ADDITIONAL INFORMATION
Attachments

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ATTACHMENT A
STATUTORY AND REGULATORY REFERENCES

No Child Left Behind Act, Elementary and Secondary Education, P.L. 107-110, Title II, Part B, Math and Science Partnerships

SEC. 2201. PURPOSE; DEFINITIONS.

(a) PURPOSE- The purpose of this part is to improve the academic achievement of students in the areas of mathematics and science by encouraging State educational agencies, institutions of higher education, local educational agencies, elementary schools, and secondary schools to participate in programs that —

(1) improve and upgrade the status and stature of mathematics and science teaching by encouraging institutions of higher education to assume greater responsibility for improving mathematics and science teacher education through the establishment of a comprehensive, integrated system of recruiting, training, and advising mathematics and science teachers;

(2) focus on the education of mathematics and science teachers as a career-long process that continuously stimulates teachers' intellectual growth and upgrades teachers' knowledge and skills;

(3) bring mathematics and science teachers in elementary schools and secondary schools together with scientists, mathematicians, and engineers to increase the subject matter knowledge of mathematics and science teachers and improve such teachers' teaching skills through the use of sophisticated laboratory equipment and work space, computing facilities, libraries, and other resources that institutions of higher education are better able to provide than the elementary schools and secondary schools;

(4) develop more rigorous mathematics and science curricula that are aligned with challenging State and local academic content standards and with the standards expected for postsecondary study in engineering, mathematics, and science; and

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

(b) DEFINITIONS- In this part:

(1) ELIGIBLE PARTNERSHIP- The term eligible partnership' means a partnership that —

(A) shall include —

(i) if grants are awarded under section 2202(a)(1), a State educational agency;
(ii) an engineering, mathematics, or science department of an institution of higher education; and
(iii) a high-need local educational agency; and

(B) may include —

(i) another engineering, mathematics, science, or teacher training department of an institution of higher education;
(ii) additional local educational agencies, public charter schools, public or private elementary schools or secondary schools, or a consortium of such schools;
(iii) a business; or
(iv) a nonprofit or for-profit organization of demonstrated effectiveness in improving the quality of mathematics and science teachers.

(2) SUMMER WORKSHOP OR INSTITUTE- The term summer workshop or institute' means a workshop or institute, conducted during the summer, that —

(A) is conducted for a period of not less than 2 weeks;

(B) includes, as a component, a program that provides direct interaction between students and faculty; and

(C) provides for follow up training during the academic year that is conducted in the classroom for a period of not less than three consecutive or nonconsecutive days, except that —

(i) if the workshop or institute is conducted during a 2-week period, the followup training shall be conducted for a period of not less than 4 days; and
(ii) if the followup training is for teachers in rural school districts, the followup training may be conducted through distance learning.

SEC. 2202. GRANTS FOR MATHEMATICS AND SCIENCE PARTNERSHIPS.

(a) GRANTS AUTHORIZED-

(1) GRANTS TO PARTNERSHIPS- For any fiscal year for which the funds

appropriated under section 2203 are less than $100,000,000, the Secretary is authorized to award grants, on a competitive basis, to eligible partnerships to carry out the authorized activities described in subsection (c).

(2) GRANTS TO STATE EDUCATIONAL AGENCIES-

(A) IN GENERAL- For any fiscal year for which the funds appropriated under section 2203 equal or exceed $100,000,000 —

(i) if an eligible partnership in the State was previously awarded a grant under paragraph (1), and the grant period has not ended, the Secretary shall reserve funds in a sufficient amount to make payments to the partnership in accordance with the terms of the grant; and

(ii) the Secretary is authorized to award grants to State educational agencies to enable such agencies to award subgrants, on a competitive basis, to eligible partnerships to carry out the authorized activities described in subsection (c).

(B) ALLOTMENT- The Secretary shall allot the amount made available under this part for a fiscal year and not reserved under subparagraph (A)(i) among the State educational agencies in proportion to the number of children, aged 5 to 17, who are from families with incomes below the poverty line and reside in a State for the most recent fiscal year for which satisfactory data are available, as compared to the number of such children who reside in all such States for such year.

