AGREEMENT NUMBER x259685 BETWEEN THE BOARD OF REGENTS OF THE UNIVERSITY OF WISCONSIN SYSTEM AND

Madison Metropolitan School District

This Agreement is executed by and between the Board of Regents of the University of Wisconsin System ("University"), and Madison Metropolitan School District ("Subgrantee")

WHEREAS the University has received an award entitled "System wide Change for All Learners and Educators (SCALE)" from the National Science Foundation, ("Sponsor") under agreement number 0227016 ("Prime Award"), (CFDA number 47,076):

NOW IHEREFORE, it is agreed as follows:

Article 1. Period of Performance

The effective period of this Agreement shall be from 1/1/06 through 12/31/06, unless otherwise provided for by modification to this agreement. No expenses will be reimbursed which are incurred prior to the effective date or subsequent to the termination date unless specifically approved, in writing, by the University

Article 2. Scope of Work

Unless otherwise specifically provided in this Agreement, the Subgrantee shall supply all the necessary personnel, equipment, and materials to accomplish the tasks set forth in Appendix A ("Scope of Work")

Article 3. Technical Direction

Terrence Millar, as the Principal Investigator of the University, shall retain the responsibility for technical monitoring of this project. Any change to the Scope of Work must be approved, in writing, by the University.

Article 4. Key Personnel

The following person(s) ("Key Person") are considered to be essential to the work performed hereunder:

Mary Rambert

In the event that a Key Person becomes unable or unwilling to continue the project, the Subgrantee shall notify the University in writing and may propose an individual to replace such Key Person. Any replacement of a Key Person must be approved, in writing, by the University. In the event a mutually acceptable replacement is not available, the University shall have the option to terminate the project. The thirty (30) day prior notice provided under Article 18 is not required for termination by the University under this Article. Such termination shall be in writing and the Subgrantee will be reimbursed for allowable documented costs and noncancellable obligations incurred prior to the termination date

Article 5 Limitation on Costs

The cost, both direct and indirect, of performing the tasks under Article 3 of this Agreement will not exceed \$220,000 in United States Dollars as set forth in Appendix B. University is not, in the absence of a modification, obligated to reimburse the Subgrantee for costs incurred by the Subgrantee which are in excess of the cost specified in this article.

Article 6. Cost Sharing

The Subgrantee is responsible for any cost sharing as detailed in Appendix B.

Article 7. Method of Payment

a) The Subgrantee will submit invoices in United States Dollars for work done not more often than monthly. The invoice shall reference the Agreement number and shall reflect summary detail, by budget category, of the costs incurred. A certified original and three copies of the invoice shall be submitted to:

The University of Wisconsin-Madison Research & Sponsored Programs 750 University Avenue, 4th Floor Madison, Wisconsin 53706 Attention: Robert Mougin

- b) Invoices received from the Subgrantee will be reviewed by the Principal Investigator and the Office of Research & Sponsored Programs prior to payment
- c) The final invoice shall be submitted by the Subgrantee within sixty (60) days of the termination date of this Agreement.

Article 8. Audit

The Subgrantee will maintain adequate financial records, in accordance with generally accepted accounting practices, to clearly and easily identify expenses, to describe the nature of each expense, and to establish relatedness to this Agreement. All records related to this Agreement shall be available for audit by the University and the Cognizant Federal Audit Agency. If Subgrantee expends \$500,000 or more of federal funds in their fiscal year, Subgrantee agrees to provide University with notification of completion of required audits and of any adverse findings which impact this Agreement, in accordance with Office of Management and Budget Circular A-133.

The financial records of this Agreement will be retained for a period of three (3) years from the date of submission of the final report of expenditures except for records related to any audit initiated prior to the expiration date which shall be retained until the audit findings involving the records have been resolved.

Article 9. Equipment Accountability

Title to equipment purchased under this Agreement will reside with the Subgrantee Inventory, accountability and disposition of equipment will be in accordance with the terms of the Prime Award

Article 10. Program Income

The Subgrantee is accountable to the University for any program income generated as a result of this Agreement. The University is accountable to the funding agency for the records on the receipt and disposition of any such income. The Subgrantee will maintain such records as are necessary for the University to fulfill its responsibility and will report, in writing, to the University any program income generated as a result of this Agreement.

Article 11 Reports

The Subgrantee is responsible for submitting the following reports:

a) Progress Reports are to be submitted annually to the Principal Investigator.

