CONNECTICUT STATE DEPARTMENT OF EDUCATION

Office of Academics Bureau of Curriculum, Instruction and Assessment



Mathematics and Science Partnership Grant Program

REQUEST FOR PROPOSALS

2015 - 2018

STATUTE: Local Competitive Grant under PL 107-110, Title II, Part B, Sec. 2201, 2202, and 2203 of the Elementary and Secondary Education Act, as amended by the No Child Left Behind Act of 2001.

PURPOSE: To support institutional and organizational partnerships that improve student achievement, interest and aspiration in mathematics and science through sustained professional development programs that enhance teachers' content knowledge and teaching practices.



RFP Published: August 20, 2015

Notice of Intent to Apply Due: September 15, 2015

Full Proposals Due: October 13, 2015

Anticipated Award Notification: November 16, 2015

Project Period: 3 Years, including summer institutes in 2016, 2017 and 2018

RFP 976

Dr. Dianna R. Wentzell Commissioner of Education

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AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER.

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MATHEMATICS AND SCIENCE PARTNERSHIP GRANT PROGRAM REQUEST FOR PROPOSALS 2015-2018

I. Background

Overview of Title IIb Mathematics and Science Partnership Program

The Mathematics and Science Partnership (MSP) grant is a federal formula grant to states funded under Title II, Part B, of the *Elementary and Secondary Education Act* and administered by the U.S. Department of Education (ED). The program is intended to increase the academic achievement of K-12 students in mathematics and science by enhancing the content knowledge and teaching skills of classroom teachers.

The Connecticut State Department of Education (CSDE) is responsible for administering a competitive grant program that makes awards to partnerships between local education agencies (LEAs), including charter schools, magnet schools and independent schools, and faculty at institutions of higher education (IHEs). Other partners may include business and industry and non-profit or for-profit organizations with expertise in leading impactful professional development that leads to improved teaching practices and student success in mathematics or science.

Purpose of the MSP Program

The MSP Program is designed to promote mutually beneficial, collaborative partnerships intended to:

- creating opportunities for intensive and ongoing professional development that improves the **subject matter knowledge** of K-12 teachers;
- advancing **strong teaching skills** for teachers of mathematics and/or science and teacher educators by focusing on teaching methods with strong evidence of effectiveness; and
- establishing and operating mathematics and summer workshops or institutes in addition to on-going professional learning opportunities during the school year.

Guiding Principles of the MSP Program

The MSP Program is characterized by the following core principles:

- Meaningful Partnerships Strong partnerships are those which share responsibility for
 planning and implementing PD projects that benefit <u>all</u> partners. STEM faculty and
 education specialists jointly plan and facilitate the PD program together with LEA leaders
 and participating teachers so that content and pedagogy are accessible, meaningful and
 useful to teachers. School principals are vital partners in establishing and supporting the
 enactment of project goals and outcomes.
- Needs-based The MSP Program is intended to fund STEM improvement initiatives whose
 goals and intended outcomes are based upon the <u>specific</u> instructional challenges faced by
 partner schools and districts. A meaningful and multifaceted assessment of the status of
 teaching and learning of mathematics and science in the partner LEAs forms the basis for
 setting goals and planning the program of MSP PD.

- *Institutional Change* Successful partnerships often yield institutional reforms such as ongoing collaborations between IHEs and LEAs around student attainment of college- and career-ready standards, professional learning communities, IHE faculty engagement in improving teacher preparation programs and courses, or new degree programs.
- Rigor MSP PD is rigorous in terms of (i) the depth of content and pedagogy addressed, (ii) the duration and format of the professional learning experiences, and (iii) the expected impacts on teaching practices and student learning, interest, aspiration and achievement on standardized tests. Deep exploration of select, critical concepts over time is considered more rigorous and effective than superficial treatment of many topics or isolated one-day workshops.
- Evidence-based MSP PD facilitators are expected to integrate standards-based academic
 content with evidence-based strategies for teaching that content. The design of the PD
 program should reflect (i) evidence from research that supports the use of the teaching
 strategies and methods being promoted, and (ii) principles of effective adult learning most
 likely to promote the transfer of new knowledge and skills into classroom teaching
 practice. Documented evidence of teachers' application of newly-acquired knowledge and
 teaching strategies in the classroom is a core expectation of MSP projects.
- *Standards-based* MSP PD programs enhance teachers' understanding of concepts and practices in the following sets of academic learning standards:
 - o Connecticut Core Standards for Mathematics (CCS-M)
 - National Research Council "Framework for K-12 Science Education" (NRC Science Framework)
 - o <u>Connecticut Core Science Curriculum Framework</u> (CT Science Standards)
 - o Next Generation Science Standards (NGSS)
 - Connecticut Core Standards for English Language Arts and Literacy in History, Science and Technical Subjects (CCS-ELA-HST)
- Sustainable impact—Projects funded under the MSP program are expected to result in measurable and sustainable impact on teachers' content knowledge, instructional practices and student performance on large-scale state assessments and other measures of mathematics and science proficiency. Sustainability beyond the grant period means ongoing collaborations among the partners. This can be achieved and evidenced in multiple ways, including but not limited to, combining multiple funding sources; developing new or modified IHE courses and degrees; or on-going recruitment of new participant cohorts.
- Research and Evaluation Projects funded under the MSP program must conduct
 experimental research to collect evidence of the impact of the PD on teacher content
 knowledge, teaching practices and student achievement on state assessments and other
 indicators of growth. Valid and reliable instruments will be used to measure changes in
 teachers' content knowledge, teaching practice and student achievement (see Appendix I)

Goals of Connecticut's MSP Program

The Connecticut MSP Program strives to achieve the following broad goals:

• greater numbers of students, especially in high-need schools, who have access to high-quality instruction in mathematics and science in Kindergarten through Grade 12;

- greater numbers of students who demonstrate progress toward college- and careerreadiness as measured by large-scale state assessments and other measures of mathematics and science learning, interest and aspiration; and
- enhanced capacity of IHE and K-12 educators statewide to design and facilitate student learning that reflects the spirit and intent of the Connecticut Core Standards and the National Research Council's "Framework for K-12 Science Education".

In addition, to support the CSDE's efforts to improve teacher preparation and teacher effectiveness, the Connecticut MSP Program will promote on-going collaborations between IHE teacher preparation programs and the LEAs within their region.

Connecticut's 2015-2018 Project Priorities

Proposals are solicited in any of the following categories. Applicants may submit proposals in more than one category. A separate proposal and budget must be submitted for each category.

PRIORITY PROJECT CATEGORIES	GRADE AND DISCIPLINE
A. INTEL MATH® SCALE-UP: Proposals will enable IHE mathematics teacher education faculty, pre-service teachers and K-8 teachers of mathematics to become better prepared to teach according to the Common Core State Standards for Mathematics (CCSS-M) through the use of Math® as the core content program.	K-12 mathematics teachers
Successful proposals will include:	
 (a) a plan to support all participating teachers to institute the Mathematics Teaching Practices described in the NCTM publication Principles to Actions: Ensuring Mathematical Success for All; (b) alignment of the practices to Connecticut's Common Core of Teaching (CCT); and (c) instruction in the formative assessment process as defined and supported through the Smarter Balanced Digital Library and Exemplars. 	
Participation of IHE teacher educators from multiple campuses is preferred. Each participating IHE will support the certification of at least one team, consisting of a mathematician and a mathematics educator, as Intel Math® instructors. The Intel Math® instructors will conduct the course for all LEA participants, and for the appropriate teacher education faculty.	
 The primary goals of this category are to: Enable IHE teacher educators to better align pre-service teacher education courses in mathematics with the CCSS-M and CCT. Support in-service teachers in the full implementation of the CCSS-M through rigorous instruction in mathematics content, pedagogy and an intentional instruction cycle which incorporates classroom instruction and the formative assessment process. Bring greater consistency to mathematics teacher education programs statewide. 	

B. ALGEBRA REGIONAL LEARNING COMMUNITIES: Develop a prototype format and syllabus for a regional professional learning community of practitioners (PLC) that will bring together (in-person and on-line) teachers who are currently using or wish to begin using the state-developed model curriculum. Led by expert facilitators, the PLC will use *Principles to Action* as the foundation to explore challenges to implementation and strategies to overcome those challenges. Emphasis is on PLC participants collectively defining their implementation needs and using *Principles to Action* as a resource to translate pedagogical shifts necessitated by the model curriculum into new teaching approaches and strategies.

Grade 7-12 mathematics educators

Pilot the format and syllabus with the goal of improving it and making it available statewide through a blend of on-demand and in-person learning modules in the future.

C. COMPUTER SCIENCE FOR CTE, SCIENCE AND MATHEMATICS
TEACHERS: Develop a learning program that will increase the expertise of high
school teachers for teaching computer science to diverse students. The focus of this
learning program should be on fundamental principles of computer science
education. Courses that address these principles include but are not limited to:
Exploring Computer Science, AP Principles, or AP Computer Science A. Attention
should be given to pedagogical practices, increasing computational thinking
competencies of teachers and students; and developing innovative approaches for

Grade 9-12 teachers of mathematics, CTE, or science

A primary goal of this category is to enhance the teaching competencies of educators teaching high school computer science courses.

courses.

increasing the participation of underrepresented students in computer science

A secondary goal of this category is to expand the number of high schools that offer computer science courses taught by trained teachers. In doing so there should be an increase in student interest, motivation, and preparation to pursue advanced studies in the field of computer science.

D. NEXT GENERATION SCIENCE PEDAGOGY: Develop and/or implement a blended learning program (combining on-line and in-person learning structures) that will build capacity of teams of educators and administrators to understand <u>and</u> enact new pedagogical approaches envisioned in the *NRC Science Framework* and the *NGSS*. The PD program must be structured so that it is scalable for statewide educator access beyond the grant period.

K-12 educators; teacher leaders; school principals; higher education faculty; special educators

A primary goal of this category is to foster school-wide transitions to teaching strategies that engage students in using Science and Engineering Practices and Crosscutting Concepts to develop understanding of Core Disciplinary Ideas that explain real-world phenomena. Emphasis is on strategies that support students in: (i) developing explanatory models; (ii) constructing and critiquing reasoned arguments; and (iii) negotiating scientific explanations through cognitively productive classroom discourse.

A secondary goal of this category is to modify available professional development resources to create and operationalize learning programs that meet the *specific* NGSS learning needs and constraints of <u>school principals</u>, <u>higher education faculty</u>, <u>elementary teachers</u>, <u>special educators</u>, and <u>informal science educators</u>.

E. NEXT GENERATION SCIENCE CURRICULUM AND INSTRUCTIONAL RESOURCES – Develop and/or implement a professional learning program that will build capacity of teams of educators and teacher leaders to design or adapt learning units based upon the curriculum recommendations and the grade band end points in the NRC Science Framework. This PD program should build participants' foundational understanding of, and ability to apply, the "3 Integrated Dimensions" of science -- Core Disciplinary Ideas, Science and Engineering Practices and Crosscutting Concepts – that are central to Next Generation Science.

A primary goal of this category is to develop sample Next Generation Science learning units that can become part of a CSDE-led digital library to be accessed by educators state-wide during and beyond the grant period. Teaching resources developed should exemplify the Next Generation Science "Advances" described in the draft NGSS Primary Evaluation of Essential Criteria for Alignment (PEEC-Alignment) and the EQUIP Science Unit Evaluation Rubric developed by Achieve, Inc.

K-12 science teachers and teacher-leaders; district science leaders; Career and Technical Educators; teachers of engineering and computer science

F. NEXT GENERATION SCIENCE LEADERSHIP DEVELOPMENT – Develop and/or implement a research-based blended learning program (combining on-line and in-person learning structures) that will <u>build capacity of learning facilitators</u> to lead state-wide and district-level professional development focused on NGSS pedagogy or curriculum development. Funded projects will (i) demonstrate substantial knowledge of: (i) principles of adult learning; (ii) guiding principles of the NRC Science Framework and the NGSS; and (iii) science-specific pedagogical content knowledge.

Secondary science educators; higher education faculty; informal science educators

A primary goal of this category is to refine the abilities of an elite cohort of Connecticut science educators to lead educator study groups that result in measurable change in teaching practices that support students in (i) developing explanatory models; (ii) constructing and critiquing reasoned arguments; and (iii) negotiating scientific explanations through cognitively productive discourse.

