEM Network will happen in **two (2)** phases. Phase one (1) began with the funded Lead Partnership working collaboratively with ISBE IMSP staff to recruit and appoint the I-STEM Network Steering Committee; recruiting and appointing the I-STEM Network Administrator; and recruiting and selecting Area Teacher Leaders (ATL), as well as coordinating and/or developing the math and science professional development that will be used to train the ATL in the ATL Academy during the 2014-15 academic year. Phase two (2) begins with the awarding of the I-STEM Network Area Partnerships that will be identified through this RFP. The AP will utilize the science and math resources coordinated/developed by the Lead Partnership in order to provide high-quality, capacity-building activities to cohorts of K-12 math and science teachers in summer workshops and academic year institutes.

The purpose of this network structure is to provide consistent, coherent information, resources, and support to math and science teachers as they deepen their content knowledge and implement the New Illinois Learning Standards (New ILS). Teachers in the AP, as well as the ATL involved in the Lead Partnership, will develop a greater level of expertise in math and science teaching and learning. Moreover, it is expected that the I-STEM Network, through the combined influences of the Lead Partnership and the APs, will reach several hundred Illinois math and science teachers throughout the course of the grant in order to develop deeper understanding of the instructional shifts, practices, and concepts that will lead to the intended changes in math and science classrooms across Illinois.

I-STEM Network Area Partnership Program (AP)

Summer Workshops

The I-STEM Network AP requirements include professional development activities that are conducted for a period of not less than two (2) weeks and consist of a minimum of eighty (80) hours and include, as a component, a program that provides direct interaction between classroom teachers, university faculty, and BINs or for-profit partners. The summer workshops will be conducted synchronously throughout the I-STEM Network, co-facilitated by the ATL, and feature state and national experts presenting current research and best practices simultaneously to all participants in the program, regardless of geography. There will also be an opportunity for the development of local contextualized resources and lessons as teachers work with IHE faculty and BINs that are a part of their particular AP.

Institute Dates

Institute dates will include follow-up trainings during the academic year, sharing classroom results of the new strategies, and collaboration on refining the work from the summer workshops. By definition, institute dates are intended to be follow-up trainings during the academic year that are best conducted in the classroom for a period of not less than four (4) consecutive or nonconsecutive days and are a minimum of four (4) hours in duration. However, if the follow-up training is for teachers in rural school districts, it may be conducted through distance learning. Generally, most institutes will be co-facilitated by NGSX and Intel Math experts and the ATL.

One of the AP Institute dates will include attendance and participation in the I-STEM Network Conference.

Appendix C

Evaluation and Accountability Plan and Reporting Requirements
Excellent evaluation has been a prominent part of the IMSP Program. I-STEM Network Program evaluation has two (2) elements: evaluation of state-level goals and federally required Annual Performance Reports (APR).

Annual Performance Reports (APR)
Federal legislation requires each funded program to submit an annual report to the U.S. Department of Education (ED) documenting the partnership's progress in meeting its MSP goals and objectives. ED provides an online APR System to accommodate the electronic submission of evaluation data. Information about the Federal APR can be located at http://www.ed-msp.net/.

The external evaluation team will work with the AP in order to complete the APR. Additionally, the team will review APRs submitted by the funded program and provide feedback to project administrators concerning necessary edits to their respective reports.

Government Performance and Results Act (GPRA): The IMSP Program is subject to the Government Performance and Results Act (GPRA), which requires participants to set targets for performance, measure progress toward those targets, and report on whether or not the targets have been met, and describe future strategies to continue to make progress toward meeting those targets.

More information about reporting and the GPRA can be found at the following two (2) sites:
http://www.ed-msp.net/public_documents/document/resource/PP12%20APR%20form.pdf and
http://www.ed-msp.net/public_documents/document/annual/GPRA%20Final%20PP10%20Report.pdf.