- b) Invention Statements are to be submitted annually to the University, as applicable
- c) Program Income Reports, if applicable, are to be submitted within sixty (60) days of the termination date of this agreement and thereafter, as may be required by the terms and conditions of the Prime Award as incorporated into this Agreement

Article 12. Publication and Copyrights

It is understood that decisions about authorship on all publications resulting from research under this Agreement will be made by the Principal Investigator and the Key Person(s) prior to any such publication. The Federal Government shall have a royalty-free, nonexclusive and irrevocable right to reproduce, publish or otherwise use, and to authorize others to use, any copyrightable material that is developed under this Agreement. The University shall have the unrestricted right to use all data which is delivered or specified to be delivered under this Agreement.

Article 13. Patents and Inventions

This Agreement is subject to 37 CFR 401. The Subgrantee will be required to obtain appropriate patent agreements from all persons who perform any part of the work under the Agreement, and for disclosing any subject inventions to the University.

Article 14. Care and Treatment of Laboratory Animals

Should vertebrate animals be used in this project, the Subgrantee will comply with the Animal Welfare Act, as amended (7 U.S.C. 2131 et seq) and any other Prime Award requirements with regard to the care and treatment of laboratory animals.

Article 15. Protection of Human Subjects

Should human subjects be used in this project, the Subgrantee will comply with all applicable Federal regulations on the protection of human subjects (45 CFR Part 46 as amended), as required by the terms of the Prime Award. In addition to assuring that the initial requirements for protection of human subjects are met, the Subgrantee agrees to assure continued monitoring and compliance with these requirements during the course of the project.

Article 16. Assurances

By accepting this agreement, the Subgrantee certifies compliance with the following regulations and provides any other assurances not specifically listed below but required by the terms of the Prime Award:

- a) Debarment, Suspension, and Other Responsibility Matters: Neither the Subgrantee nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by a Federal department or agency
- b) Certification Regarding Lobbying: No Federal appropriated funds have been paid or will be paid, by or on behalf of the Subgrantee, to any person for influencing or attempting to influence an officer or employee of any Federal agency, Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or intending to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan or cooperative agreement, the Subgrantee shall certify and disclose accordingly. The Subgrantee shall require that the language of this certification be included in the award documents for all subawards at all tiers (including

subcontracts, subgrants, and contracts under grants, loans, and cooperative agreement) and that all subrecipients shall certify and disclose accordingly. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, USC. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

- c) Federal Debt Collection Procedures Act of 1990 (28 U S C 3201(e)), also known as Nondelinquency on Federal Debt
- d) Drug-Free Workplace Act of 1988 (Public Law 100-690, Title V, Subtitle D, as amended)
- e) Title VI of the Civil Rights Act of 1964, the Age Discrimination Act of 1975, Title IX of the Education Acts of 1972, and Section 504 of the Rehabilitation Act of 1973

Article 17. Funding Agency Provisions

This Agreement is also subject to all the terms and conditions of the Prime Award (Appendix C). All references in the Prime Award terms to the Funding Agency should be deemed to mean "University" and references to the "Grantee or Contractor" should be deemed to mean "Subgrantee"

Article 18. Contract Termination

This Agreement may be terminated by either party upon thirty (30) days written notice and, in such event, reimbursement will be limited to documented costs and noncancellable obligations incurred prior to termination. Notice of termination shall be given by personal delivery, certified mail or registered mail and shall be effective upon date of receipt.

Article 19. Independent Contractor

Subgrantee is an independent contractor, not a partner, joint venturer or agent of the University; nor are Subgrantee's employees considered employees of the University for any reason

Article 20 Notices

Notices, invoices, reports, payments and other communications to either party by the other shall be delivered personally or sent by first class, postage prepaid to the following addresses and shall be deemed given on the date so delivered or deposited in the mail unless otherwise provided herein.

UNIVERSITY:

Robert Andresen, Assistant Director Post-award

Research & Sponsored Programs
The University of Wisconsin-Madison
750 University Avenue, 4th Floor
Madison, Wisconsin 53706

PRINCIPAL INVESTIGATOR:

Terrence Millar

WCER

The University of Wisconsin-Madison

1025 West Johnson St. Madison, WI 53706

SUBGRANTEE:

Mary Ramberg

Madison Metropolitan School District

545 W Dayton St Madison, WI 53703

Article 21. Miscellaneous

This Agreement may only be modified or amended by a written agreement signed by an authorized representative of both parties

This Agreement shall be binding upon the parties hereto, their successors and assigns, upon due execution by both parties

Madison Metropolitan School District	Board of Regents of the U Wisconsin System	Board of Regents of the University of Wisconsin System	
By: (sign)	By: (sign) Barlara)	1. Keenan	
Name: (print) Roger Price Board Secretary		bara J. Keenan ninistrative Officer	
Title: (print) Asst. Supt. of Busine	5 Title: (print)	· · · · · · · · · · · · · · · · · · ·	
Date: (print) 5/22/06	Date: (print)) <u>/</u>	
Social Security or Tax ID Number:			
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IRS Tax Status: (please check one)			
் Foreign	gan ^e Romania	**************************************	
For Profit Not-For-Profit		ide (1818). Programme de la companya	
Individual			
Other (please specify)			