(C) MINIMUM ALLOTMENT- The amount of any State educational agency's allotment under subparagraph (B) for any fiscal year may not be less than one-half of 1 percent of the amount made available under this part for such year.

(3) DURATION- The Secretary shall award grants under this part for a period of 3 years.

(4) SUPPLEMENT, NOT SUPPLANT- Funds received under this part shall be used to supplement, and not supplant, funds that would otherwise be used for activities authorized under this part.

(b) APPLICATION REQUIREMENTS-

(1) IN GENERAL- Each eligible partnership desiring a grant or subgrant under this part shall submit an application —

(A) in the case of grants awarded pursuant to subsection (a)(1), to the Secretary, at such time, in such manner, and accompanied by such information as the Secretary may require; or

(B) in the case of subgrants awarded pursuant to subsection (a)(2), to the State educational agency, at such time, in such manner, and accompanied by such information as the State educational agency may require.

(2) CONTENTS- Each application submitted pursuant to paragraph (1) shall include —

(A) the results of a comprehensive assessment of the teacher quality and professional development needs of any schools, local educational agencies, and State educational agencies that comprise the eligible partnership with respect to the teaching and learning of mathematics and science;

(B) a description of how the activities to be carried out by the eligible partnership will be aligned with challenging State academic content and student academic achievement standards in mathematics and science and with other educational reform activities that promote student academic achievement in mathematics and science;

(C) a description of how the activities to be carried out by the eligible partnership will be based on a review of scientifically based research, and an explanation of how the activities are expected to improve student academic achievement and strengthen the quality of mathematics and science instruction;

(D) a description of —

(i) how the eligible partnership will carry out the authorized activities described in subsection (c); and
(ii) the eligible partnership's evaluation and accountability plan described in subsection (e); and

(E) a description of how the eligible partnership will continue the activities funded under this part after the original grant or subgrant period has expired.

(c) AUTHORIZED ACTIVITIES- An eligible partnership shall use funds provided under this part for one or more of the following activities related to elementary schools or secondary schools:

(1) Creating opportunities for enhanced and ongoing professional development of mathematics and science teachers that improves the subject matter knowledge of such teachers.

(2) Promoting strong teaching skills for mathematics and science teachers and teacher educators, including integrating reliable scientifically based research teaching methods and technology-based teaching methods into the curriculum.

(3) Establishing and operating mathematics and science summer workshops or institutes, including followup training, for elementary school and secondary school mathematics and science teachers that —

(A) shall —

(i) directly relate to the curriculum and academic areas in which the teacher provides instruction, and focus only secondarily on pedagogy;
(ii) enhance the ability of the teacher to understand and use the challenging State academic content standards for mathematics and science and to select appropriate curricula; and
(iii) train teachers to use curricula that are —

(I) based on scientific research;
(II) aligned with challenging State academic content standards; and
(III) object-centered, experiment-oriented, and concept- and content-based; and

(B) may include —

(i) programs that provide teachers and prospective teachers with opportunities to work under the guidance of experienced teachers and college faculty;
(ii) instruction in the use of data and assessments to inform and instruct classroom practice; and
(iii) professional development activities, including supplemental and followup activities, such as curriculum alignment, distance learning, and activities that train teachers to utilize technology in the classroom.

(4) Recruiting mathematics, engineering, and science majors to teaching through the use of —

(A) signing and performance incentives that are linked to activities proven effective in retaining teachers, for individuals with demonstrated professional experience in mathematics, engineering, or science;

(B) stipends provided to mathematics and science teachers for certification through alternative routes;

(C) scholarships for teachers to pursue advanced course work in mathematics, engineering, or science; and

(D) other programs that the State educational agency determines to be effective in recruiting and retaining individuals with strong mathematics, engineering, or science backgrounds.

(5) Developing or redesigning more rigorous mathematics and science curricula that are aligned with challenging State and local academic content standards and with the standards expected for postsecondary study in mathematics and science.

(6) Establishing distance learning programs for mathematics and science teachers using curricula that are innovative, content-based, and based on scientifically based research that is current as of the date of the program involved.

(7) Designing programs to prepare a mathematics or science teacher at a school to provide professional development to other mathematics or science teachers at the school and to assist beginning and other teachers at the school, including (if applicable) a mechanism to integrate the teacher's experiences from a summer workshop or institute into the provision of professional development and assistance.