Next Generation Science Exemplar (NGSX) FAQs
Excerpted from http://www.ngsx.org/about/faq/

What is the NGSX professional development system?
The Next Generation Science Exemplar System for Professional Development, or NGSX, is a new kind of professional development environment. It is a web-based system designed to engage educators in the three (3) major dimensions of the National Research Council's (NRC) *Framework for K-12 Science Education* -- core ideas of science, scientific and engineering practices, and cross-cutting concepts. At the same time, NGSX participants are engaged with student performance expectations found in the New ILS. NGSX has been used by teachers across the country. As part of the original field-testing funded by the National Science Foundation, more than 350 teachers and administrators have worked with the NGSX professional development system, completing units of professional development. The NGSX system was field-tested in Arkansas, California, Illinois, Michigan, Minnesota, Oregon, Vermont, Washington, and Wisconsin. Since the initial NSF-funded field trials, several districts have funded teacher study groups to work with NGSX using **the state Math and Science Partnership** (MSP) funds or other state funding, including districts in Colorado, Connecticut, and Vermont.

Who is on the NGSX team for the I-STEM Network?
The NGSX project co-investigators are Sarah Michaels (Clark University), Jean Moon (Tidemark Institute), and Brian Reiser, Ph.D. (Northwestern University).

Why is NGSX an important professional development resource for the I-STEM Network?
States and districts are asking how professional development and pre-service teacher education must change to support this new road map for science teaching and learning. How do we get started? What does this road map look like? In response to these and similar questions, the NGSX team has designed a professional development system to make this new vision of science teaching and learning visible and coherent. Drawing from highly respected, research-based principles on learning, NGSX has assembled a library of tools, tasks, and resources to help teachers grow in their knowledge, confidence, and facility with the major ideas in the *Framework for K-12 Science Education* and the New ILS – core ideas in science, scientific and engineering practices, and cross-cutting concepts.

What results have been achieved?
NGSX supports teachers using the science practices of argumentation, explanation, and modeling to learn core ideas of their discipline so that they can develop both the understanding of the science and the pedagogy needed to teach in alignment with the New ILS. It uses in-depth investigation of one area of science (e.g., nature of matter), followed by analyses of student learning and classroom video cases across grades K-12. Assessment of teacher growth in field studies employed items drawn from nationally used instruments that examine science knowledge and pedagogy (e.g., Horizon).

Teachers also shifted in their understanding about a range of questions examining student learning and pedagogical practices that support three-dimensional learning. Teachers' understanding (pedagogical content knowledge) of how to support the science practices was examined by having them describe and analyze scenarios of how students could be engaged in scientific modeling, argumentation, and classroom discussion.

Why is NGSX web-based?
Advances in digital, media, and network technologies have boosted professional learning capabilities in many professions. Web-based advances present an opportunity for professional development in science in response to the shifts outlined in the *Framework for K-12 Science Education* and New ILS. The Internet is a versatile platform where high-quality, image-rich resources can be made widely accessible while providing greater flexibility for learners to learn from one another. NGSX participants have the benefits of accessing videos, texts, and tools twenty-four hours per day and seven days per week. As a result, learning is more flexible and not subject to traditional constraints of professional development such as start and end times.

What can teachers expect as participants in NGSX?
NGSX contains eight units as of October 2014. They are intended to be flexible, allowing teachers and their colleagues to move through units at their own pace. Each unit is based on a particular set of learning goals involving the three dimensions of the NRC Framework and student performance expectations found in the New ILS. For example, in the Matter Pathway of NGSX, the focus is on physical science; more specifically, the structures and properties of matter. Teacher learning will be guided by the question, "How do particles combine to form the variety of matter one observes?" (NGSS, PS1.A, Structures and Properties of Matter) Intentionally integrated into learning about matter are two of the scientific and engineering practices-- modeling and argumentation from evidence. Here is a sample of learning goals built into this pathway:

- What is model-based reasoning and how is it fundamental to science, as well as science teaching and learning? How do I build a culture of reasoning with evidence in my classroom?
- How do I create a classroom culture where students will go public with their ideas and build on the ideas of their classmates?