Appendix A

MMSD Budget Narrative SCALE FY2006

The Madison Metropolitan School District (MMSD) is committed to developing teacher expertise in mathematics and science. Four basic premises underlie the use of funds in the MMSD SCALE initiative:

1. Teacher expertise and skill is the most important variable in student achievement.

- 2. Professional development that includes on-site support for implementation is the most effective way to impact teacher expertise and skill.
- 3 Developing on-site teacher leadership capacity and expertise in content and pedagogy are integral for promoting and sustaining long-term change in teacher culture and practice.
- 4. Improving teacher quality will have a beneficial effect on all students, and will have a disproportionately positive impact on low achieving students.

The professional development plan for science includes a central staff person with responsibility for the initial training of middle school science teachers new to standards-based science curriculum and assessment, follow-up training for more experienced staff, and special training for staff who support students with special education needs and students who are English language learners; development of school-based leadership in each of the middle schools; and support of school-based efforts to implement strategies so every middle school student experiences deep, conceptually based instruction in science. Substitute teachers will be provided to release teachers for professional development on science inquiry pedagogy and compensation for work conducted after contract hours will be provided. Teacher leaders will be compensated non-contract hour work to develop school-wide systems and practices to increase academic rigor and deepen science inquiry learning. In addition to the focus on building capacity in middle school teachers and leaders, the district will also concentrate SCALE resources on high school science teachers, providing professional development that will support their efforts to implement research-based teaching practices enabling diverse groups of students to succeed in freshman science courses

The professional development plan for mathematics includes a central staff person with responsibility for the initial training of middle school teachers who are new to standards-based mathematics curriculum adopted by district middle schools, follow-up training for more experienced staff, and special training for staff who support students with special educational needs or students who are English language learners; development of school-based leadership in each of the middle schools; and support of school-based efforts to implement strategies so every student experiences deep, conceptually based instruction in mathematics. In addition to this focus on middle school mathematics teachers, the district will also focus SCALE resources on support of one high school mathematics department piloting the implementation of both a standards-based algebra curriculum and a standards-based integrated mathematics curriculum (Student outcomes of this effort are also being studied by SCALE-supported research.) Support will also be provided to that high school's mathematics department as it develops strategies to embed honors mathematics opportunities into hetereogeneously grouped classes. SCALE funds will also be used to help support professional development of elementary school math teachers around students' development of multi-digit concepts/Base Ten concepts.

The additional salary will fund Linda McQuillen's work with Math professional development.

Year 4 Proposed Budget 5. Madison Metropolitan School District

NSF Award # EHR 0227016 Awardee Institution Name UW Madison

1/1/2006-

	12/31/2006
Cost Category	Year 4 Budget Request
A. Senior Personnel	
1. Pl Mary Ramberg	
2 Co-Pl Lisa Wachtel	
Total Senior Personnel	
B. Other Personnel	
1 () Post Doctoral Associates	
2 (2) Other Professionals	\$144,200
3. () Graduate Students	
4 () Undergraduate Students	• 1
5. () Secretarial - Clerical (if charged directly)	
6 () Other	
Total Salaries and Wages (A+B)	\$144,200
C Fringe Benefits	\$32,200
TOTAL SALARIES, WAGES, & FRINGE (A+B+C)	\$176,400
D Equipment	
E. Travel	
1 Domestic ,	
2 Foreign	
TOTAL TRAVEL (E1+E2)	
F. Participant Support Costs	
1. Stipends	\$20,000
2 Travel	
3 Subsistence	
4. Other	\$15,900
TOTAL # OF PARTICIPANTS()	
TOTAL PARTICIPANT COSTS	\$35,900
G. Other Direct Costs	
1 Materials and Supplies	
2. Publication Costs/Documentation/Dissemination	
3. Consultant Services	
4. Computer Services	
5 Subawards	
6. Other	
TOTAL OTHER DIRECT COSTS	
H. TOTAL DIRECT COSTS (A through G)	\$212,300
I Indirect Costs	\$7,700.
J. Total Direct And Indirect Costs (H+I)	\$220,000
	4 42.1

Madison's subaward is increased by \$20,000 in Year 4 to cover additional part time salary

AppendixC

From:

<pgreen@nsf.gov>

To:

<nsf@rsp.wisc.edu>

Date:

Mon, Sep 30, 2002 8:47 AM

Subject:

Award Id: 0227016, Pl: Millar

Division of Grants and Agreements September 30, 2002

Ms Diane Barrett Sponsored Research Officer The University of Wisconsin - Madison 750 University Ave Madison, WI 53706-1490

Re: Cooperative Agreement No. EHR-0227016

Dear Ms. Barrett:

Attached is the referenced electronic Cooperative Agreement that provides support for the System-Wide Change for All Learners and Educators (SCALE)

This Agreement has been awarded electronically. If this Agreement is acceptable to you, please print a copy of the signature page, sign it and return it to me via U.S. mail and/or FAX (703) 292-9142 as soon as possible.