(8) Establishing and operating programs to bring mathematics and science teachers into contact with working scientists, mathematicians, and engineers, to expand such teachers' subject matter knowledge of and research in science and mathematics.

(9) Designing programs to identify and develop exemplary mathematics and science teachers in the kindergarten through grade 8 classrooms.

(10) Training mathematics and science teachers and developing programs to encourage young women and other underrepresented individuals in mathematics and science careers (including engineering and technology) to pursue postsecondary degrees in majors leading to such careers.

(d) COORDINATION AND CONSULTATION-

(1) PARTNERSHIP GRANTS- An eligible partnership receiving a grant under section 203 of the Higher Education Act of 1965 shall coordinate the use of such funds with any related activities carried out by such partnership with funds made available under this part.

(2) NATIONAL SCIENCE FOUNDATION- In carrying out the activities authorized by this part, the Secretary shall consult and coordinate with the Director of the National Science Foundation, particularly with respect to the appropriate roles for the Department and the Foundation in the conduct of summer workshops, institutes, or partnerships to improve mathematics and science teaching in elementary schools and secondary schools.

(e) EVALUATION AND ACCOUNTABILITY PLAN-

(1) IN GENERAL- Each eligible partnership receiving a grant or subgrant under this part shall develop an evaluation and accountability plan for activities assisted under this part that includes rigorous objectives that measure the

impact of activities funded under this part.

(2) CONTENTS- The plan developed pursuant to paragraph (1) —

(A) shall include measurable objectives to increase the number of mathematics and science teachers who participate in content-based professional development activities;

(B) shall include measurable objectives for improved student academic achievement on State mathematics and science assessments or, where applicable, an International Mathematics and Science Study assessment; and

(C) may include objectives and measures for —

(i) increased participation by students in advanced courses in mathematics and science;
(ii) increased percentages of elementary school teachers with academic majors or minors, or group majors or minors, in mathematics, engineering, or the sciences; and
(iii) increased percentages of secondary school classes in mathematics and science taught by teachers with academic majors in mathematics, engineering, and science.

(f) REPORT- Each eligible partnership receiving a grant or subgrant under this part shall report annually to the Secretary regarding the eligible partnership's progress in meeting the objectives described in the accountability plan of the partnership under subsection (e).

ATTACHMENT B
Applicable Definitions

[Section 9101; unless cited]

Exemplary teacher:

A teacher who--

(A) is a highly qualified teacher such as a master teacher;

(B) has been teaching for at least 5 years in a public or private school or institution of higher education;

(C) is recommended to be an exemplary teacher by administrators and other teachers who are knowledgeable about the individual's performance;

(D) is currently teaching and based in a public school; and

(E) assists other teachers in improving instructional strategies, improves the skills of other teachers, performs teacher mentoring, develops curricula, and offers other professional development.

Highly qualified teacher:

(A) when used with respect to any public elementary school or secondary school teacher teaching in a State, means that—

(i) the teacher has obtained full State certification as a teacher (including certification obtained through alternative routes to certification) or passed the State teacher licensing examination, and holds a license to teach in such State, except that when used with respect to any teacher teaching in a public charter school, the term means that the teacher meets the requirements set forth in the State's public charter school law; and

(ii) the teacher has not had certification or licensure requirements waived on an emergency, temporary, or provisional basis;

(B) when used with respect to—

(i) an elementary school teacher who is new to the profession, means that the teacher—

(I) holds at least a bachelor's degree; and

(II) has demonstrated, by passing a rigorous State test, subject knowledge and teaching skills in reading, writing, mathematics, and other areas of the basic elementary school curriculum (which may consist of passing a State required certification or licensing test or tests in reading, writing, mathematics, and other areas of the basic elementary school curriculum); or

(ii) a middle or secondary school teacher who is new to the profession, means that the teacher holds at least a bachelor's degree and has demonstrated a high level of competency in each of the academic subjects in which the teacher teaches by—

(I) passing a rigorous State academic subject test in each of the academic subjects in which the teacher teaches (which may consist of a passing level of performance on a State required certification or licensing test or tests in each of the academic subjects in which the teacher teaches); or