Guided by the research-based expertise of the NGSX team and their belief that learning builds progressively over time, this pathway has activities for teachers to accomplish between units. These activities serve as bridge building, further exploring the ideas, videos, and activities contained in the current unit while preparing for the next. Part of the bridge-building experience will be opportunities for teachers to try activities in their classrooms and bring those experiences back to their cohort for discussion with colleagues.

Which states have participated in NGSX pilots?
NGSX has been piloted in nine (9) states: Arkansas, California, Illinois (Chicago), Michigan, Minnesota, Oregon, Vermont, Washington, and Wisconsin. It is currently featured in the Connecticut MSP program.

Intel® Math Program for Education Professionals-FAQs
Excerpted from http://www.intel.com/content/www/us/en/corporate-responsibility/intel-math-program-article.html

What is Intel Math?
The Intel® Math course is a scaled-up adaptation of the Vermont Mathematics Initiative (VMI), a content-intensive professional development program developed by Dr. Kenneth Gross, professor of mathematics and education at the University of Vermont. Intel® Math provides 80 hours of professional development in mathematics for K-8 teachers (teacher participants) in the form of a course co-facilitated by a practicing mathematician and a mathematics educator (instructors). The course "is designed to close the gap between insufficient mathematics training of elementary school teachers and the demands of the contemporary mathematics classroom" (*Kenneth Gross*, on VMI) and places emphasis on deepening the teacher participants' understanding of core K-8 mathematics concepts. It is grounded in a problem-solving approach to topics such as integer arithmetic, the decimal number system, place value, rational number arithmetic, rates, linear equations, and functions. About 90 percent of the course is focused on mathematics content knowledge and the remaining 10 percent on pedagogy.

What are some benefits?
"Deepening teachers' content knowledge is a priority for districts since research suggests that students are disadvantaged, and actually learn less, when their teachers do not understand the content (Goldhaber & Brewer, 2000; Monk, 1994). Progress in rectifying this situation stands to be a major contribution of Intel Mathematics." (*WestEd evaluation report, 6/30/2009*).