The Government is not obligated to you in connection with performance under the proposed Agreement until the Agreement has been signed without condition or changes, by an authorized official of your institution.

If you have any questions, contact Pamela A. Hawkins, on my staff, at (703) 292-8218.

Sincerely,

Paulette L. Green Grants and Agreements Officer

Attachment nsf@rsp wisc edu

Between

NATIONAL SCIENCE FOUNDATION

Arlington, VA 22230

and

The University of Wisconsin - Madison -

Madison, WI 53706-1490

TITLE: System-Wide Change for All Learners and Educators

PI Name: Terrence S. Millar, Andrew C. Porter, Christian D. Schunn, Kathy Lesley, Lauren B. Resnick

EFFECTIVE DATE: January 1, 2003 EXPIRATION DATE: December 31, 2007

AUTHORITY: This Agreement is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75).

This Agreement is entered into between the United States of America, hereinafter called the Government, represented by the National Science Foundation, hereinafter called the Foundation or NSF, and The University of Wisconsin - Madison, hereinafter called the Awardee.

NSF Program Official:

Joan T Prival, (703) 292-4635

FAX: Email:

(703) 292-9015 iprival@nsf.gov

NSF Grants & Agreements Official:

Pamela A. Hawkins, (703) 292-8218

FAX:

(703) 292-9142

Email:

panawkin@nsf.gov

Please have an authorized official of your institution execute this Agreement and return two (2) signed copies within ten (10) working days to the Grants & Agreements Official.

The United States of America:

Acceptance:

(Signature)

Paulette L. Green

(Signature)

(Name)

Grants & Agreements Officer

(Title)

September 30, 2002

(Title)

Diane Barrett, Federal Director Research & Sponsored Programs

Vane Banet

(Date)

(Date)

National Science Foundation

The University of Wisconsin - Madison

Cooperative Agreement No. EHR-0227016

Special Conditions

- A. Statement of Purpose
- B. Period of Performance
- C. Statement of Work and Awardee Responsibilities
- D. NSF Responsibilities
- E. Funding & Funding Schedule
- F. Reporting Requirements
- G. Key Personnel
- H. Other Conditions
- I. Strategic Plan
- II. General Conditions
- A. Grant General Conditions GC-1
- B. Cooperative Agreement General Conditions CA-1
- III. Order of Precedence

Cooperative Agreement NO. EHR-0227016

I SPECIAL CONDITIONS

A STATEMENT OF PURPOSE

The Math and Science Partnership (MSP) enacts a portion of the President's vision, enunciated in No Child Left Behind, to strengthen and reform preK-12 education. The program seeks to demonstrate improved student achievement in mathematics and science through support of partnerships that unite the efforts of teachers, administrators and guidance counselors in local school districts with administrators and science, mathematics, engineering and education faculties of colleges and universities

The purpose of the System-Wide Change for All Learners and Educators (SCALE) award, hereafter referred to as the "Partnership," is to improve the mathematics and science achievement of all students at

all grade levels in the four partner school districts (Denver Public Schools, Los Angeles Unified School District, Madison Metropolitan School District, and the Providence Public Schools) and to create a model form of partnership for reforming preK-12 STEM education through the following areas of work:

- 1 Implementing the best current mathematics and science programs system-wide;
- 2 Creating state-of-the-art science, technology, engineering and mathematics immersion projects and implementing them system-wide;
- 3 Reforming preservice and in-service STEM teacher education for teachers in the partner districts;
- 4 Creating mentoring and guidance experiences for middle and high school students, especially women and minorities; and
- 5. Implementing a comprehensive program of research and evaluation.

The lead partner in the Partnership is the University of Wisconsin-Madison and additional partners include University of Pittsburgh, Los Angeles Unified School District, Denver Public Schools, Providence (Rhode Island) Public Schools, and Madison Metropolitan School District

The lead partner accepts the overall management and fiscal responsibility for the Partnership. NSF expects that the Principal Investigator (PI) and other individuals identified as Key Personnel in Section G of this Agreement will be responsible for fulfilling the terms of this Agreement.