General Project Requirements

All MSP projects must:

- provide content-rich professional development that enhances teachers' understanding of mathematics and/or science content, how students learn that content, and teaching practices that are likely to improve student learning.
- design a PD program based upon an assessment (both qualitative and quantitative) of the teaching and learning improvement goals of the partner school.
- recruit at least 25 educators to participate in the MSP professional learning program.
- provide on-going professional learning during the school year and the summer. A minimum of 24 hours of PD should occur during the school year; and a minimum of 30 hours of PD should occur during each summer.
- provide support for teachers' implementation of newly learned content and teaching strategies;

- contract with a qualified, independent project evaluator with experience conducting scientific research. The project evaluator should assist with the development of the proposal and with identifying appropriate instruments to collect data about the quality of the PD and its impact on teachers, their teaching, and on students' learning.
- administer valid and reliable pre- and post-tests to assess changes in teachers' understanding of rigorous content addressed in the PD;
- use valid and reliable instruments to collect evidence of changes in classroom teaching practices over the course of the project.

II. Partnerships

Eligibility, Roles and Responsibilities

MSP partnerships include a Lead Partner, required core partners, contributing partners and participating partners.

All MSP projects MUST include, at a minimum, the following partners:

- Faculty from Departments of <u>Mathematics</u>, <u>Sciences</u>, <u>or Engineering</u> at one or more IHE(s), including public and private colleges, universities and community colleges;
- Faculty responsible for <u>teacher preparation</u> in mathematics or science education at one or more IHE(s); and
- <u>At least one</u> high-need LEA (*see Appendix F for a list of Alliance Districts*).

Lead Partners are responsible for collaborative project design and fiscal management. The following entities may serve as MSP Lead Partners:

- IHE;
- LEA; and
- Nonprofit and/or informal education organizations with demonstrated effectiveness in improving the quality of mathematics or science teaching.

Contributing partners provide specific expertise, professional development, resources or management services. Contributing partners include entities such as:

- Regional Educational Service Centers (RESCs);
- STEM business and industry; and
- Nonprofit and/or informal education organizations with demonstrated effectiveness in improving the quality of mathematics or science teaching.

Participating partners are the districts, schools and educators who will benefit from the professional learning program. Participating partners include entities such as:

- additional high-need LEAs;
- additional LEAs that are not high-need;
- public charter and magnet schools;

• private or independent schools¹;

Definition of High Need

- A high-need LEA in Connecticut is one of thirty "Alliance Districts" that have been identified based on students' scores on state assessments.
- A high-need <u>school</u>, for purposes of Connecticut's MSP grant competition, is defined as
 one in which fewer than 70% of students scored "At or Above Goal" on the most recent
 Connecticut Mastery Test (CMT) or Connecticut Academic Performance Test (CAPT) in
 mathematics or science. <u>NOTE: a high-need school may or may not be in a high-need</u>
 LEA.
- At least 33% of the <u>schools</u> participating in the MSP project must qualify as high-need in mathematics or science.

Equitable Participation for Private Schools

Section 9501 of the ESEA requires equitable participation for private schools. Eligible applicants must engage in timely and meaningful consultation with appropriate officials of private schools within their attendance area regarding the opportunity to participate in grant-related activities. This consultation must take place during the development of the partnership proposal, before making any decisions that affect the opportunities of eligible private school children, teachers and other educational personnel to participate in programs under Title II, Part B.

The MSP lead partner should extend an invitation to officials of the private schools and convene a meeting with them prior to the submission of the MSP proposal. The program activities available to private school students and teachers should be described. Opportunities are offered for the private school officials to ask questions and offer suggestions.

A consultation process that involves an LEA simply sending a letter to private school officials explaining the purpose of federal education programs and the LEA's intent to apply for funds is not adequate consultation.

For detailed information, see Non-regulatory Guidance from ED for equitable services for eligible private school students, teachers, and other educational personnel at: http://www2.ed.gov/policy/elsec/guid/equitableserguidance.doc.

¹ All LEAs participating in the grant must provide documentation indicating that they have consulted with each nonpublic school within their attendance area regarding the opportunity to participate in grant-related activities.

² As described in Connecticut's ESEA Waiver application and in Public Act 12-116 as the thirty districts with the lowest district performance index (DPI) scores statewide. The DPI is calculated based on the percentage of students in the district scoring at goal, proficient, basic or below basic on the CMT or CAPT mathematics, reading, writing and science state assessments.

Partnership Formation Priorities

Applicants should choose partners based on their need for and commitment to support and sustain MSP PD outcomes. To maximize the potential for school wide impacts through cross-disciplinary applications of enhanced teaching strategies, **bonus points** will be awarded to projects that present evidence that:

- A building administrator(s) of each partner school is significantly involved in MSP project planning, professional learning sessions, and in setting expectations for implementing new instructional approaches.
- The district STEM leader(s) is **significantly** involved in MSP project planning, professional learning sessions, and in setting expectations for implementing new instructional approaches.
- Educators from multiple content areas (i.e., mathematics, science, computer science, engineering, and other career and technical education subjects) participate in the project.
- Special education teachers participate in the project.
- Teams of educators from each school (rather than individuals) participate in the project. Teams may consist of representatives from a single grade or multiple grades.

Project Roles

Each project is required to identify individuals to serve in the following roles:

- A Lead Partner organization serves as fiscal agent for the project. The Lead Partner can be an LEA, IHE, RESC or other qualified nonprofit organization. The fiscal agent is responsible for ensuring compliance with federal, state and local grant management regulations and procedures;
- A Project Coordinator (PC) serves as the driving force for establishing and achieving the
 project's vision and design. The PC provides leadership in developing a project plan that
 reflects the needs and goals of all partners. The PC is responsible for duties such as
 partnership formation, proposal development, teacher recruitment, collaboration with
 CSDE, progress monitoring, submitting interim and annual performance reports (APRs) to
 ED and CSDE, and attending state and federal meetings. This is a job that requires
 significant investment of expertise and time;
- A *Project Management Team* consisting of representatives from all partners, including teacher representatives, the project's external evaluator, and the CSDE MSP program manager. The management team will meet regularly to plan, monitor and make adjustments to the PD program throughout the project. It is recommended that at least two teachers from the PD cohort serve on the management team;
- MSP School Facilitators the principal of each participating school. MSP Facilitators ensure
 alignment of district and school policies with MSP project goals. Principals articulate
 intended outcomes, nominate cohort members, structure time for MSP teachers to work
 together and with others, and assist with data collection for project evaluation. They are
 encouraged to participate in project management and PD activities; and
- An *Independent Project Evaluator* who will work with the PC to design the accountability and evaluation plan, including research questions specific to the proposed project. The

Project Evaluator should be identified early in the proposal development process so he or she can participate in project planning, establishing measurable goals, identifying results indicators, and selecting measurement instruments to collect data. The Project Evaluator will be responsible for collecting data on the nature of the PD interventions as well as their impact on teacher content knowledge, teaching practices and student learning. In addition, the Project Evaluator will complete portions of the APR report to ED and will write a final project evaluation report to be submitted to the Project Coordinator, ED and CSDE. Project evaluators are responsible for obtaining appropriate institutional approvals to conduct research with human subjects, as needed (see EDGAR Sections 76.681 and 76.740).

CSDE PROGRAM OVERSIGHT

CSDE is responsible for assuring that MSP partnerships are selected, monitored, managed and evaluated in compliance with program guidelines issued by ED and with state and federal grant management regulations. See <u>Education Department General Administrative</u>

<u>Regulations (EDGAR)</u>. Sections 74, 76, 77, 80, 81, 82, 86, 98 and 99 apply to the MSP Program.

CSDE MSP program managers will work closely with MSP project coordinators throughout the project period and should be invited to all Project Management Team meetings. CSDE program managers should be contacted promptly regarding issues such as: (i) changes to key project personnel; (ii) attrition of PD participants or partner districts; (iii) budget modifications; or (iv) changes to planned activities.

- *Pre-Award Advisory Meeting* CSDE MSP program managers will host a Pre-Award Advisory Meeting for the PCs of highly-ranked proposals. Additional information about project expectations and research will be provided. Requested modifications to the project design and the budget will be discussed at that time and revised proposals will be submitted prior to final finding determinations (see Important Dates).
- *Technical Assistance Meetings* CSDE MSP program managers may host meetings to provide technical assistance regarding compliance with state and federal requirements regarding project expectations, impact monitoring, research and evaluation design and instruments, and fiscal management.
- Site visits CSDE MSP program managers will attend project activities to monitor that activities are being carried out as proposed in the application, and to provide feedback to PCs about the quality of the PD.
- Interim Progress Reports_— A report describing project activities, expenditures, achievements and challenges will be submitted to CSDE program managers every 6 months (see Important Dates). A Progress Report form will be provided.

III. Fiscal Information

Amount Available for Distribution

• Approximately \$1,600,000 is available to fund a variety of MSP projects in mathematics and science.

• There is no pre-determined minimum or maximum award for each individual project. The budget should reasonably reflect the scale and scope of the project. Historically, MSP project budgets have ranged from \$100,000 to \$375,000 per year, depending on the scale of the project.

Project Periods 2015-2018

Proposals will describe a 3-year project design to be carried out beginning January 1, 2016 and concluding by September 30, 2018. The project work can include development of the PD materials and implementation of the PD with educators. Phase I must include a 2016 summer workshop, but school year activities, including PD materials development, may begin as early as February 2016.

Project work will be organized as follows:

- Phase 1: January 1, 2016 through September 30, 2016 to conduct school-year project activities and summer workshops. *Please note this is a 9-month work period.*
- Phase 2: October 1, 2016 through September 30, 2017 to conduct school-year project activities and summer workshops. *Please note this is a 12-month work period.*
- Phase 3: October 1, 2017 through September 30, 2018 to conduct school-year project activities and summer workshops. *Please note this is a 12-month work period.*
- Proposals will include a project description that outlines Phases 1, 2, and 3.
- Budgets for Phases 1 and 2 will be submitted with this application. Awards will be made for Phases 1 and 2:
 - i. The entire Phase 1 award must be expended by September 30, 2016;
 - ii. The entire Phase 2 award must be expended by September 30, 2017.
- A continuation application will be submitted to CSDE in August 2017. It will include a Phase 3 activity description, a Phase 3 budget, together with information about activities, achievements, challenges and solutions during Phases 1 and 2.
- Continued funding of Phase 3 of the MSP project will be contingent upon:
 - i. allocation of MSP funds by the federal government;
 - ii. responsible fiscal management during Phases1 and 2;
 - iii. effectiveness and impact of Phase 1 and 2 project activities; and
 - iv. evidence of sufficient, on-going educator participation.

Allowable Expenditures

MSP Program funds received must be used to <u>supplement and not to supplant</u> funds that would ordinarily be the responsibility of the grantee. MSP funds must be used specifically for educator professional development, including but not limited to the development and validation of the materials to be used for professional learning.

Grantees and subcontractors (i.e., all organizations or individuals who receive MSP funds in payment for services related to the MSP grant) must keep a monthly record of hours spent on MSP-related work, the days on which the work occurred, and the nature of the work that was

done. Time and effort logs should be submitted to the Project Coordinator at the end of every month (see Appendix K).

The following table provides some guidelines regarding allowable expenses. Additional information is available from the CSDE Program Managers:

MSP Budget Guidelines			
Teacher Stipends	Teachers can only be paid for time beyond their regular contract day/year. Payments are based on daily/hourly rates defined in district contracts.		
Expenses for Substitute Teachers	Allowable as determined by the daily rate in each partner district.		
Project Coordination & Management	MSP funds may be used to compensate the Project Coordinator for reasonable costs of project-related work that occurs beyond the coordinator's employment contract.		
Instructional Curricular Materials	Allowable only for teachers participating in the PD. Purchase of instructional materials for students' use is not allowable.		
Consultants and Subcontracts	Payments for services by those not on the grantees' payroll must be reasonable and based upon prevailing regional rates.		
IHE Tuition	Allowable only for courses developed to meet MSP project goals.		
IHE Faculty Stipends	Allowable only if no tuition payment is made. Contractual daily/hourly salary rate allowable for PD instruction time; 50% of daily/hourly rate for PD development and evaluation time.		
Project Evaluation	Not to exceed 20% of total approved annual budget, depending on the scalability readiness of the project design.		
Food	Not allowable in most cases; working lunches may be allowable if justified.		
Technology Acquisition	Allowable only if directly related to the content/pedagogy focus of the PD or to the collection of evidence of change in teaching practices. Technology devices should not be used primarily as teacher recruitment incentives. Any technology purchased by the grantee remains the property of the lead partner and not the individual teachers, and may be reclaimed by CSDE at the end of the grant period.		
Memberships in Professional Organizations	Not allowable.		
Conference Registration Fees	Allowable only to attend U.S. Department of Education MSP events (if applicable).		
Travel	Allowable only for travel to MSP national conferences hosted by U.S. Dept. of Education (maximum 4 key project staff per project).		
Indirect Costs	Only available to the Lead Partner. The Lead Partner must have a current indirect cost rate agreement on file with the State of Connecticut in order to charge indirect costs to a grant. Not to exceed 8% of approved budget.		