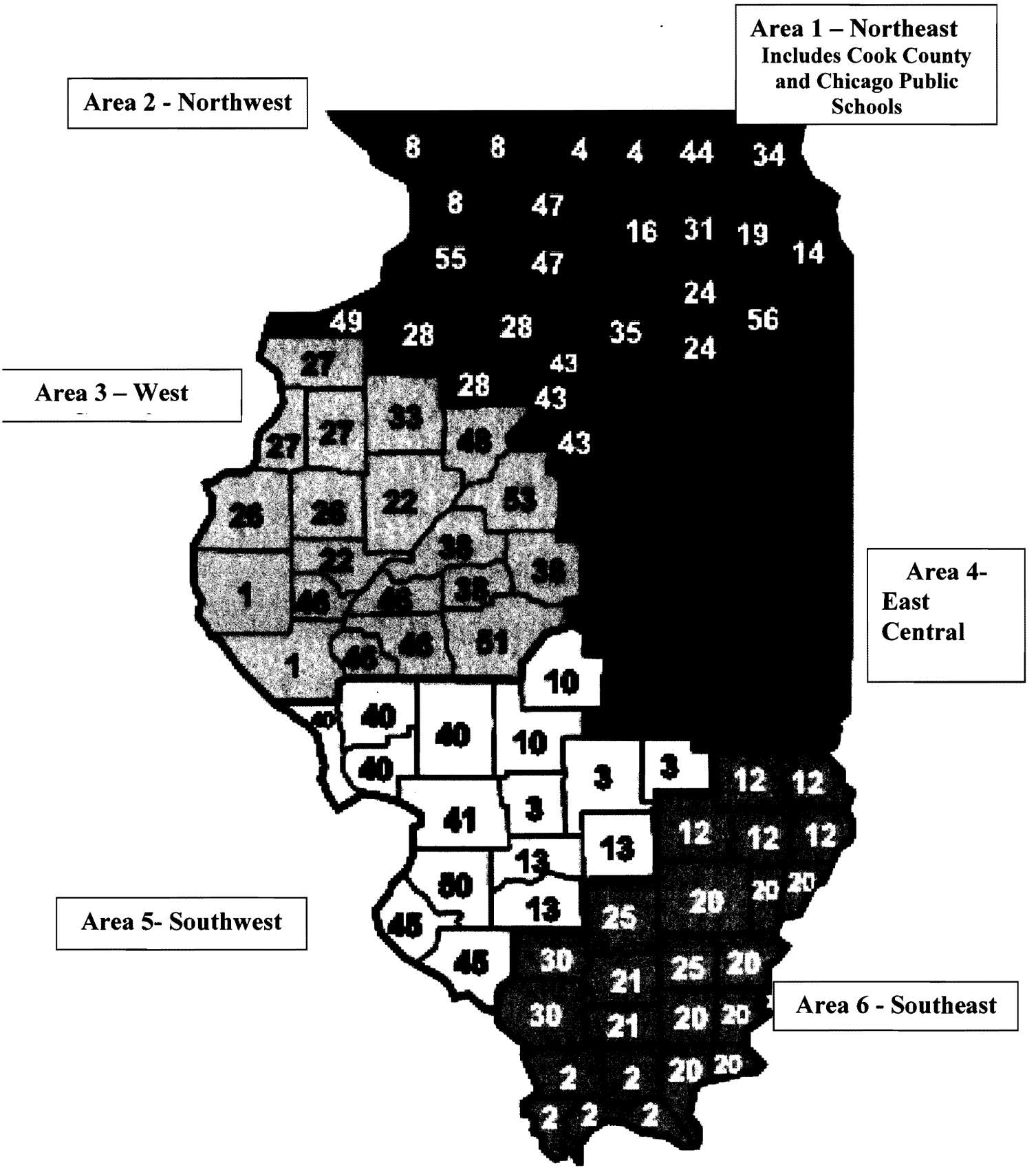
Evaluation results (*WestEd evaluation report*, 6/30/2009) indicate the Intel® Math course "provides teachers with opportunities to deepen their content understanding and to consider pedagogical issues related to their roles as mathematics teachers." In particular, teachers who completed the course have demonstrated growth in mathematics, in both their computational skills and their conceptual understanding. They have commented on varied ways of applying knowledge gained from the course to their classrooms, have indicated an increased focus on communication and reasoning, and reported multiple benefits to their students. Lasting benefits mentioned by teachers include "mathematics knowledge and strategies, access to resources, increased confidence in mathematics learning, changes in approach to teaching mathematics, an appreciation for the importance of making connections across mathematics topics, and understanding student thinking and learning styles."

What is the Course Curriculum?
The course is organized into eight units, each of which comprises four to seven sessions. Intel® Math teacher participants receive the two-volume *Teacher Manual*, in which each session focuses on mathematics content through a series of problems. Additionally, teacher participants receive an *Answer Manual*, which gives multiple solutions to each problem, and a *Reference Manual*, which expands on the philosophy and themes of Intel® Math and offers supplemental readings. Instructors receive all the materials that the teacher participants receive, and an additional *Instructor Manual*, which is essentially a session-by-session companion to the *Teacher Manual*. The *Instructor Manual* also includes a 30-plus page course introduction that details aspects essential for a successful implementation of Intel® Math, true to its philosophy and goals. A section on manipulatives, for example, discusses how the latter may be useful tools for representing and generating ideas, yet also highlights that manipulation of didactic physical objects may not, in and of itself, elicit or unpack conceptual thinking. Specific guidelines on how to select teachers to present their solution strategies and how to organize the order in which solutions are shared are also included as part of the discussion on "Facilitating Presentation of Answers." Additionally, the program allows for differentiation of the materials and homework assignments to meet teachers at various levels of math content knowledge.