B. PERIOD OF PERFORMANCE

The period of performance of this Agreement is January 1, 2003 through December 31, 2007, subject to annual review and availability of NSF funds

C. STATEMENT OF WORK AND AWARDEE RESPONSIBILITIES

The University of Wisconsin - Madison shall be responsible for the project in accordance with its proposal EHR-0227016 as modified by emails dated August 2 and September 16, 2002.

- 1. The Partnership is committed to:
- a establishing a results-oriented, accountable project that implements evidence-based educational practices, and that will result in improved student outcomes, reduction of the achievement gap, and the generation and sustenance of a competent mathematics and science teacher workforce.
- b encouraging all students to participate and succeed in challenging mathematics and/or science courses that are taught by educators who effectively match local and state standards to appropriate curricula, learning technology, instruction, and assessment.
- c. strengthening the mathematics and science teaching profession through recruitment of qualified individuals to become teachers; preparation of future teachers in significant content and pedagogy; support of the teacher certification process; support of teacher induction into the field; development of policies that impact teacher placement or assignment; and support of continuing professional development.
- d. realizing cultural/institutional change within the Partnership organizations such that all partners, including higher education organizations and their mathematics, science, engineering and education faculty, make commitments to work together with preK-12 educators such that all are accountable for improved student performance.
- e contributing to the development of the national capacity to introduce and sustain successful science and mathematics education reform through the implementation of effective systems that link assessment (classroom, local, and state) and accountability measures, and through participation in the MSP Learning Network that will facilitate national, large-scale research as well as formative and summative evaluation of site-specific outcomes.
- 2. The Partnership leadership team, including Key Personnel described in Section G of this Agreement, will reflect the partner constituents served by the project and include those groups traditionally underrepresented in science, technology, engineering, and mathematics (STEM) fields. A Management Plan and accompanying organization chart reflecting all partners and key personnel must be submitted as

- a part of the draft Strategic Plan described in Item 4: below and in Section I of this Agreement. Any subsequent change in the organizational structure during a funding period must be reported immediately to the cognizant NSF Program Officer.
- 3. The Partnership will identify a Project Director (PD) to oversee the day-to-day operations of the project within 90 days of the effective date of this award. A request for approval of the identified individual should be submitted to the cognizant Program Officer and should include the individual's resume.
- 4. The Partnership will develop a comprehensive 5-Year Strategic Plan (hereafter referred to as the "Plan") with goals and timelines for the five-year period. The Plan will encompass those activities described in the proposal EHR-0227016 as modified by emails dated August 2 and September 16, 2002. The Plan will be jointly developed by all the partners in the partnership and must clearly delineate the roles and responsibilities of each of the partners and of the project management teams, and must be integrally aligned with the relevant evaluation plan. It will include milestones and/or deliverables to measure the progress of the Partnership toward realizing its goals. A draft Plan is due within 90 days of the effective date of this award to the cognizant NSF Program Officer for review and approval. The Plan will articulate the Partnership vision and goals and will describe strategies the Partnership will employ to realize its goals.
- 5. The Partnership will develop an Implementation Plan for Year 1 of the project. This Implementation Plan will support strategies described in the Strategic Plan and is due to NSF within 180 days of the effective date of this Agreement.
- 6. The Partnership must show progress towards the goals outlined in the proposal and set forth in the Plan. The Partnership is required to provide an annual analysis of its achievements as they relate to student outcomes and teacher number, quality, and diversity. The Annual Progress Report will be the predominant evaluative measure of progress as described in Section F.3. of this Agreement.
- 7. The Partnership is committed to ensuring that programs and activities developed during the MSP timeframe will result in institutional changes, such that activities shown to improve student outcomes and enhance the instructional workforce will be sustained after NSF funding ends.
- 8. The Partnership will participate in meetings of NSF-MSP PIs/PDs and be represented at the national and regional meetings as deemed appropriate to the development, coordination, and review of MSP activities. Travel costs related to these activities may be charged to the MSP award.
- 9. The Partnership will participate in site/reverse site visits as requested by NSF.
- 10. The Partnership is responsible for dissemination of ideas, activities, and programs. The Partnership will acknowledge NSF support in all documents, presentations, and events
- 11. The Partnership will ensure that all key members of its leadership team have and maintain Internet access.
- 12. All Partnerships supported by the MSP program, as part of a national program, are expected to work collaboratively with the NSF designated evaluators and researchers, as appropriate. This includes providing data relevant to the work of the MSP program. Data requirements will be developed by NSF in cooperation with the PIs/PDs participating in the MSP Learning Network.
- 13. State and local resources committed to the MSP should supplement and not supplant funds available for meeting the educational needs of the district, region, or state community
- 14. The Partnership will focus on the following four action goals:
- a. Implementing strategies to transform core STEM teaching system-wide in each of the four partner school districts so that every student experiences deep, conceptually based instruction on core math and

science concepts on a continuing basis. To this end, the Partnership will:

- (1) develop materials and training for district-wide coaching and professional development in mathematics and science;
 - (2) develop a coherent and cumulative K-8 science program in each partner district; and
 - (3) develop and implement high school mathematics and science literacy programs
- b Develop and implement immersion STEM learning experiences to ensure that every student in the partner districts experiences the process of engagement in an extended (e.g. four-week) scientific investigation at least once a year. To this end, the Partnership will:
- (1) Create SCALE immersion teams of STEM teachers, STEM faculty, graduate students and undergraduates, and experts in the learning sciences who will develop and test immersion projects matched to state science and math standards and adapt sets of immersion projects to special populations including English language learners, students with special needs, and students with disabilities; and
- (2) Train and support teachers in each partner school district to effectively use sets of immersion projects so that all students experience at least one unit each year as part of the math/science curriculum at all grade levels.
- c. Implement new teacher preparation and development educational programs in local IHEs that give teachers a deeper grasp of STEM content and effective pedagogical strategies for engaging students in learning that content.

To this end, the Partnership will:

- (1) collaborate with major teacher preparation institutions in each partner city (initially to include California State University Dominguez Hills, Rhode Island College, University of Wisconsin, and University of Colorado at Denver) to provide teacher preparation programs that are directly linked to the districts' curricula and use adaptations of the SCALE-developed professional development materials;
 - (2) involve master teachers in the instruction of preservice courses at the local IHEs;
- (3) involve STEM faculty from local IHEs in teacher preparation programs to increase the content knowledge of preservice teachers and provide continuing education to the new teachers as they are employed in the partner districts;
- (4) invite preservice teachers to participate in district professional development on inquiry-based instructional methods; and
- (5) create supportive induction and continuing professional development environments to retain teachers in high need schools.
- d. Increase the participation of minority and female students in high school math and science courses and send more of them to college as students of STEM disciplines, thus building a more diverse pool of potential STEM teachers. To this end, the Partnership will:
- (1) create cadres of high school students who serve as tutors and classroom aides in elementary and middle schools;
- (2) restructure the middle and high school guidance system to guide all students into programs that prepare them for college or postsecondary technical training; and
 - (3) eliminate general math and science course that are not rigorous.

- 15. The Partnership will conduct a formative and summative evaluation of curricular and student engagement activities focusing on student achievement.
- 16. The Partnership will conduct research studies on organizational change at districts and teacher training institutions and studies on partnership building
- 17. The Partnership will implement a dissemination strategy to include diffusion of change within the partnership, a "tiers of networks" approach to foster broad adaptation of SCALE curricula and resources, and production of generalizable knowledge and products including the development of a state-of-the-art website and publication in refereed journals.
- 18 The Partnerships' management plan will provide mechanisms for addressing geographic barriers
- 19. The Partnership will coordinate its efforts with other STEM education initiatives including, but not limited to, the Los Angeles USP, K-Through Infinity GK12 project, Centers for Learning and Teaching at the partner institutions (DiME and CIRTL), Standards-Based Science Assessment, and Improving Effectiveness of Instruction in Mathematics and Science with Data on Enacted Curriculum.

D. NSF RESPONSIBILITIES

NSF has a major responsibility for providing the Partnership with potential support, general oversight and monitoring to help assure effective Partnership performance and administration, as well as coordination of all MSP awards through the MSP Learning Network

Unless the NSF reserves specific responsibility by special condition or general condition for coordinating or integrating the project with other activities or sharing responsibility for certain aspects of the project, all such responsibilities remain with the Awardee

In accordance with the NSF's responsibilities under this Agreement, the following special conditions apply:

- 1. In order to facilitate the work done by the Awardee under this Agreement, the NSF will:
- a. hold periodic NSF-MSP Pls/PDs and management meetings;
- b. make additional information available regularly to the Awardee on the status of other MSP efforts that are supported by NSF and the U.S. Department of Education;
- c. provide through NSF staff, contractors, and consultants technical assistance in the form of usable information and professional advice as appropriate.
- d. encourage all NSF awardees in the vicinity of the Partnership to cooperate with the Awardee;
- e expand the current NSF Electronic Network to include MSP key personnel for the sharing of information, ideas, and experiences; and
- f. provide continuous feedback to the Awardee on its progress, based on reports submitted by the Awardee, periodic site visits, and the contacts and interchanges involved in the monitoring process.
- 2. A Critical Phase I review will be conducted by NSF toward the end of the second project year. The review will include a site visit, evaluation of the Annual Progress Report, and Partnership progress toward realizing its vision and goals. At the conclusion of the site visit and following subsequent NSF-Awardee discussion about any issues raised in the site review process, NSF will advise the Partnership whether funding will continue for an additional three years or if phase down plans should be prepared
- 3. Unless specified otherwise in this Agreement, all required NSF approvals must be in writing and signed by the cognizant NSF Grants and Agreements Official.
- 4. Performance of work under this Agreement shall be subject to the general oversight and monitoring of the cognizant NSF Program Officer. This NSF involvement may include, but is not limited to:

- a participation in resolution of governance, programmatic, technical, managerial, and/or scheduling concerns;
- b technical guidance and/or advice, especially with regard to the integration, collaboration, and coordination with other education projects funded by NSF;
- c. review and, where required by the Agreement, approve technical reports and information to be delivered by the Awardee
- d. approvals as required under the NSF Grant General Conditions, GC-1.
- 5. NSF involvement must be consistent with the general Statement of Work as stated in this Agreement. The cognizant NSF Program Officer does not have the authority to and may not:
- a. request additional work outside the general scope of the Agreement;
- b. issue instructions, which constitute a change as defined in Article 8 of GC-1, "Significant Project Changes";
- c. cause an increase or decrease in the estimated cost or time required for performance under the Agreement; and
- d, change any of the expressed terms and conditions of the Agreement.
- 6. If, in the opinion of the Partnership, any instructions or requests issued by the Program Officer are within one of the categories as defined in (a) through (d) in the above paragraph, the Partnership shall not proceed but shall notify the Grants and Agreements Officer and shall request, if appropriate, modification of the Agreement in accordance with Article 42, "Changes Limitation of Funds", CA-1

E. FUNDING & FUNDING SCHEDULE

1 Funding:

It is the intent of the Foundation to provide up to \$35,000,000 to support the Partnership over the next 5 years. Funds in the amount of \$14,000,000 are hereby provided to support the Partnership in accordance with the proposal EHR-0227016 dated April 30, 2002 as modified by emails dated August 2 and September 16, 2002.

The awardee is only authorized to spend \$3,500,000 for the first 6 months of this project. Following the submission of the 5-year strategic Plan, Financial Report, Year 1 Implementation Plan and written approval by the cognizant NF Grants and Agreements Officer, the awardee may be authorized to expend \$3,500,000 for the next 6 months. Following submission of the Annual Progress Report including an Implementation Plan for Year 2 of the project, a site/reverse site visit, and written approval by the cognizant NSF Grants and Agreements Officer, the awardee may expend funds up to \$7,000,000 for project year 2.

Of the funds authorized for the first 6 months, the awardee is only authorized to spend \$50,000 until final acceptable budgets, including subaward budgets, and budget narratives are submitted to NSF. The budget narratives must provide a detailed discussion of the funding requested, and the costs must track back to the NSF budget line items. Upon review of the budget documentation and written approval of the cognizant NSF Grants and Agreements Officer, the awardee may be authorized to expend \$3,450,000 for the balance of the 6-month period. Final budget agreements must be completed and submitted to the cognizant NSF Program Official within 90 days of the effective date of the award.

NSF authorization to enter into the proposed contractual arrangements with Denver School District, Madison Metropolitan School District, the Los Angeles Unified School District, and the Providence School District is being withheld pending submission of information detailed in Section 25 b 4 of the FDP-III General Terms and Conditions, dated 07/01/00

2 Funding Schedule

a. The level of continued NSF support will be negotiated with the Awardee annually. Continuation of NSF support will depend upon an annual review of accomplishments, availability of funds, and project progress.

The following is the anticipated funding schedule by performance period and type of review schedule for this Partnership:

Performance

FY Performance
Year FundingPeriodReview Type

- 1 FY 200210/1/02 9/30/03Annual review
- 2 FY 200310/1/03 9/30/04Critical Phase I review
- 3 FY 200410/1/04 9/30/05Annual review
- 4 FY 200510/1/05 9/30/06Annual review
- 5 FY 200610/1/06 9/30/07No review
- b. If the annual review of progress determines that continuation of support is warranted, the level of support will be negotiated with the Awardee, and will take into account the level of commitment from other sources and the availability of NSF funds. If review of the Partnership project determines that support is not warranted, the NSF may provide decreased funding to phase out the Foundation's support. The Awardee agrees to negotiate a phase-out plan with NSF if the decision is made by NSF that continued full funding is not warranted.
- 3. Reimbursement for consultant services under this award must be in accordance with Article 5, GC-1.
- 4. Funds provided for participant support may not be diverted by the Awardee to other categories of expense without the prior written approval of the cognizant NSF Program Officer. Costs of entertainment, amusement, diversion and social activities, and any costs directly associated with such costs (such as meals, lodging, rentals, transportation and gratuities) are unallowable. When certain meals are an integral and necessary part of a conference or meeting (i.e., working meals where business is transacted), grant funds may be used for such meals. Grant funds may also be used to furnish a reasonable amount of coffee or soft drinks for conference or meeting participants and attendees during coffee breaks.