IV. Application Requirements

Application Submission

- The application deadline is Tuesday, October 13, 2015, at 4:00 p.m.
- Save the completed application as a PDF document. Name the document as follows: "lead name 2015 MSP Proposal-Math or Science". For example: "Avon 2015 MSP Proposal-Math.pdf". Include a footer with page numbers, Lead Partner and Project Category.
- E-mail a PDF version of the proposal, including all signatures, **no later than 4:00 p.m. on Tuesday, October 13, 2015** to:

Mathematics: Jennifer Michalek - Jennifer.michalek@ct.gov

Science: Elizabeth Buttner – <u>elizabeth.buttner@ct.gov</u>

The CSDE Academic Office will send an electronic confirmation upon receipt of proposals.

Application Format

The following pages form the body of an electronic application.

- Please enter requested narratives and information electronically on the following pages.
- Forms requiring signatures should be signed, scanned, and placed back into the electronic application package in the assigned position.
- Project Abstract should be single-spaced, in 12 pt. font. All other proposal section narratives should be double-spaced and should adhere to the stated page limits for each section. Charts should be single-spaced.
- Include the prompts for all section narratives with the responses for that section.
- Save <u>only</u> the Application Template components of the RFP, beginning with the "Cover Page" as a single PDF document for submission.

<u>Application Component Checklist</u>

Γhe s	ubmitte	ed application has the following components assembled in the following sequence:
	Webin	ar Registration Form
	Notice	of Intent to Apply
	Cover l	Page
	Project	Abstract
	Budget	Form ED114 – Phase 1
	Annota	ited Budget Narrative – Phase 1
	Budget	Form ED114 – Phase 2
	Annota	ited Budget Narrative – Phase 2
	Propos	al Section I – Needs Assessment (scanned copies or links to surveys or
	observ	ation protocols used)
	0	Needs Assessment Data Analysis
_	0	Principals' Statement of Need, Goals and Commitment
	-	al Section II – Project Goals and Objectives
Ц	Propos	al Section III – Partnership Commitment and Capacity
	0	Signed Partnership Agreement
	0	Documentation of Invitation and Consultation with Private Schools
	0	Superintendents' and Deans' Letters of Support
_	0	Partnership Commitment and Capacity
	Propos	al Section IV – PD Program Design and Quality
	0	3-Year Project Overview
	0	Phase 1 Project Activity Timeline
	0	Phase 2 Project Activity Timeline
	0	Phase 1 Professional Development Activity Operations Plan
	0	Phase 2 Professional Development Activity Operations Plan
	Propos	al Section V – Project Staffing, Management, Monitoring and Sustainability
	0	Project Staffing, Management, Monitoring and Sustainability
	0	MSP Project Personnel Roles and Responsibilities
	0	Curricula Vitae of <u>relevant</u> achievements for Project Coordinator, each PD
		Facilitator, and the Project Evaluator (scan and insert)
	0	Project Management Team Meeting Schedule
	Propos	al Section VI – Project Evaluation and Research Plan
	Appen	dix A – Statement of Assurances
	Appen	dix B and C – Certification Regarding Lobbying; Debarment and Suspension and
	Other F	Responsibility Matters; and Drug-Free Workplace Requirements
	Appen	dix D – Certification of Affirmative Action Packet on File
	Appen	dix E – Supplement Not Supplant Assurance

Important Dates

EVENT	DATE
Request for Proposals announced	August 20, 2015
Bidders' Webinar Registration Deadline	August 28, 2015
Bidders' Webinar	September 1, 2015
Notice of Intent to Apply due	September 15, 2015
Proposals due to CSDE	October 13, 2015
Pre-award Negotiation Meeting with CSDE	Week of November 9, 2015
Anticipated announcement of grant awards	December 2015
CSDE Prepayment Grant System Technical Assistance meeting	January 2016
Phase 1 funds access begins	January 2016
U.S. Department of Education National MSP Conference	March 2016 (tentative)
Interim Progress Report due to CSDE	June 1, 2016
Phase 1 funds access ends	September 30, 2016
1st Annual Performance Report (APR) due to CSDE	February 1, 2017
Phase 2 funds access begins	October 1, 2016
Phase 3 Continuation Application due to CSDE	August 2017
Phase 2 funds access ends	September 30, 2017
2nd Annual Performance Report (APR) due to CSDE	February 1, 2018
Phase 3 funds access begins	October 1, 2017
Phase 3 funds access ends	September 30, 2018

Bidders' Webinar

A Bidders' Webinar will be held on Tuesday, September 1 from 1:30 to 3:00 pm. Prospective lead partners are urged to participate. CSDE MSP Program Managers will provide information about the MSP program and answer questions about partnership formation and proposal development. The webinar will be recorded and posted on the CSDE MSP web site. Please complete the Bidders' Webinar Registration Form so that you can receive the link to join the webinar.

BIDDERS' WEBINAR REGISTRATION FORM

Yes, we plan to participate in the Bidders' Webinar on Tuesday, September 1 from 1:30 pm to 3:00 pm. CSDE MSP Program Managers will provide information about the program and answer questions about partnership formation and proposal development.

Name:	
Title:	
LEA/IHE/Organization:	
E-mail Address:	
Number of Webinar Participants:	
Number of locations from which participants will join:	
Please return this form by e-mail to marion.lamprecht@ct.gov no lat	er than Friday, August 28,

2015 by 4:00 pm

NOTICE OF INTENT TO APPLY

E-MAIL A COMPLETED COPY OF THE FORM BELOW TO <u>marion.lamprecht@ct.gov</u> no later than Tuesday, September 15, 2015 at 4:00 p.m.

Applicants are requested to submit to CSDE a signed, non-binding Notice of Intent to Apply. This information will help CSDE constitute the proposal review panel. *NOTE: If proposals are to be submitted for multiple categories, a separate application must be submitted for each category. Categories may not be combined within a single application.*

TO CSDE MSP PROGRAM MANAGERS:

This is to inform you that the partnership described below intends to submit an application for a Title IIB Mathematics and Science Partnership Program grant for 2015-2018. The following information describes our current plans, which are still evolving. The information is provided solely to assist CSDE in preparing for the grant review process:

We intend to submit a proposal(s) for the following project category (check all that apply):

Project Category A: Intel Math Scale-Up
Project Category B: Algebra Regional Learning Communities
Project Category C: Computer Science for CTE, Science and Mathematics Teachers
Project Category D: Next Generation Science Pedagogy
Project Category E: Next Generation Science Curriculum and Instructional Resources
Project Category F: Next Generation Science Leadership Development
Lead Partner Organization:
Project Coordinator Name:
IHE Partner(s):
High-Need LEA Partners:
Other LEA Partners:
Private and/or Charter Schools Participating:
Other Contributing Partner(s):
We understand that this letter of intent does not (a) obligate us to submit an application; or (b) limit us to submitting an application with the partners named herein or for the project category described above.
Sincerely,
[Project Coordinator Name]
[Lead Partner Name]
[Phone Number]
[E-mail]

APPLICATION TEMPLATE

COVER PAGE

Connecticut State Department of Education Office of Academics - Bureau of Curriculum, Instruction and Assessment

Application for a Title II-B Mathematics and Science Partnership Grant 2015 - 2018

PROJECT TITLE:			
PROJECT DISCIPLINE:	Mathematics	_ Science	
PROJECT CATEGORY:	A B C	D E F(choose one)	
GRADE-LEVELS TARGETED:			
LEAD PARTNER:			
Project Coordinat	or's Name:		
Project Coordinat	or 's Title:		
Mailing Address:			
Telephone:			
E-mail address:			
High-need LEA Partner(s):			
Other Participating LEA Partn	er(s):		
IHE Partner(s):			
Other Contributing Partner(s)):		
Amount of MSP Phase 1 fundi	ng requested (9-m	onth work period):	
Amount of MSP Phase 2 fundi	ng requested (12-n	nonth work period):	
Projected Number of Educato	rs Participating:		
Proposal prepared by:			
	CERTIFICATION	N OF AUTHORIZED OFFICIAL	
correct, that the filing of thi	s application is dul	s/her knowledge, the informati y authorized by the governing b with the attached Statement of A	ody of this organization or
Authorized Officer's Name (page 1)	 rint)	Signature	 Date

Project Abstract

On the next page, provide a concise summary of the proposed project. Please note that this project abstract will be used to describe your project in MSP publications and web sites; therefore, it is important to avoid jargon, abbreviations and short-hand references to programs that others might not recognize. It should provide a general overview for those who are not familiar with your work. The abstract should include the following elements: (maximum 1 page, single-spaced):

- Identify the project partners and the RFP Project Priority Category it addresses;
- Describe the challenge or problem the project is designed to address and the intended impacts on participating IHEs, LEAs, teachers, schools, and students (individual names should not be included);
- Describe the design of the PD program and the anticipated changes in teachers' content knowledge, teaching practices, student learning and aspiration it is intended to achieve.

PROJECT ABSTRACT

PROI	ECT TITLE:	LEAD PARTNER:

BUDGET FORM ED 114 WORKSHEET- MATHEMATICS PROJECT – Phase 1

Mathematics and Science Partnership Grant Program Local Competitive – ESEA, Title II Part B

GRANTI	EE NAME (Fiscal Ager	nt):		TOWN CODE:	
GRANT	TITLE: Mathematics a	and Science Partnersh	nip Program – Matl	n Projects	
	e Mathematics in title				
	NTING CLASSIFICATIO		DVD 05TF 0045	OVA DESCRIPTION 4 4 5 0 0 0	0.0000
FUND: 1	12060 SPID: 21592	PROGRAM: 84157	BUDGET: 2015	CHARTFIELD1: 17000	3 CTFD 2:
GRANT	PERIOD <mark>: 01/01/201</mark>	<mark>6 - 09/30/2016</mark>		AUTHORIZED AM	OUNT:
CODE	DESCRIPTION				BUDGET AMOUNT
111A	NON-INSTRUCTION	ONAL SALARIES			
111B	INSTRUCTIONAL	SALARIES			
200	PERSONAL SERV	ICES-EMPLOYEE BI	ENEFITS		
322	IN-SERVICE				
330	EMPLOYEE TRAI	NING AND DEVELO	PMENT SERVICE	S	
352	OTHER TECHNIC	AL SERVICES			
530	COMMUNICATIO	N			
560	TUITION				
580	TRAVEL				
640	BOOKS/PERIODIO	CALS			
650	SUPPLIES				
917	INDIRECT COSTS	(8% maximum)			
	TOTAL				

BUDGET FORM ED 114 WORKSHEET- SCIENCE PROJECT – Phase 1

Mathematics and Science Partnership Grant Program Local Competitive – ESEA, Title II Part B

GRANTI	EΕ	NAME (Fiscal Agent): TOWN CODE	l:
GRANT	ΤI	TLE: Mathematics and Science Partnership Program – Science Projects	
	S	TITLE: cience in title) TING CLASSIFICATIONS:	
FUND: 1	2	060 SPID: 21592 PROGRAM: 84158 BUDGET: 2015 CHARTFIELD1: 170	003 CTFD 2:
GRANT	ΡI	ERIOD: 01/01/2016 - 09/30/2016 AUTHORIZED A	AMOUNT:
CODE		DESCRIPTION	BUDGET AMOUNT
111A		NON-INSTRUCTIONAL SALARIES	
111B		INSTRUCTIONAL SALARIES	
200		PERSONAL SERVICES-EMPLOYEE BENEFITS	
322		IN-SERVICE	
330		EMPLOYEE TRAINING AND DEVELOPMENT SERVICES	
352		OTHER TECHNICAL SERVICES	
530		COMMUNICATION	
560		TUITION	
580		TRAVEL	
640		BOOKS/PERIODICALS	
650		SUPPLIES	
917		INDIRECT COSTS (8% maximum)	
		TOTAL.	

Annotated Budget Narrative for Phase 1

Describe in detail the basis for determining the amounts shown on the Budget Form ED114. Fill in the AMOUNT for each line item, and then in the space below each code, give a brief explanation of how the funds will be used. Provide a detailed breakdown of hourly, daily or per unit costs or rates.