Illinois State Board of Education

ROE/ISC Areas through July 1, 2015

Appendix F



Appendix G

Scoring Rubric for the Statewide I-STEM Network Area Partnership

Seventy -five (75) Total Possible Points

I Literature Review/Needs Assessment (maximum of ten (10) points)

Criteria	5 points	3 points	1 point
Content and conclusions of the literature review	The review cites scientifically based research that aligns effective professional development to mathematics or science teaching and learning as previously described in this RFP. includes the required number of citations.	The review cites scientifically based research that aligns effective professional development to math or science teaching and learning.	The review cites limited scientifically based research that aligns to effective professional development to math and science teaching and learning.
Local, state and national needs assessment, including the selection of a SAP or MAP	The applicant has adequately documented the needs of the participating LEAs to improve their math or science instruction based on the New ILS for its students in kindergarten through grade 12. The data collected, including student achievement data, have been thoroughly analyzed and used to propose a program that is aligned to the I-STEM Network Program goals, and addresses the gaps or weaknesses in the	The applicant has adequately documented the needs of the participating LEAs to improve their math or science instruction based on the New ILS for its students. The data collected is limited and/or not thoroughly analyzed or of sufficient quantity to make a proposal for the I-STEM Network or justify the selection of the MAP or SAP.	The applicant has not adequately documented the needs of the participating LEAs to improve their math or science instruction based on the New ILS.

	participating teachers' content and pedagogical knowledge in mathematics or science, including a clear justification for the selection of a MAP or SAP.		

II I-STEM Network Area Partnership Structure, Qualifications, and Capacity (maximum of fifteen (15) points)

Criteria	5 points	3 points	1 point
Personnel qualifications representing the partnership entities	The proposed personnel representing the partnership entities have the qualifications and experiences necessary for the planning, delivery, and evaluation of a successful MAP or SAP.	The proposed personnel for the partnership entities have some of the qualifications or experiences that will generally lead to the successful delivery of a MAP or SAP.	The proposed personnel for the partnership entities have limited qualifications or experiences that will lead to limited success in delivery of the goals and requirements of a MAP or SAP.
Partnership recruitment plan	The recruitment plan for teacher participants includes elementary, middle, and high school representation, along with a plan for retention of participants throughout the three-year grant period that includes incentives for program completion.	The recruitment plan for teacher participants includes elementary, middle, and high school representation, but the plan for retention of the participants is limited or without incentives.	The recruitment plan for teacher participants is missing required participants and/or is limited in the three-year scope or need for retention.

Partnership entities and capacity	Partnership entities have the capacity, commitment, and relationships to fully implement the goals of the MAP or SAP within the local area. Evidence is presented that all partnership entities were involved in planning the partnership work.	Partnership entities have the commitment but limited capacity or relationships to fully implement the goals of the MAP or SAP within the local area, or there is limited evidence that all partners were involved in planning the partnership work.	Partnership entities were not involved in the planning and/or are not involved in the implementation of the MAP or SAP plan.

III. I-STEM Network Area Partnership Program Deliverables (maximum of twenty (20) points)

Criteria	5 points	3 points	1 point
MAP or SAP content, resources, and strategies for the summer workshops and follow-up institutes during the school year	Proposed MAP or SAP activities include required content, resources, and strategies that will be used with all participants, along with optional content, additional resources, or strategies proposed by the partnership for its participants.	MAP or SAP activities include the required content, resources, and strategies that will be used with all participants, but limited information on other content resources or strategies offered by the partnership entities.	MAP or SAP activities are missing some of the required content, resources, or strategies.
MAP or SAP timeline and logistics	Detailed timeline for delivery of the MAP or SAP activities that includes specific dates, locations, persons responsible, and other details that clearly describe the partnership's plan for the successful delivery of the summer workshops and school year	Timeline for MAP and SAP activities that includes some specifics on dates, locations, and persons responsible, but is missing key information or detail that fully describes a prepared partnership plan for summer institutes and school year follow-up	Some information regarding a timeline for MAP and SAP activities is included.