(II) successful completion, in each of the academic subjects in which the teacher teaches, of an academic major, a graduate degree, coursework

equivalent to an undergraduate academic major, or advanced certification or credentialing; and

(C) when used with respect to an elementary, middle, or secondary school teacher who is not new to the profession, means that the teacher holds at least a bachelor's degree and—

(i) has met the applicable standard in clause (i) or (ii) of subparagraph (B), which includes an option for a test; or

(ii) demonstrates competence in all the academic subjects in which the teacher teaches based on a high objective uniform State standard of evaluation that—

(I) is set by the State for both grade appropriate academic subject matter knowledge and teaching skills;

(II) is aligned with challenging State academic content and student academic achievement standards and developed in consultation with core content specialists, teachers, principals, and school administrators;

(III) provides objective, coherent information about the teacher's attainment of core content knowledge in the academic subjects in which a teacher teaches;

(IV) is applied uniformly to all teachers in the same academic subject and the same grade level throughout the State;

(V) takes into consideration, but not be based primarily on, the time the teacher has been teaching in the academic subject;

(VI) is made available to the public upon request; and

(VII) may involve multiple, objective measures of teacher competency.

Other staff – Pupil services personnel, librarians, career guidance and counseling personnel, education aides, and other instructional and administrative personnel.

Poverty Line – means the poverty line (as defined by the Office of Management and Budget and revised annually in accordance with section 673(2) of the Community Services Block Grant Act) applicable to a family of the size involved.

Principal - Includes an assistant principal.

Professional development

(A) includes activities that—

(i) improve and increase teachers' knowledge of the academic subjects the teachers teach, and enable teachers to become highly qualified;

(ii) are an integral part of broad school-wide and district-wide educational improvement plans;

(iii) give teachers, principals, and administrators the knowledge and skills to provide students with the opportunity to meet challenging State academic content standards and student academic achievement standards;

(iv) improve classroom management skills;

(v) (I) are high quality, 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; and
(II) are not 1-day or short-term workshops or conferences;

(vi) support the recruiting, hiring, and training of highly qualified teachers, including teachers who became highly qualified through State and local alternative routes to certification;

(vii) advance teacher understanding of effective instructional strategies that are—
(I) based on scientifically based research (except that this subclause shall not apply to activities carried out under part D of title II); and
(II) strategies for improving student academic achievement or substantially increasing the knowledge and teaching skills of teachers; and

(viii) are aligned with and directly related to—
(I) State academic content standards, student academic achievement standards, and assessments; and
(II) the curricula and programs tied to the standards described in subclause (I) except that this subclause shall not apply to activities described in clauses (ii) and (iii) of section 2123(3)(B);

(ix) are developed with extensive participation of teachers, principals, parents, and administrators of schools to be served under this Act;

(x) are designed to give teachers of limited English proficient children, and other teachers and instructional staff, the knowledge and skills to provide instruction and appropriate language and academic support services to those children, including the appropriate use of curricula and assessments;

(xi) to the extent appropriate, provide training for teachers and principals in the use of technology so that technology and technology applications are effectively used in the classroom to improve teaching and learning in the curricula and core academic subjects in which the teachers teach;

(xii) as a whole, are regularly evaluated for their impact on increased teacher effectiveness and improved student academic achievement, with the findings of the evaluations used to improve the quality of professional development;

(xiii) provide instruction in methods of teaching children with special needs;

(xiv) include instruction in the use of data and assessments to inform and instruct classroom practice; and

(xv) include instruction in ways that teachers, principals, pupil services personnel, and school administrators may work more effectively with parents; and

(B) may include activities that—

(i) involve the forming of partnerships with institutions of higher education to establish school-based teacher training programs that provide prospective teachers and beginning teachers with an opportunity to work under the guidance of experienced teachers and college faculty;

(ii) create programs to enable paraprofessionals (assisting teachers employed by a local educational agency receiving assistance under part A of title I) to obtain the education necessary for those paraprofessionals to become certified and licensed teachers; and

(iii) provide follow-up training to teachers who have participated in activities described in subparagraph (A) or another clause of this subparagraph that are designed to ensure that the knowledge and skills learned by the teachers are implemented in the classroom.