CODE	ОВЈЕСТ	AMOUNT
	Non-Instructional	
111A	Amounts paid to administrative employees of the grantee not involved in providing direct services to pupils/clients. Include all gross salary payments for these individuals while they are on the grantee payroll including overtime salaries or salaries paid to employees of a temporary nature.	
	Project coordinator compensation can be viewed in the following ways:	
	 a) As the Grantee's in-kind contribution to the project; If Option (a) is elected, do not enter any amount in this line. 	
	b) As reimbursable to the grantee institution (if the work occurs during the contractual day or year); If Option (b) is elected, estimate the number of days to be devoted solely to the coordination of this project. Use the daily per diem rate to calculate the amount that will be allocated to the grantee to compensate for the time devoted to MSP project coordination. Enter that amount in Line 111A; or	
	c) As reimbursable to the project coordinator (if the work occurs beyond the contractual day or year). If Option (c) is elected, estimate the number of days to be devoted solely to the coordination of this project. Use the daily per diem rate to calculate the amount that will be paid to the project coordinator as compensation for the time devoted to MSP project coordination. Enter that amount in Line 119.	
	Instructional	
111B	Salaries for employees providing direct instruction/counseling to pupils/clients. This category is used for both counselors and teachers. Include all salaries for these individuals while they are on the grantee payroll including overtime salaries or salaries of temporary employees. Substitute teachers or teachers hired on a temporary basis to perform work in positions of either a temporary or permanent nature are also reported here. Tutors or individuals whose services are acquired through a contract are not included in the category. A general rule of thumb is that a person for whom the grantee is paying employee benefits and who is on the grantee payroll is included; a person who is paid a fee with no grantee obligation for benefits is not.	
	 Insert stipends for salaried teachers from the Lead Partner only (after school, weekends or summer activities). Stipend cannot be issued for time spent in professional development activities for which graduate credits are being issued. Substitute teachers hired on a temporary basis to perform work in positions of either a temporary or permanent nature are also reported. 	
	Personal Services - Employee Benefits	
200	Amounts paid by the grantee on behalf of the employees whose salaries are reported in objects 100 or 111A and 111B. These amounts are not included in the gross salary, but are in addition to that amount. Such payments are fringe benefit payments and, while not paid directly to employees, nevertheless are part of the cost of personal services. Included are the employer's cost of group insurance, social security contribution, retirement contribution, tuition reimbursement, unemployment compensation and workmen's compensation insurance.	
322	In-service (Instructional Program Improvement Services) Payments for services performed by persons qualified to assist teachers and supervisors to enhance the quality of the teaching process. This category includes curriculum consultants, inservice training specialists, etc., who are not on the grantee payroll.	
	 Fees for persons contracted to facilitate professional development are entered here. Provide an itemized breakdown of the payments to each provider, including services to be rendered, number of hours/days, hourly/daily rate and total compensation. All costs associated with teaching a credit-bearing course must be entered under Line 560. IHE faculty are only eligible for compensation if they are not compensated by their institution for teaching the course. 	

	TOTAL	
	Education may use the rate approved by another federal agency. • 8% maximum	
917	Costs incurred by the grantee which are not directly related to the program but are a result thereof. Grantees must submit indirect cost proposals to the Connecticut State Department of Education to apply for a restricted and unrestricted rate. Only grantees that have received rate approvals are eligible to claim indirect costs. Please note, however, that grantees who receive the majority of their grant funds other than through the Connecticut State Department of	
	development. Indirect Costs	
030	related hardware or software. • Enter itemized breakdown of costs for supplies purchased for use in the professional	
650	Itemize costs for textbooks and other instructional resource publications purchased for use in the professional development, including credit-bearing college courses. Instructional Supplies Expenditures for consumable items purchased for instructional use, including technology-	
640	Books and Periodicals Expenditures for books, textbooks, and periodicals prescribed and available for general use, including reference books. This category includes the cost of workbooks, textbook binding or repairs, and textbooks that are purchased to be resold or rented. Also recorded here are the costs of binding or other repairs to school library books.	
	Enter costs for travel, as authorized under the budget guidelines or CSDE MSP program managers	
580	Travel Expenditures for transportation, meals, hotel and other expenses associated with staff travel. Per diem payments to staff in lieu of reimbursement for subsistence (room and board) are also included.	
	• If college credit is being issued, all fees related to tuition, registration, etc. are entered on this line	
560	Tuition Expenditures to reimburse other educational agencies for instructional services to pupils.	
	Enter fees for on-line or distance learning and/or website development and hosting.	
530	Communication Payments for services provided by persons or businesses to assist in transmitting and receiving messages or information. This category includes telephone services as well as postage machine rental and postage.	
	 Project Evaluation costs are entered here. Include an itemized breakdown of services to be rendered, including number of work days/hours and per diem/hourly rate. Cannot exceed 20% of total budget. 	
352	Other Technical Services Technical services other than data-processing and related services.	
	 digitizing web-based learning modules web design videography 	
	Fees such as:	
330	including instructional, administrative, and service employees. Included are course registration fees (that are not tuition reimbursement), charges from external vendors to conduct training courses (at either school district facilities or off-site), and other expenditures associated with training or professional development by third-party vendors.	
	Employee Training and Development Services Services supporting the professional and technical development of school district personnel,	

BUDGET FORM ED 114 WORKSHEET- MATHEMATICS PROJECT – Phase 2

Mathematics and Science Partnership Grant Program Local Competitive – ESEA, Title II Part B

GRANTI	EE NA	ME (Fiscal Agent): TOWN CODE:		
GRANT	TITLE	: Mathematics and Science Partnership Program – Math Projects		
PROJEC' (include		LE: ematics in title)		
ACCOUN	NTING	CLASSIFICATIONS:		
FUND: 1	2060	SPID: 21592 PROGRAM: 84157 BUDGET: 2016 CHARTFIELD1: 17000	3 CTFD 2:	
GRANT	PERIC	DD: 10/01/2016 - 09/30/2017 AUTHORIZED AMO	OUNT:	
CODE	DE:	SCRIPTION	BUDGET AMOUNT	
111A	NO	N-INSTRUCTIONAL SALARIES		
111B	INS	STRUCTIONAL SALARIES		
200	PEI	RSONAL SERVICES-EMPLOYEE BENEFITS		
322	IN-	SERVICE		
330	EM	PLOYEE TRAINING AND DEVELOPMENT SERVICES		
352	OT	HER TECHNICAL SERVICES		
530	CO	MMUNICATION		
560	TU	ITION		
580	TR	AVEL		
640	ВО	OKS/PERIODICALS		
650	SU	PPLIES		
917	INDIRECT COSTS (8% maximum)			
	TO	TAL		

BUDGET FORM ED 114 WORKSHEET- SCIENCE PROJECT – Phase 2

Mathematics and Science Partnership Grant Program Local Competitive – ESEA, Title II Part B

GRANTI	EΕ	E NAME (Fiscal Agent): TOWN CO	DDE:		
GRANT	ΤI	ITLE: Mathematics and Science Partnership Program – Science Projects			
	S	TITLE: Science in title) FING CLASSIFICATIONS:			
FUND: 1	2	060 SPID: 21592 PROGRAM: 84158 BUDGET: 2016 CHARTFIELD1:	170003 CTFD 2:		
GRANT	ΡF	ERIOD <mark>: 10/01/2016 - 09/30/2017</mark> AUTHORIZE	D AMOUNT:		
CODE		DESCRIPTION	BUDGET AMOUNT		
111A		NON-INSTRUCTIONAL SALARIES			
111B		INSTRUCTIONAL SALARIES			
200	PERSONAL SERVICES-EMPLOYEE BENEFITS				
322		IN-SERVICE			
330	EMPLOYEE TRAINING AND DEVELOPMENT SERVICES				
352	OTHER TECHNICAL SERVICES				
530		COMMUNICATION			
560		TUITION			
580		TRAVEL			
640		BOOKS/PERIODICALS			
650	SUPPLIES				
917		INDIRECT COSTS (8% maximum)			
		TOTAL.			

Annotated Budget Narrative for Phase 2

Describe in detail the basis for determining the amounts shown on the Budget Form ED114. Fill in the AMOUNT for each line item, and then in the space below each code, give a brief explanation of how the funds will be used. Provide a detailed breakdown of hourly, daily or per unit costs or rates.

CODE	OBJECT	AMOUNT
	Non-Instructional	<u> </u>
111A	Amounts paid to administrative employees of the grantee not involved in providing direct services to pupils/clients. Include all gross salary payments for these individuals while they are on the grantee payroll including overtime salaries or salaries paid to employees of a temporary nature.	
	Project coordinator compensation can be viewed in the following ways:	
	d) As the Grantee's in-kind contribution to the project; If Option (a) is elected, do not enter any amount in this line.	
	e) As reimbursable to the grantee institution (if the work occurs during the contractual day or year); If Option (b) is elected, estimate the number of days to be devoted solely to the coordination of this project. Use the daily per diem rate to calculate the amount that will be allocated to the grantee to compensate for the time devoted to MSP project coordination. Enter that amount in Line 111A; or	
	f) As reimbursable to the project coordinator (if the work occurs beyond the contractual day or year). If Option (c) is elected, estimate the number of days to be devoted solely to the coordination of this project. Use the daily per diem rate to calculate the amount that will be paid to the project coordinator as compensation for the time devoted to MSP project coordination. Enter that amount in Line 119.	
	Instructional Salaries for employees providing direct instruction/counseling to pupils/clients. This category	
111B	is used for both counselors and teachers. Include all salaries for these individuals while they are on the grantee payroll including overtime salaries or salaries of temporary employees. Substitute teachers or teachers hired on a temporary basis to perform work in positions of either a temporary or permanent nature are also reported here. Tutors or individuals whose services are acquired through a contract are not included in the category. A general rule of thumb is that a person for whom the grantee is paying employee benefits and who is on the grantee payroll is included; a person who is paid a fee with no grantee obligation for benefits is not.	
	• Insert stipends for salaried teachers from the Lead Partner only (after school, weekends or summer activities). Stipend cannot be issued for time spent in professional development activities for which graduate credits are being issued.	
	 Substitute teachers hired on a temporary basis to perform work in positions of either a temporary or permanent nature are also reported. 	
200	Personal Services - Employee Benefits Amounts paid by the grantee on behalf of the employees whose salaries are reported in objects 100 or 111A and 111B. These amounts are not included in the gross salary, but are in addition to that amount. Such payments are fringe benefit payments and, while not paid directly to employees, nevertheless are part of the cost of personal services. Included are the employer's cost of group insurance, social security contribution, retirement contribution, tuition reimbursement, unemployment compensation and workmen's compensation insurance.	
	In-service (Instructional Program Improvement Services)	
322	Payments for services performed by persons qualified to assist teachers and supervisors to enhance the quality of the teaching process. This category includes curriculum consultants, inservice training specialists, etc., who are not on the grantee payroll.	
	 Fees for persons contracted to facilitate professional development are entered here. Provide an itemized breakdown of the payments to each provider, including services to be rendered, number of hours/days, hourly/daily rate and total compensation. 	
	 All costs associated with teaching a credit-bearing course must be entered under Line 560. IHE faculty are only eligible for compensation if they are not compensated by their institution for teaching the course. 	

	TOTAL	
	• 8% maximum	
917	Costs incurred by the grantee which are not directly related to the program but are a result thereof. Grantees must submit indirect cost proposals to the Connecticut State Department of Education to apply for a restricted and unrestricted rate. Only grantees that have received rate approvals are eligible to claim indirect costs. Please note, however, that grantees who receive the majority of their grant funds other than through the Connecticut State Department of Education may use the rate approved by another federal agency.	
	Enter itemized breakdown of costs for supplies purchased for use in the professional development. Indirect Costs	
650	Instructional Supplies Expenditures for consumable items purchased for instructional use, including technology-related hardware or software.	
	 Itemize costs for textbooks and other instructional resource publications purchased for use in the professional development, including credit-bearing college courses. 	
640	managers Books and Periodicals Expenditures for books, textbooks, and periodicals prescribed and available for general use, including reference books. This category includes the cost of workbooks, textbook binding or repairs, and textbooks that are purchased to be resold or rented. Also recorded here are the costs of binding or other repairs to school library books.	
	 included. Enter costs for travel, as authorized under the budget guidelines or CSDE MSP program 	
580	Travel Expenditures for transportation, meals, hotel and other expenses associated with staff travel. Per diem payments to staff in lieu of reimbursement for subsistence (room and board) are also	
	 Expenditures to reimburse other educational agencies for instructional services to pupils. If college credit is being issued, all fees related to tuition, registration, etc. are entered on this line 	
560	Enter fees for on-line or distance learning and/or website development and hosting. Tuition Expenditures to reimburse other educational agencies for instructional services to pupils.	
530	Communication Payments for services provided by persons or businesses to assist in transmitting and receiving messages or information. This category includes telephone services as well as postage machine rental and postage.	
	 Cannot exceed 20% of total budget. Project Evaluation costs are entered here. Include an itemized breakdown of services to be rendered, including number of work days/hours and per diem/hourly rate. 	
352	• videography Other Technical Services Technical services other than data-processing and related services.	
	Fees such as: • digitizing web-based learning modules • web design	
330	Services supporting the professional and technical development of school district personnel, including instructional, administrative, and service employees. Included are course registration fees (that are not tuition reimbursement), charges from external vendors to conduct training courses (at either school district facilities or off-site), and other expenditures associated with training or professional development by third-party vendors.	
	Employee Training and Development Services	

Proposal Section I - NEEDS ASSESSMENT INSTRUCTIONS

What is the evidence that supports the need for the MSP project?