	follow-up institute activities.	activities.	
Coordination with ATL	Specific activities, roles and involvement of the Lead Partnership ATL in the MAP or SAP are clearly described for the design and delivery of the summer workshops and school year institutes.	Roles and activities of the Lead Partnership ATL are referenced in the MAP or SAP plan, but not fully organized or clearly communicated.	Limited involvement or coordination with the Lead Partnership ATL is described.
Statewide conference and website	Activities describe full commitment to and plans for participation in the I-STEM Network conference and I-STEM website.	I-STEM conference and website are mentioned within the plan deliverables without specificity or clear commitment.	Reference to I-STEM conference and website are missing or limited.

IV. I-STEM Network Area Partnership Program Evaluation and Accountability Plan and Reporting Requirements (maximum of fifteen (15) points)

Criteria	5 points	3 points	1 point
MAP or SAP Administrator and Data Coordinator	Qualifications and experiences of an identified Administrator and Data Coordinator are described. The proposed individuals' skill sets satisfy the expectations outlined for the roles.	Qualifications and experiences of Administrator and Data Coordinator are described, but key persons are not yet identified.	Limited references to the qualifications and experiences of the required Administrators or Data Coordinator.
Evaluation compliance plan	Fully described evaluation plan that is in compliance with the requirements of the Lead Partnership evaluation.	Evaluation plan is described that will support the Lead Partnership with fewer details in how the compliance will be attained.	Evaluation plan shows limited support of the requirements of the Lead Partnership evaluation plan.

Data collection	Strategies with a high likelihood of success are planned for the timely collection of the data required from the LEAs and participants.	Data collection is referenced in the evaluation plan.	Limited data collection and submission from the LEAs and participants is planned.

V. I-STEM Network Area Partnership Sustainability Plan (maximum of five (5) points)

Criteria	5 points	3 points	1 point
Sustainability plan	Clear description of how the partnership program will be sustained and supported during and after the grant is provided, along with a discussion of how the AP will continue to impact student achievement in K-12 mathematics or science. If needed, a collaborative plan to maintain program participants, objectives, and activities through the ROE/ISC consolidation on July 1, 2015, is included.	Sustainability plan describes activities and strategies that will likely result in continued impact of the MAP or SAP within K-12 in the area. A plan for maintaining program participants through the ROE/ISC consolidation is included, if needed.	Sustainability plan is limited and generally insufficient to show a likely result of continued impact of the MAP and SAP on K-12 students and teachers in the area.

VI. Overall I-STEM Area Partnership Budget (5 points)

Criteria	5 points	3 points	1 point
MAP or SAP budget	The partnership budget shows the allocation of partnership resources as	The partnership budget shows a limited allocation of partnership resources in	The partnership budget shows insufficient detail to determine if the resources

	customary and reasonable in terms of distribution, scope, and accuracy, in addition to being in alignment with the partnership's goals and the participants' needs.	alignment with the partnership's goals and participants' needs.	have been allocated in alignment with the partnership's goals and participants' needs.

VII. Overall High-Quality I-STEM Area Partnership Plan for Delivery (5 points)

Criteria	5 points	3 points	1 point
Overall MAP or SAP plan	The proposal describes a clear, well-thought-out plan by committed partners to deliver a successful systemic, multi-year federal professional development project focusing on high-quality math or science content, aligned to the New ILS, in which many teachers will participate and their students will benefit.	The proposal describes a limited plan by committed partners to deliver a successful, systemic, multi-year federal professional development project focusing on high-quality math or science content, aligned to the New ILS.	The proposal describes an insufficient plan to deliver a successful, systemic, multi-year federal professional development project in math or science.