Scientifically based research

(A) 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

(B) includes research that—

(i) employs systematic, empirical methods that draw on observation or experiment;

(ii) involves rigorous data analyses that are adequate to test the stated hypotheses and justify the general conclusions drawn;

(iii) 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;

(iv) is evaluated using experimental or quasi-experimental designs in which individuals, entities, programs, or activities are assigned to different conditions and with appropriate controls to evaluate the effects of the condition of interest, with a preference for random-assignment experiments, or other designs to the extent that those designs contain within-condition or across-condition controls;

(v) ensures that experimental studies are presented in sufficient detail and clarity to allow for replication or, at a minimum, offer the opportunity to build systematically on their findings; and

(vi) has been accepted by a peer-reviewed journal or approved by a panel of independent experts through a comparably rigorous, objective, and scientific review.

Key Terms

Cadre Members (CMs) – educators and administrators who are trained on a limited basis through outreach and mentoring by the Science and Mathematics Regional Collaboratives. Cadre Members differ from STMs/MTMs because they generally receive less than 30 contact hours of professional development over the duration of the project.

High Quality, Sustained and High Intensity Professional Development – instructional activities that involve teachers in the development and delivery of training; encourage networking among teachers; reflect pertinent research on professional development and topic of inquiry; are aligned with the Texas Essential Knowledge and Skills (TEKS); provide adequate time for the activities over a significant span of time to assure that change occurs; enhance teacher content knowledge in the science discipline of study; and provide ongoing follow-up, evaluation, and support of continuous improvement in teaching and learning.

Instructional Team Members (ITMs) – a small team of individuals who together design and provide professional development for a Regional Collaborative. An Instructional Team is ideally comprised of a mathematics or science professor, a mathematics or science education professor, a mathematics or science specialist, and a master teacher.

Professional Development Academy (PDA) – opportunities provided at the state level for Project Directors or Instructional Team Members of all Regional Collaboratives to participate in professional development to enhance instructional skills and understanding of the challenging state academic content and student academic achievement standards, and state assessment.

Professional Development Program (PDP) – the activities teachers participate in to enhance their instructional skills and science content knowledge at each Regional Collaborative.

Science or Mathematics Teacher Mentors (STMs/MTMs) – teachers of science or mathematics in the PreK-12 classroom from public or private non-profit schools who have made a commitment to the Science or Mathematics Regional Collaborative to participate in an average of 100 contact hours of professional development. STMs/MTMs are expected to take the science or mathematics content knowledge, classroom skills, and leadership skills back to their respective campuses, districts, or regions and provide mentoring, technical assistance, peer coaching and professional development to additional teachers.

For additional legal definitions please see the Federal Government website at: http://www.ed.gov/policy/elsec/leg/esea02/index.html for the *Elementary and Secondary Education Act* (ESEA) as amended by the *No Child Left Behind Act of 2001*.

ATTACHMENT C
Critical Dates

Activity	Date
RFA Release Date	Monday, December 5, 2011
FAQ first posting	Monday, December 12, 2011
Webinar (10:00 am – 12:00 noon)	Thursday, January 19, 2012
RFA Due Date	Monday, February 13, 2012
Start Date of Grant	Tuesday, May 1, 2012
Project Directors Meetings	Thursday **and** Friday, September 13 and 14, 2012
Report #1 and Invoice #1 Due on Activities as of September 30, 2012	Friday, October 12, 2012
Subsequent Invoices	Monthly, due the 15th of each month
Project Directors Webinar Meeting	Thursday, February 7, 2013
Report #2 Due on Activities as of February 28, 2013	Friday, March 22, 2013
Project Directors Meetings	Thursday **and** Friday, April 18 and 19, 2013
Report #3 Due on Activities as of May 31, 2013	Friday, June 14, 2013
TRC Nineteenth Annual Meeting	Week of June 24, 2013 (*June 26-28, 2013*)
End Date of Grant	Wednesday, July 31, 2013
Final Report and Invoice Due on Activities as of July 31, 2013	Thursday, August 15, 2013
UT closeout form to UT's Office of Sponsored Projects	Friday, August 30, 2013