Conduct a comprehensive needs assessment to portray the <u>current state</u> of teaching and learning of mathematics or science in <u>each partner school</u>. The analysis of this data will be the basis for developing MSP project goals that reflect the vision and intent of the CCSS-M and NRC Framework for K-12 Science Education.

- Collect and analyze quantitative (metric measures of a variety of indicators) <u>and</u> qualitative (observations; artifacts; surveys) baseline data to identify <u>specific challenges</u> <u>or problems</u> in mathematics and/or science teaching and learning in the partner schools.
- Theorize about possible correlations between student test scores and current curricular or instructional practices. Beyond simply citing trends in achievement, consider what improvements to current teaching practices could fix the problems identified in the needs assessment.
- Engage principals in reflecting on the current state of mathematics or science teaching and learning in their schools and identifying specific intended improvements ("look fors") achievable through MSP participation.

POSSIBLE EVIDENCE SOURCES:

School performance on Smarter Balanced mathematics assessment claims:

Claim #1 – Concepts & Procedures

"Students can explain and apply mathematical concepts and interpret and carry out mathematical procedures with precision and fluency."

Claim #2 - Problem Solving

Respond to the prompts on the next page

"Students can solve a range of complex well-posed problems in pure and applied mathematics, making productive use of knowledge and problem solving strategies."

Claim #3 – Communicating Reasoning

"Students can clearly and precisely construct viable arguments to support their own reasoning and to critique the reasoning of others."

Claim #4 – Modeling and Data Analysis

"Students can analyze complex, real-world scenarios and can construct and use mathematical models to interpret and solve problems."

- CMT/CAPT science strand scores; other standardized or district-wide assessments; or student work on curriculum-embedded performance tasks;
- Qualitative data may be derived from classroom observations, walk-throughs, teacher surveys, teacher interviews, videotaped lesson segments, administrator report, etc.

Respond to the prompts on the next page.						

PROPOSAL SECTION I.A - NEEDS ASSESSMENT DATA ANALYSIS

(maximum 2 double-spaced pages)

Enter your responses in the space below each of the following prompts:

- 1. Describe the methods and instruments used to conduct the needs assessment. Attach copies of (or links to) instruments cited.
- 2. Describe a problem(s) or challenge(s) related to mathematics or science <u>teaching</u> observed in the data analysis. The problem(s) or challenge(s) should be specific. For example, stating that teachers need deeper content knowledge is too vague. What should teachers be able to do better if the MSP intervention works?
 - a. Cite relevant <u>quantitative</u> indicators of the problem. What is the evidence that the problem exists?
 - b. Cite relevant <u>qualitative</u> indicators of the problem. What is the evidence that the problem exists?
- 3. Describe a problem(s) or challenge(s) related to mathematics or science <u>student learning</u> observed in the data analysis. The problem(s) or challenge(s) should be specific. For example, stating that student test scores are low is too vague. What should students be able to do better if the MSP intervention works?
 - a. Cite relevant <u>quantitative</u> indicators of the problem. What is the evidence that the problem exists?
 - b. Cite relevant <u>qualitative</u> indicators of the problem. What is the evidence that the problem exists?
- 4. Describe a problem(s) or challenge(s) related to student interest or aspirations in mathematics or science. The problem(s) or challenge(s) should be specific (e.g., underrepresentation of girls and minorities in computer science elective courses). How could this challenge be addressed if the MSP PD intervention works?
 - a. Cite relevant quantitative and qualitative indicators of the problem;
 - b. Describe expected changes in these indicators if the MSP PD intervention is successful.
- 5. Explain how the identified needs for the MSP project are aligned with the LEAs' school and district improvement goals and initiatives.

Proposal Section I.B – PRINCIPAL'S STATEMENT OF NEED, GOALS AND COMMITMENT (maximum 2 double-spaced pages)

The principal of <u>each</u> participating school should provide the following information:					
Principal's Name:	School:	District:			

- 1. Briefly summarize the typical attributes of mathematics or science teaching and learning in your school.
- 2. Briefly describe what you would like to see change as a result of the MSP project, and how these outcomes will contribute to the achievement of school or district improvement goals.
- 3. Briefly describe how you will establish clear expectations for MSP teachers to practice and implement new teaching strategies they learn during their professional development program.

I agree to serve as the MSP Facilitator for my school. I will participate in project goal-setting and will assure that MSP teachers have release time to participate in project activities. I will support the MSP project by ensuring that school policies are aligned with MSP project goals, activities and outcomes.

Principal Signature	Printed Name	Date

4. BONUS: Describe how you will be significantly involved in the MSP project beyond the foundational commitments agreed to above.

Proposal Section II - PROJECT GOALS AND OBJECTIVES

What improvements in mathematics and/or science teaching and student learning does the partnership aim to achieve? How will these improvements resolve the problem(s) or challenge(s) described in the Needs Assessment?

The project goals and objectives will form the basis for the project's evaluation and for principals' "look fors". They should be explicit to the participating schools, measurable and reflect the findings from the Needs Assessment. Project goals are more than a restatement of MSP program goals to increase teacher content knowledge, improve teaching skills and raise student achievement. For example, "Enhanced understanding of curricular content will enable teachers to engage students in developing explanatory models".

In the table below, list the specific and measurable <u>project</u> goals (not the MSP Program goals), how they relate to the findings of the Needs Assessment, and how the partnership will know if the goals have been achieved.

MSP PROJECT GOALS	NEEDS ASSESSMENT JUSTIFICATION	OBJECTIVES What will teachers or students do better if the PD intervention works?	EVIDENCE What will count as evidence that the intended change has occurred?

Proposal Section III.A - PARTNERSHIP AGREEMENT

Title II B Mathematics and Science Partnership Program 2015-2018

)15-2018	<u> </u>	
LEAD PARTNER /FISCAL AGENT	OFFICER'S SIGNATURE	OFFICER'S NAME	INSTITUTION TYPE (LEA, IHE, OTHER)	HIGH-NEED LEA (Y/N)
CONTRIBUTING PARTNER(S)				
(Provide services to the partnership)				
PARTICIPATING PARTNER(S) (LEAs enrolling educator teams)				

By signing this Partnership Agreement, the above-named applicants agree to form a partnership under the terms described in the Request for Proposals under Title II-Part B Mathematics and Science Partnership Grant Program. The signatories agree to comply with the terms and goals of the proposal and with all federal and state regulations pertaining to the use of funds received under this grant. WITHIN 3 DAYS OF ANY CHANGE IN KEY PROJECT PERSONNEL OR PARTNER LEAS OF IHES, THE PROJECT COORDINATOR MUST NOTIFY THE CSDE PROGRAM MANAGER.

Proposal Section III.B - EQUITABLE PARTICIPATION OF PRIVATE SCHOOLS

Eligible applicants must engage in timely and meaningful consultation with appropriate officials of private schools within their attendance area regarding the opportunity to participate in grant-related activities. This consultation must take place during the development of the partnership proposal, before making any decisions that affect the opportunities of eligible private school children, teachers and other educational personnel to participate in programs under Title II, Part B.

- Provide a copy of the invitation to private schools to participate in the proposed MSP project
- Provide documentation of the consultation to inform private schools about the proposed MSP project and to invite them to participate prior to submission of this proposal.

Proposal Section III.C - SUPERINTENDENT'S AND DEAN'S LETTER OF SUPPORT

Provide copies of a participation support letter signed by each LEA superintendent and IHE dean. The letter should state:

- the outcomes the LEA or IHE hopes to achieve through participation in the project;
- what the administration will do to demonstrate support for the project; and
- an acknowledgement that the LEA will participate in a project-related research study.

Proposal Section III.D - PARTNERSHIP COMMITMENT (maximum 2 double-spaced pages)

What is the evidence of partners' commitment to the project's goals?

- 1. Identify the project partners and justify why each LEA, IHE, and PD provider was selected based on Needs Assessment data and project goals.
- 2. Describe how the project will ensure meaningful collaboration and shared decision-making among LEAs, PD participants, IHE faculty and PD facilitators so that the needs and goals of <u>all</u> partners and teacher participants are met.
- 3. Describe the institutional changes that the MSP PD project intends to bring to the partner IHEs and LEAs. Note that meaningful partnerships produce benefits for contributing partner organizations (as a whole rather than only benefitting individual professors or teachers) and participating partner districts.
- 4. Describe the resources and in-kind support to be contributed by partners (facilities, personnel, substitutes, equipment, supplies, etc.).
- 5. List the private schools invited to participate, and attach documentation of meetings held to apprise private school officials of the MSP project goals and of their opportunity to participate in the project.

Proposal Section IV.A - PD PROGRAM DESIGN AND QUALITY (maximum 2 double-spaced pages)

How does the partnership intend to carry out a PD program to achieve project goals?

- 1. Conduct a search of scientifically-based research (SBR) on effective PD for science and mathematics teachers (*see Appendix H*).
- 2. Select key findings from research that influenced the PD design.
- 3. Design a coherent, on-going program of PD facilitated by experts. The program must provide **at least 135 hours of professional learning** over the 3-year project period. In addition, the program must include a component designed to support teachers' classroom implementation of newly learned content and teaching strategies.

This section will include general information about the entire 3-year project plan and specific information about the Phase 1 and Phase 2 activities.

- 1. Describe the findings from your search of SBR that influenced the design of the partnership's PD program.
- 2. Describe the CONTENT focus of the project.
- 3. Describe the PEDAGOGICAL focus of the project.
- 4. How will teachers be engaged in learning new content and teaching strategies? Include approximate percentages of time teachers will be engaged in active investigations, facilitated debriefing, field studies, teacher collaborations, reflection on classroom implications, or looking at student work.

Proposal Section IV.B - PD PROGRAM DESIGN AND QUALITY

(maximum 1 single-spaced page)

In the chart below, insert brief descriptions of the major activities planned for the entire 3-year project:

3 YEAR PROJECT OVERVIEW

PROJECT PHASE	MAJOR ACTIVITIES
1. January 2016 - September 2016	
2. October 2016 – September 2017	
3. October 2017 – September 2018	

Proposal Section IV.C - PHASE 1 PROJECT ACTIVITY TIMELINE

January 1, 2016 - September 30, 2016

START/END DATE(S)	ACTIVITY	TIME OF DAY	# OF CONTACT HOURS	ACTIVITY OBJECTIVES	LOCATION	PD LEADER(S)
	1.					
	2.					
	3.					
	4.					
	5.					
	6.					
	1	1	TOTAL PHASE 1 PD CONTACT HOURS:		I	

Proposal Section IV.C - PHASE 2 PROJECT ACTIVITY TIMELINE

October 1, 2016 - September 30, 2017

START/END DATE(S)	ACTIVITY	TIME OF DAY	# OF CONTACT HOURS	ACTIVITY OBJECTIVES	LOCATION	PD LEADER(S)
	1.					
	2.					
	3.					
	4.					
	5.					
	6.					
			TOTAL PHASE 1 PD CONTACT HOURS:			

Proposal Section IV.D - PHASE I PD ACTIVITY OPERATION PLAN (maximum 2 double-spaced page)

2. Explain why the Phase 1 activities were chosen and why they are organized in this

1. Describe how Phase 1 activities will be carried out.

sequence.

- 3. Describe how teachers will be supported in their efforts to enact newly-learned content and teaching strategies to produce observable changes in teaching practice.
- 4. How will Phase 1 activities lay a foundation for Phase 2 and Phase 3 activities and contribute to achievement of the project's overall goals?

Proposal Section IV.D - PHASE 2 PD ACTIVITY OPERATION PLAN (maximum 2 double-spaced page)

Describe how Phase 2 activities will be carried out.
 Explain why the Phase 2 activities were chosen and why they are organized in this sequence.
 Describe how teachers will be supported in their efforts to enact newly-learned content and teaching strategies to produce observable changes in teaching practice.
 How will Phase 2 activities build upon the learning from Phase 1 and lay a foundation for Phase 3 activities?

Proposal Section V.A – PROJECT CAPACITY, MANAGEMENT and SUSTAINABILITY (maximum 3 double-spaced pages)

How does the project assure high-quality adult learning and efficient operations with potential to sustain and scale-up impacts?

- 1. Present a plan to inform, recruit and retain educators in the PD program. Describe <u>specific</u> strategies that will be used to promote participation and retention.
- 2. Describe the expertise of the professional learning facilitators. Include specific information about the PD Facilitators
 - a. Depth of knowledge of the major shifts envisioned for student learning in the Connecticut Core Standards for Mathematics; the NRC Framework for K-12 Science Education; and the Connecticut Core Standards for English Language Arts and Literacy in Science, History and Technical Subjects (as appropriate).
 - b. Provide evidence of the PD Facilitators' record of having designed PD interventions that resulted in teachers enacting new skills and strategies.
- 3. Describe how the project will monitor the extent to which:
 - a. Participants' learning needs are being met?
 - b. Participants are learning content and related instructional practices that can be used in their classrooms?
 - c. Participants are applying enhanced content knowledge and instructional practices to their own teaching?
- 4. How will the project assure that timely adjustments to programming are made in response to progress monitoring?
- 5. Describe how the intended impacts of the MSP project will be sustained by the partners beyond the grant period.

Proposal Section V.B - PROJECT PERSONNEL ROLES AND RESPONSIBILITIES

- 1. Provide the information requested in the table below to describe the human resources that will be used to carry out the project.
- 2. Attach a *curriculum vitae* (CV) of <u>relevant</u> experience (2-page maximum) for the Project Coordinator, each PD Facilitator, and the Project Evaluator.

Organizations or individuals who receive MSP funds in payment for services related to the MSP grant must keep a monthly record of hours spent on MSP-related work, the days on which the work occurred, and the nature of the work that was done. Time and effort logs should be submitted to the Project Coordinator at the end of every month (see Appendix K).

NAME	IHE, LEA or ORGANIZATION	PROJECT ROLE	RESPONSIBILITIES
		Project Coordinator	
		Fiscal Agent	
		IHE STEM Faculty	
		IHE STEM Faculty	
		IHE STEM Faculty	
		School Facilitator	
		Project Evaluator	

Proposal Section V.C - MSP PROJECT MANAGEMENT TEAM

Project Management Teams must meet regularly. If in-person meetings are impractical, virtual meetings can be held using teleconferencing or videoconferencing for all or some participants.

PROJECT MANAGEMENT TEAM		
NAME	PARTNER ORGANIZATION	
	Project Coordinator	
	Teacher Representative	
	Teacher Representative	
	CSDE Program Manager	
	Project Evaluator	
How frequently, and when, will the project mar other month):	nagement team meet? (e.g., 3 rd Tuesday of every	

Proposal Section VI - PROJECT IMPACT EVALUATION AND RESEARCH PLAN

 to be completed in collaboration with External Project Evaluator (maximum 3 double-spaced pages)

The U.S. Department of Education requires all MSP projects to measure and annually report project impacts on teacher content knowledge, teaching practices and student achievement on state assessments (see Appendix G - GPRA Indicators).

All projects must administer appropriate pre/post assessments of teacher content knowledge.

Projects that propose to use a previously-validated PD design should strive to meet criteria established by the U.S. Department of Education for quasi-experimental³ research (*Guidelines for Conducting Experimental Research* and *How To Guide for Reporting on Rigorous Evaluations*).

- 1. Briefly describe the professional development research experience that justifies the selection of the project's External Evaluator (including experience evaluating projects funded under Title II-B (MSP) or Title II-A (TQP)
- 2. Describe methods and instruments to be used to measure the anticipated changes in teacher content knowledge
- 3. Describe methods and instruments to be used to measure the anticipated changes in teaching practices
- 4. Describe methods and instruments to be used to measure the anticipated changes in student learning and interest or aspiration
- 5. Describe methods and instruments to be used to measure anticipated programmatic changes that occur in LEAs, IHEs or other project partners as a result of the MSP project:
- 6. Describe methods and instruments to be used to measure anticipated impacts of the MSP project on participating schools:
- 7. **RESEARCH OPTION**: Your project <u>may</u> choose to conduct research to learn more about and refine your PD interventions. (i) Projects trying out newly-developed PD designs are likely to have questions about the effectiveness of different aspects of the PD design in hopes of refining and improving it. (ii) Projects using well-established PD designs are likely to focus more on questions about changes in participants' teaching practices and their impacts on student learning correlated to the PD intervention.
 - a. Briefly describe a research question(s) of particular interest to your project, including the assumptions about the intervention's impacts and a general plan for collecting data to test these assumptions

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³ **Quasi-experimental study**—the study measures the intervention's effect by comparing post-intervention outcomes for treatment participants with outcomes for a comparison group (that was not exposed to the intervention), chosen through methods other than random assignment.

APPLICATION REVIEW CRITERIA

and

AWARD TERMS and CONDITIONS

EVALUATION OF APPLICATIONS

Following staff review for eligibility, completeness and compliance with application requirements, a proposal review panel whose members have relevant expertise will review each application. The review panel will evaluate the merits of each eligible application using the MSP Proposal Review Criteria. The panel scores proposals and makes award recommendations to the CSDE grant program managers who, in turn, make award recommendations to the CSDE Chief Academic Officer.

Following the panel's review of proposals, Project Coordinators of the leading applications will be contacted by CSDE program managers for pre-award modification negotiation. Additional information about project expectations and research will be provided at that time. Requested modifications to the project design and the budget will be discussed. Project Coordinators may be asked to submit revised narrative sections or budgets. These revised documents must be signed by all participating principals and District MSP Leaders. CSDE Program Managers will then make final funding recommendations to the CSDE Chief Academic Officer, who will issue a formal award notification to the Lead Partner.

CSDE reserves the right to award or reject any and all proposals, in whole or in part, and to waive technical defects, irregularities and omissions if, in its judgment, the best interest of the State would be served.

TERMS AND CONDITIONS OF AWARDS

Rights Reserved by the State

The CSDE reserves the right to:

- make grant awards under this program without discussion with the applicants;
 therefore, proposals should represent the applicant's best effort to ensure a quality proposal from both a technical and cost standpoint;
- reject all proposals and to conduct a more extensive proposal solicitation or to reject a lower cost proposal if the higher cost proposal is deemed to more appropriately meet the stated objectives of the grant program;
- limit the number of grant awards per applicant or per geographic area in order to promote a broad distribution of funds; and
- make site visits to monitor the quality of project activities.

Additional Information/Conditions

MSP Grant applicants should be aware that:

- all awards are subject to the availability of federal funds;
- funds granted for MSP projects shall be used to supplement, and not supplant, funds that would otherwise be used for proposed activities;
- ownership of Proposals: All proposals are to be the sole property of the State, and are subject to disclosure pursuant to the Freedom of Information Act;

- ownership of Subsequent Products: Any product, whether acceptable or unacceptable, developed under a contract awarded as a result of this Request for Proposals is to be the sole property of the state unless stated otherwise in the application or contract as a result of proprietary interests secured by the grantee from a third party; and
- rejection of Qualified Proposals: Proposals are subject to rejection in whole or in part.

Obligations of Grantees

Each partnership receiving a grant must report at scheduled intervals to the CSDE and to the USED regarding the partnership's progress in meeting the goals and objectives described in the partnership's proposal. These reports will include qualitative and quantitative baseline and outcome data for schools, teachers and students participating in grant-related activities.

All grantees are hereby notified that the grant to be awarded is subject to contract compliance requirements as set forth in Connecticut General Statutes (C.G.S.) Section 4a-60 and Section 4a-68j-l et seq. of the Regulations of Connecticut State Agencies.

Furthermore, the grantee must submit periodic reports of its employment and sub-grantee practices, in such form, in such manner and at such time as may be prescribed by the Connecticut Commission on Human Rights and Opportunities.

Freedom of Information

All of the information contained in a proposal submitted in response to this RFP is subject to the provisions of Chapter 3 of the Connecticut General Statutes (Public Records and Meetings and Freedom of Information Act [FOIA] Sections 1-200 to 1-242, inclusive). The FOIA declares that, except as provided by federal law or state statute, records maintained or kept on file by any public agency (as defined in the statute) are public records and every person has the right to inspect such records and receive a copy of such records.

Utilization of Minority Business Enterprises

All grantees shall make good faith efforts to employ minority business enterprises as subgrantees and suppliers of materials on projects subject to contract requirements. Grantees shall certify under oath to the Commission on Human Rights and Opportunities and the CSDE that the minority businesses selected as sub-grantees and suppliers of materials comply with the criteria of Section 4a-60 if such businesses are not currently registered with the Department of Economic Development.

Annie E. Casey Foundation

Grantees that are part of a collaborative effort funded in whole or in part by the Annie E. Casey Foundation must submit documentation that: the collaborative oversight entity has been provided the opportunity to review and comment on the grant application or proposal prior to submission to the Department; the proposal or application submitted provides information detailing the activities which assure priority access to services to children, youth and families referred by the collaborative oversight entity; and the applicant shall designate someone to act as liaison for the referral process.

MSP PROPOSAL REVIEW CRITERIA

 $Applications\ can\ earn\ a\ total\ of\ 100\ POINTS,\ plus\ 10\ possible\ bonus\ points,\ based\ on\ the\ following\ criteria:$

	Criteria	Points
Sec	tion I. Needs Assessment Conducts a comprehensive assessment of indicators of mathematics and science teaching and learning	
•	Describes the methods and instruments used to collect needs assessment data	
•	Analyzes quantitative and qualitative data to identify a problem or challenge specific to the partner schools	/10
	Provides principals' statements describing the <u>quality of teaching and student learning</u> in the partner schools	,
	Provides a meaningful analysis of <u>student achievement on standardized assessments</u> in partner schools	
•	Cites data related to student learning, interest and aspiration in partner schools	
Sec	tion II. Project Goals and Objectives Project goals reflect the needs identified in the comprehensive Needs Assessment	
•	Specific goals and measurable objectives (outcomes) are identifiable	/15
•	Project goals are aligned primarily with content and practices in CCS-M or NRC Science Framework; and secondarily with CCS-ELA Literacy in History, Science and Technical Subjects or current state science standards	/15
•	Project goals are aligned with school and district improvement goals and initiatives in the partner district	
Sec	tion III. Partnership Commitment Documentation of planning meetings shows evidence of meaningful collaboration of all core partners, including the IHEs, LEAs and the project evaluator	
•	Provides evidence of authentic commitment and support of deans, superintendents and principals	
•	Provides evidence of communication with private schools to invite their participation in the MSP PD project	/20
•	Provides evidence that a cohort of at least 25 educators has been, or will be, recruited	
•	Provides evidence of in-kind support by all partners	
•	5-POINT ADMINISTRATOR SUPPORT BONUS: District- and school-level administrators participate in PD activities, or have an exceptionally strong plan to support implementation in the school	
Sec	rtion IV. PD Program Design and Quality Provides evidence of a robust (at least 135 hours over 34 months), coherent, and feasible PD program that meets the requirements of the category and of the MSP program	
•	Includes design and delivery formats that are supported by scientific-based research <u>and</u> reflects the needs of educators in the partner schools	
•	Addresses both rigorous, standards-based content and content-specific pedagogies	/20
•	Describes a practical plan to support teachers' implementation of newly learned content and teaching strategies in their classroom practice	
•	5-POINT IMPACT BONUS: Proposed project has potential to maximize impact through inclusion of national experts or program, or by including multiple IHEs, multiple high-need schools, or a substantial number of teachers within a school or grade, or across disciplines	

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Sec	ction V. Project Personnel, Management and Sustainability Establishes specific criteria and a sound plan to recruit and retain highly-motivated and qualified participants		
•	Details a schedule of management team meetings that is sufficient to operate the project with due diligence		
•	Project staff have appropriate expertise in CCS-M, NRC Science Framework, computer science or engineering; and are knowledgeable about current "best practices" in adult learning		
•	PD facilitators provide evidence of past success leading PD that correlated with teachers enacting new approaches or strategies	nce of past success leading PD that correlated with teachers enacting new /15	
-	Describes methods to monitor PD quality and effectiveness and to make on-going adjustments as needed		
•	Describes a feasible plan to sustain project impacts among the partners beyond the grant period		
•	Describes a feasible plan to scale-up the PD program to make it accessible statewide		
Sec	ction VI. Project Impact Evaluation and Research Plan External project evaluator demonstrates expertise in experimental research design		
•	Reflects valid and reliable methods and instruments to evaluate impact of PD on participants' content knowledge and their application of new knowledge and teaching strategies to classroom practice		
•	Reflects valid and reliable methods and instruments to evaluate impact of PD on student achievement on standardized tests; and other measures of student learning interest or aspiration	/10	
•	Presents a plan to conduct quasi-experimental research on <u>change in teaching practices</u> that meets criteria set by U.S. Dept. of Ed in (if appropriate)		
•	Describes methods to evaluate institutional changes that occur at IHEs, LEAs and other partners		
Bu	dget Documentation and Cost Effectiveness		
-	The fiscal agent has a well-established infrastructure to responsibly manage funding draws and payments		
-	The proposed budget is reasonable in terms of expenditures per participant and rates for professional services	/10	
-	The proposed budget includes expenditures that are allowable and allocable		
-	The proposed budget is sufficient to carry out proposed activities and achieve project goals		
то	TOTAL SCORE		
ВО	BONUS POINTS EARNED		
TOTAL SCORE WITH BONUS			

APPENDICES

APPENDIX A: STATEMENT OF ASSURANCES

Connecticut State Department of Education Standard Statement of Assurances Grant Programs

PROJECT TITLE: M	athematics and Science Partnership Grant Program – ESEA Title II, Part B
	• •
THE APPLICANT: _	HEREBY ASSURES THAT:
	(Insert Lead Partner Name)

- **A.** The applicant has the necessary legal authority to apply for and receive the proposed grant.
- **B.** The filing of this application has been authorized by the applicant's governing body. The undersigned official has been duly authorized to file this application for and on behalf of said applicant, and otherwise to act as the authorized representative of the applicant in connection with this application.
- **C.** The activities and services for which assistance is sought under this grant will be administered by or under the supervision and control of the applicant.
- **D.** The project will be operated in compliance with all applicable state and federal laws and in compliance with regulations and other policies and administrative directives of the Connecticut State Board of Education and the State Department of Education (CSDE).
- **E.** Grant funds shall not be used to supplant funds normally budgeted by the agency.
- **F.** Fiscal control and accounting procedures will be used to ensure proper disbursement of all funds awarded.
- **G.** The applicant will submit a final project report (within 60 days of the project completion) and such other reports, as specified, to the CSDE. This report should include information relating to the project records and access thereto as the CSDE may find necessary.
- **H.** The CSDE reserves the exclusive right to use and grant the right to use and/or publish any part or parts of any summary, abstract, reports, publications, records and materials resulting from this project and this grant.
- I. If the project achieves the specified objectives, every reasonable effort will be made to continue the project and/or implement the results after the termination of state and federal funding.
- J. The applicant will protect and save harmless the State Board of Education from financial loss and expense, including legal fees and costs, if any, arising out of any breach of the duties, in whole or part, described in the application for the grant.
- **K.** At the conclusion of each grant period, the applicant will provide for an independent audit report acceptable to the grantor in accordance with Sections 7-394a and 7-396a of the

Connecticut General Statutes (C.G.S.), and the applicant shall return to the SDE any moneys not expended in accordance with the approved program/operation budget as determined by the audit.

- **L.** The grant award is subject to approval of the SDE and availability of state or federal funds.
- **M.** The applicant agrees and warrants that Sections 4-190 to 4-197, inclusive, of the C.G.S. concerning the Personal Data Act and Sections 10-4-8 to 10-4-10, inclusive, of the Regulations of Connecticut State Agencies promulgated thereunder are hereby incorporated by reference.

N. Required Language:

References in this section to "contract" shall mean this grant agreement and to "contractor" shall mean the Grantee.

- (a) For purposes of this Section, the following terms are defined as follows:
 - i. "Commission" means the Commission on Human Rights and Opportunities;
 - ii. "Contract" and "contract" include any extension or modification of the Contract or contract:
 - iii. "Contractor" and "contractor" include any successors or assigns of the Contractor or contractor:
 - iv. "Gender identity or expression" means a person's gender-related identity, appearance or behavior, whether or not that gender-related identity, appearance or behavior is different from that traditionally associated with the person's physiology or assigned sex at birth, which gender-related identity can be shown by providing evidence including, but not limited to, medical history, care or treatment of the gender-related identity, consistent and uniform assertion of the gender-related identity or any other evidence that the gender-related identity is sincerely held, part of a person's core identity or not being asserted for an improper purpose;
 - v. "good faith" means that degree of diligence which a reasonable person would exercise in the performance of legal duties and obligations;
 - vi. "good faith efforts" shall include, but not be limited to, those reasonable initial efforts necessary to comply with statutory or regulatory requirements and additional or substituted efforts when it is determined that such initial efforts will not be sufficient to comply with such requirements;
 - vii. "marital status" means being single, married as recognized by the state of Connecticut, widowed, separated or divorced;
 - viii. "mental disability" means one or more mental disorders, as defined in the most recent edition of the American Psychiatric Association's "Diagnostic and Statistical Manual of Mental Disorders", or a record of or regarding a person as having one or more such disorders;
 - ix. "minority business enterprise" means any small contractor or supplier of materials fifty-one percent or more of the capital stock, if any, or assets of which is owned by a person or persons: (1) who are active in the daily affairs of the enterprise, (2) who have the power to direct the management and policies of the enterprise, and (3) who are members of a minority, as such term is defined in subsection (a) of Connecticut General Statutes § 32-9n; and

x. "public works contract" means any agreement between any individual, firm or corporation and the State or any political subdivision of the State other than a municipality for construction, rehabilitation, conversion, extension, demolition or repair of a public building, highway or other changes or improvements in real property, or which is financed in whole or in part by the State, including, but not limited to, matching expenditures, grants, loans, insurance or guarantees.

For purposes of this Section, the terms "Contract" and "contract" do not include a contract where each contractor is (1) a political subdivision of the state, including, but not limited to, a municipality, (2) a quasi-public agency, as defined in Conn. Gen. Stat. Section 1-120, (3) any other state, including but not limited to any federally recognized Indian tribal governments, as defined in Conn. Gen. Stat. Section 1-267, (4) the federal government, (5) a foreign government, or (6) an agency of a subdivision, agency, state or government described in the immediately preceding enumerated items (1), (2), (3), (4) or (5).

- (b) (1) The Contractor agrees and warrants that in the performance of the Contract such Contractor will not discriminate or permit discrimination against any person or group of persons on the grounds of race, color, religious creed, age, marital status, national origin, ancestry, sex, gender identity or expression, mental retardation, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by such Contractor that such disability prevents performance of the work involved, in any manner prohibited by the laws of the United States or of the State of Connecticut; and the Contractor further agrees to take affirmative action to insure that applicants with job-related qualifications are employed and that employees are treated when employed without regard to their race, color, religious creed, age, marital status, national origin, ancestry, sex, gender identity or expression, mental retardation, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by the Contractor that such disability prevents performance of the work involved; (2) the Contractor agrees, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, to state that it is an "affirmative action-equal opportunity employer" in accordance with regulations adopted by the Commission; (3) the Contractor agrees to provide each labor union or representative of workers with which the Contractor has a collective bargaining Agreement or other contract or understanding and each vendor with which the Contractor has a contract or understanding, a notice to be provided by the Commission, advising the labor union or workers' representative of the Contractor's commitments under this section and to post copies of the notice in conspicuous places available to employees and applicants for employment; (4) the Contractor agrees to comply with each provision of this Section and Connecticut General Statutes §§ 46a-68e and 46a-68f and with each regulation or relevant order issued by said Commission pursuant to Connecticut General Statutes §§ 46a-56, 46a-68e and 46a-68f; and (5) the Contractor agrees to provide the Commission on Human Rights and Opportunities with such information requested by the Commission, and permit access to pertinent books, records and accounts, concerning the employment practices and procedures of the Contractor as relate to the provisions of this Section and Connecticut General Statutes § 46a-56. If the contract is a public works contract, the Contractor agrees and warrants that he will make good faith efforts to employ minority business enterprises as subcontractors and suppliers of materials on such public works projects.
- (c) Determination of the Contractor's good faith efforts shall include, but shall not be limited to, the following factors: The Contractor's employment and subcontracting policies, patterns and practices; affirmative advertising, recruitment and training; technical assistance activities and

- such other reasonable activities or efforts as the Commission may prescribe that are designed to ensure the participation of minority business enterprises in public works projects.
- (d) The Contractor shall develop and maintain adequate documentation, in a manner prescribed by the Commission, of its good faith efforts.
- (e) The Contractor shall include the provisions of subsection (b) of this Section in every subcontract or purchase order entered into in order to fulfill any obligation of a contract with the State and such provisions shall be binding on a subcontractor, vendor or manufacturer unless exempted by regulations or orders of the Commission. The Contractor shall take such action with respect to any such subcontract or purchase order as the Commission may direct as a means of enforcing such provisions including sanctions for noncompliance in accordance with Connecticut General Statutes §46a-56; provided if such Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the Commission, the Contractor may request the State of Connecticut to enter into any such litigation or negotiation prior thereto to protect the interests of the State and the State may so enter.
- (f) The Contractor agrees to comply with the regulations referred to in this Section as they exist on the date of this Contract and as they may be adopted or amended from time to time during the term of this Contract and any amendments thereto.
- (g) (1) The Contractor agrees and warrants that in the performance of the Contract such Contractor will not discriminate or permit discrimination against any person or group of persons on the grounds of sexual orientation, in any manner prohibited by the laws of the United States or the State of Connecticut, and that employees are treated when employed without regard to their sexual orientation; (2) the Contractor agrees to provide each labor union or representative of workers with which such Contractor has a collective bargaining Agreement or other contract or understanding and each vendor with which such Contractor has a contract or understanding, a notice to be provided by the Commission on Human Rights and Opportunities advising the labor union or workers' representative of the Contractor's commitments under this section, and to post copies of the notice in conspicuous places available to employees and applicants for employment; (3) the Contractor agrees to comply with each provision of this section and with each regulation or relevant order issued by said Commission pursuant to Connecticut General Statutes § 46a-56; and (4) the Contractor agrees to provide the Commission on Human Rights and Opportunities with such information requested by the Commission, and permit access to pertinent books, records and accounts, concerning the employment practices and procedures of the Contractor which relate to the provisions of this Section and Connecticut General Statutes § 46a-56.
- (h) The Contractor shall include the provisions of the foregoing paragraph in every subcontract or purchase order entered into in order to fulfill any obligation of a contract with the State and such provisions shall be binding on a subcontractor, vendor or manufacturer unless exempted by regulations or orders of the Commission. The Contractor shall take such action with respect to any such subcontract or purchase order as the Commission may direct as a means of enforcing such provisions including sanctions for noncompliance in accordance with Connecticut General Statutes § 46a-56; provided, if such Contractor becomes involved in, or is

threatened with, litigation with a subcontractor or vendor as a result of such direction by the Commission, the Contractor may request the State of Connecticut to enter into any such litigation or negotiation prior thereto to protect the interests of the State and the State may so enter.

I, the undersigned authorized official, hereby certify that these assurances shall be fully implemented.

Signature	
Name (typed)	
Title (typed)	
Date	

APPENDIX B and C:

CERTIFICATION REGARDING LOBBYING; DEBARMENT AND SUSPENSION AND OTHER RESPONSIBILITY MATTERS; AND DRUG-FREE WORKPLACE REQUIREMENTS

Applicants should refer to the regulations cited below to determine the certification to which they are required to attest. Applicants should also review the instructions for certification included in the regulations before completing this form. Signature of this form provides for compliance with certification requirements under 34 CFR, Part 82, "New Restrictions on Lobbying, and 34 CFR Part 85, "Government-wide Debarment and Suspension (Non-procurement) and Government-wide Requirements for Drug-Free Workplace (Grants)." The certifications shall be treated as a material representation of fact upon which reliance will be placed when the Department of Education determines to award the covered transaction, grant or cooperative agreement.

1. LOBBYING

As required by Section 1352, Title 31 of the U.S. Code, and implemented at 34 CFR Part 82, for persons entering into a grant or cooperative agreement over \$100,000, as defined at 34 CFR Part 82, Sections 82.105 and 82.110, the applicant certifies that

- (a) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with the making of any Federal grant, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal grant or cooperative agreement;
- (b) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal grant or cooperative agreement, the undersigned shall complete and submit Standard Form LLL, "Disclosure Form to Report Lobbying" in accordance with its instructions:
- (c) The undersigned shall require that the language of this certification be included in the award documents for all sub awards at all tiers (including sub grants, contracts under grants and cooperative agreements, and subcontracts) and that all sub recipients shall certify and disclose accordingly.

3. DRUG-FREE WORKPLACE (GRANTEES OTHER THAN INDIVIDUALS)

As required by the Drug-Free Workplace Act of 1988, and implemented at 34 CFR Part 85, Subpart F, for grantees, as defined at 34 CFR Part 85, Sections 85.605 and 85.610 –

2. DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS

As required by Executive Order 12549, Debarment and Suspension, and implemented at 34 CFR Part 85, for prospective participants in primary covered transactions, as defined at 34 CFR Part 85, Sections 85.105 and 85.110 –

The applicant certifies that it and its principals:

- (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntary excluded from covered transactions by any Federal department or agency;
- (b) Have not within a three-year period preceding this application been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (c) Are not presently indicted for or otherwise criminally or civil charged by a governmental entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (I)(b) of this certification; and
- (d) Have not within a three-year period preceding this application had one or more public transactions (Federal, State, or local) terminated for cause or default; and
- B. Where the applicant is unable to certify to any of the statements in this certification, he or she shall attach an explanation to this application.
- GSA Regional Office, Building No. 3), Washington, DC 20202-4571. Notice shall include the identification number(s) of each affected grant;
- (f) Taking one of the following actions, within 30 calendar days of receiving notice under subparagraph (d) (2), with respect to any employee who is so convicted-

- A. The applicant certifies that it will or will continue to provide a drug-free workplace by:
- (a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;
- (b) Establishing an on-going drug-free awareness program to inform employees about-
- (1) The dangers of drug abuse in the workplace;
- (2) The grantee's policy of maintaining a drug-free workplace;
- (3) Any available drug counseling, rehabilitation, and employee assistance programs; and
- (4) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;
- (c) Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph (a);
- (d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will-
- (1) Abide by the terms of the statement; and
- (2) Notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring in the workplace no later than five calendar days after such conviction;
- (e) Notifying the agency, in writing, within 10 calendar days after receiving notice under subparagraph (dX2) from an employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must provide notice, including position title, to:

Director, Grants and Contracts Service, U.S. Department of Education, 400 Maryland Avenue, S.W. (Room 3124,

- (l) Taking appropriate personnel action against such an employee, up to and including termination, consistent with the requirements of the Rehabilitation Act of 1973, as amended; or
- (2) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency;
- (g) Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs (a), (b), (c), (d), (e), and (f).
- B. The grantee may insert in the space provided below the site(s) for the performance of work done in connection with the specific grant:

Place of Performance (Street address, city, county, state, zip code)

Check \square if there are workplaces on file that are not identified here.

DRUG-FREE WORKPLACE (GRANTEES WHO ARE INDIVIDUALS)

As required by the Drug-Free Workplace Act of 1988, and implemented at 34 CFR Part 85, Subpart F, for grantees, as defined at 34 CFR Part 85, Sections 85.605 and 85.610-

- A. As a condition of the grant, I certify that I will not engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance in conducting any activity with the grant; and
- B. If convicted of a criminal drug offense resulting from a violation occurring during the conduct of any grant activity, I will report the conviction, in writing, within 10 calendar days of the conviction, to Director, Grants and Contracts Service, U.S. Department of Education, 400 Maryland Avenue, S.W. (Room 3124, GSA Regional Office Building No. 3) Washington, DC 20202-4571. Notice shall include the identification number(s) of each affected grant.

As the duly authorized representative of the applicant, I hereby certify that the applicant will comply with the above certifications.

Name of Applicant	PR/AWARD Number and/or Project Name
Signature	Date
ED 80-0013	

APPENDIX D: CERTIFICATION THAT CURRENT AFFIRMATIVE ACTION PACKET IS ON FILE

According to the Connecticut Commission on Human Rights and Opportunities (CHRO) municipalities that operate school districts and also file a federal and/or state Affirmative Action Plan(s) are exempt from the requirement of filing an Affirmative Action Plan with the Connecticut State Department of Education. Agencies with an Affirmative Action Plan on file need to certify such by signing the statement below.

	by certify that the applying organization/agency: s a current affirmative action packet on file with the
•	The affirmative action packet is, by reference, part of
Signature of Authorized Official:	Date:
Name and Title:	

APPENDIX E: SUPPLEMENT NOT SUPPLANT ASSURANCE

I,				
Name of Authorized Officer	(District/institution name)	(Town code)		
hereby provide assurance that:				
Program funds distributed to my district/institution under PL 107-110 will be used only to supplement, and to the extent practical, increase the levels of funds that would, in the absence of these funds, be made available from federal, other state, or local sources to the local or regional board of education for professional development. In no case will the state funds allocated to my district/institution under PL 107-110 be used to supplant funds from federal, other state or local sources.				
I understand that failure to comply with these provisions of PL 107-110 will result in the loss of funds to my district/institution under the state program.				
Authorized Officer's Signature		Date		

APPENDIX F - HIGH NEED LOCAL EDUCATION AGENCIES

2015 Alliance Districts

Ansonia	Naugatuck
Bloomfield	New Britain
Bridgeport	New Haven
Bristol	New London
Danbury	Norwalk
Derby	Norwich
East Hartford	Putnam
East Haven	Stamford
East Windsor	Vernon
Hamden	Waterbury
Hartford	West Haven
Killingly	Winchester
Manchester	Windham
Meriden	Windsor
Middletown	Windsor Locks

APPENDIX G – U.S. DEPARTMENT OF EDUCATION MSP GPRA Reporting Measures

The U.S. Department of Education will report annually to Congress the following data aggregated from all MSP projects nationwide:

Teacher Knowledge

1) The percentage of MSP teachers who significantly increase their content knowledge, as reflected in project-level pre- and post-assessments.

Student Achievement

- 2) The percentage of students in classrooms of MSP teachers who score at the basic level or below in State assessments of mathematics or science.
- 3) The percentage of students in classrooms of MSP teachers who score at the proficient level or above in State assessments of mathematics or science.

Evaluation Design

- 4) The percentage of MSP projects that report using an experimental or quasi-experimental design for their evaluations.
- 5) The percentage of MSP projects that use an experimental or quasi-experimental design for their evaluations that are conducted successfully and that yield scientifically valid results.

Efficiency

6) The percentage of SEAs that submit complete and accurate data on MSP performance measures in a timely manner.

APPENDIX H - PROJECT RESOURCES

- Annenberg Media http://www.learner.org/
- Common Core State Standards Mathematics http://www.corestandards.org/Math
- Common Core State Standards English Language Arts http://www.corestandards.org/ELA-Literacy
- Council of Chief State School Officers (CCSSO) Cross-State Research Report on Effective PD: Does Teacher PD Have Effects on Teaching and Learning?
- Horizon Research Instruments http://www.horizon-research.com/instruments/
- Horizon Research Lessons From a Decade of Decade of Math and Science Reform: http://www.horizon-research.com/reports/2006/capstone.php
- MSP Knowledge Reviews from NSF Projects http://mspkmd.net/
- MSPnet Toolbox http://hub.mspnet.org/index.cfm/msp tools
- National Council of Teachers of Mathematics http://nctm.org/
- National Science Teachers Association Professional Learning Center- http://www.nsta.org
- National Staff Development Council Standards for Professional Development http://www.nsdc.org/standards/
- Observation Protocols: <u>Horizon Classroom Observation Protocol</u>, <u>CETP Classroom Observation Protocol</u>, or <u>RTOP Classroom Observation Protocol</u> or <u>CSDE's Classroom Walk-Through Protocol</u>.
- PD 360 http://www.schoolimprovement.com/
- U.S. Department of Education MSP legislation http://www.ed.gov/programs/mathsci/index.html
- U.S. Department of Education MSP web site http://www.ed-msp.net/
- What Works Clearinghouse http://www.whatworks.ed.gov/
- Effective Science Instruction: What Does Research Tell Us?
 http://www.centeroninstruction.org/files/Effective%20Sci%20Instruction%20Brief%202nd%20ed.pdf
- Taking Science to School: Learning and Teaching Science in Grades K-8. National Research Council. Washington, DC: The National Academies Press, 2007. http://books.nap.edu/catalog.php?record_id=11625
- Ready, Set, Science: Putting Research to Work in K-8 Science Classrooms. National Research Council. Washington, DC: The National Academies Press, 2007. http://www.nap.edu/catalog.php?record_id=11882
- Framework for K-12 Science Education: Practices, Crosscutting Concepts and Core ideas.

 National Research Council. Washington, DC: The National Academies Press, 2012.

 http://www.nap.edu/catalog.php?record_id=13165
- <u>Next Generation Science Standards Appendix F</u>: Science and Engineering Practices in the NGSS.

APPENDIX I

Instruments for Assessing Project Impacts

Teacher Content Knowledge

Science:

- Assessing Teacher Learning About Science Teaching (<u>ATLAST</u>).
- Misconception-Oriented Standards-based Assessment Resources for Teachers (MOSART)
- Diagnostic Teacher Assessments in Mathematics and Science **DTAMS**;
- Assorted released items from AAAS Science Item Bank, NAEP, TIMSS and PISA:
 - a) NAEP Questions Tool www.nces.ed.gov/nationsreportcard/ITMRLS
 - b) TIMSS Released Items http://nces.ed.gov/timss/educators.asp
 - c) AAAS Item Bank: http://assessment.aaas.org/topics (Gr.6-12)
 - d) PISA Science Released Items: http://www.oecd.org/pisa/38709385.pdf

Mathematics:

- Learning for Mathematics Teaching (<u>LMT</u>),
- Knowing Mathematics for Teaching Algebra (KAT),
- <u>Diagnostic Mathematics Assessments for Elementary Teachers</u> and <u>Middle School</u> Teachers

Change in Teaching Practice

- MSPnet Toolbox http://hub.mspnet.org/index.cfm/msp_tools
- RTOP Classroom Observation Protocol

APPENDIX J - DEFINITIONS OF TERMS

The following definitions are taken from the No Child Left Behind Act of 2001:

Professional Development: the term "professional development" means instructional activities that:

- are based on scientifically based research and state academic content standards, student academic achievement standards, and assessment:
- improve and increase teachers' knowledge of the academic subjects they teach;
- enable teachers to become highly qualified; and
- 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.

Scientifically Based Research: The term "scientifically based research" (SBR) means research that involves the application of rigorous, systematic, and objective procedures to obtain reliable and valid knowledge relevant to education activities and programs and includes research that:

- employs systematic, empirical methods that draw on observation or experiment and involve rigorous data analyses that are adequate to test the stated hypotheses and justify the general conclusions drawn;
- relies on measurements or observational methods that provide reliable and valid data across evaluators and observers, across multiple measurements and observations, and across studies by the same or different investigators;
- is evaluated using experimental or quasi-experimental designs in which individuals, entities, programs, or activities are assigned to different conditions, with appropriate controls to evaluate the effects of the condition of interest and with a preference for random-assignment experiments or other designs to the extent that those designs contain within-condition or across-condition controls;
- ensures that experimental studies are presented in sufficient detail and clarity to allow for replication or, at minimum, to offer the opportunity to build systematically on their findings; and
- has been accepted by a peer-reviewed journal or approved by a panel of independent experts through a comparably rigorous, objective, and scientific review.

Summer Workshop or Institute:

The term "summer workshop or institute" means a workshop or institute, conducted during the summer, that:

- is conducted for a period of not less than 2 weeks (in total; not necessarily consecutive weeks);
- includes, as a component, a program that provides direct interaction between students and faculty; and
- provides for follow-up training during the academic year for a period of not less than three consecutive or nonconsecutive days, except that if the workshop or institute is conducted during a two-week period, the follow-up training shall be conducted for a period of not less than four days; and if the follow-up training is in rural school districts, the follow-up training may be conducted through distance learning.

APPENDIX K - TIME AND EFFORT LOG

Connecticut State Department of Education Mathematics and Science Partnership Program

MONTHLY TIME and EFFORT LOG

Connecticut's Mathematics and Science Partnership program is funded by a grant from the U.S. Department of Education under Title II Part B of the Elementary and Secondary Education Act. Organizations or individuals who receive federal funds in payment for services related to the MSP grant must keep a monthly record of hours spent on MSP-related work, the days on which the work occurred, and the nature of the work that was done. Time and effort logs should be submitted to the MSP Project Coordinator at the end of every month. Project Coordinators will submit these records with each semi-annual progress report to the Program Manager at the Connecticut State Department of Education.

Month:	Year	_	
Project Title:			
Name:			
Organization:			
DATE	NATURE OF WORK	HOURS	
DATE	NATURE OF WORK	HOURS	
TOTAL HOURS			