F. REPORTING REQUIREMENTS

NSF awardees are required to electronically submit annual and final project reports using the Project Reporting System on FastLane http://www.fastlane.nsf.gov. Complete instructions for using the Project Reporting System, as well as other FastLane functions, are provided on the FastLane homepage http://www.fastlane.nsf.gov.

- 1. Strategic Plan. A draft 5-Year Strategic Plan, as described in Section I of the Special Conditions, is due to the cognizant NSF Program Official 90 days after the effective date of this Agreement. The Plan must be finalized 180 days after the effective date of this Agreement. An initial baseline report of the Partnership's database or quantitative indicators of activity and progress is due and should be included in the Plan.
- 2. Financial Report. In additional to the Financial Report due with each Annual Progress Report as described below in F.3.c., a Financial Report must be provided to the cognizant NSF Program Official six months following the effective date of this Agreement, and every year thereafter until the Agreement end date, and will contain budget explanations by partner for the current reporting year, and a statement of funds remaining unobligated at that time
- 3. Annual Progress Report. An Annual Progress Report, due four weeks prior to the annual site/reverse site visit (typically 10 weeks prior to the project anniversary date) will serve in part as the Partnership's request for continuing support. It will include:
- a. A Progress Report that includes information regarding the extent of implementation of the activities of

the MSP and the progress towards attaining the goals of the MSP.

- b. Quantitative Data that describe project progress against the baseline data provided. These data will be maintained by the Partnership, will support the Partnership's proposed Evaluation Plan and will be submitted to NSF at the time of the submission of the Annual Report. These data will serve as indicators of management activity and Partnership performance with respect to its goals and objectives. These data will be submitted annually to the MSP Program and will become part of an electronic reporting system.
- c. A Financial Report that contains detailed budget and budget explanation in accordance with NSF's Form 1030, and current information about support from other sources. A justification for any major changes being proposed must be included. A separate budget and budget explanation must be included for each subaward. An estimate of carry-over funds, if any, an explanation of the reasons for the carry-over amount, and plans for how the carry-over will be spent programmatically. Partnerships are expected to provide a good faith estimate of carry-over, verified in writing by the awardee authorized organizational representative
- d. A Management Report that provides current information about project management and support of Key Personnel.
- e. An Implementation Plan that describes activities to be undertaken in the next funding period that builds on project accomplishments within the context of the five-year Strategic Plan. It must address any conditions and concerns that have not been accomplished by prior activities or that were raised as the result of a review of a prior Annual Progress Report, Financial Report, Management Report, Site Visit, and/or Quantitative Data submission.
- 6. Special Reports. The Awardee shall submit such special reports as may be reasonably requested by the Foundation.
- 7. Final Project Report. As set forth in Article 16 "Final Report Requirements" of the Grant General Conditions GC-1. The Awardee shall submit a final report, in lieu of an annual report, within 3 months of the expiration date of this Agreement.

G. KEY PERSONNEL

The following individuals are considered Key Personnel and essential to the work of the Partnership. Any change to the key personnel or their level of effort requires the prior written approval of the NSF Grants and Agreements Officer.

Terrence S, Millar, Director Kathy Lesley, Co-Director Andrew C. Porter, Co-Director Lauren B. Resnick, Co-Director Christian D. Schunn, Co-Director

In the event of the departure of the PI or other Key Personnel, the Partnership and the affected partner institution, in consultation with and after approval by NSF, will name a suitable replacement. In the event of the departure of a PI or other Key Personnel, NSF reserves the right to reconsider further funding of the Partnership.

H OTHER CONDITIONS

1. Subawards. The Awardee hereby agrees to administer/monitor all subcontracts/subawards it enters into and support with NSF funds in accordance with the applicable Federal cost principles and Federal administrative requirements. Proposed subaward statements of work shall be submitted to the cognizant NSF Program Officer for review and approval prior to issuance. Subawards can only be issued to organizations that have the fiscal authority and responsibility to account for and handle Federal funds. The receiving organization(s) shall be subject to program audits and fiscal audits. The Awardee will develop and implement a plan that will ensure close monitoring of its subcontracts, including site visits, where feasible. A monitoring component should be included in the Annual Progress Report.

- 2. Substitute Teachers The cost of hiring substitute teachers is allowable under the following conditions: (1) it is necessary to the administration of the project; (2) an AOR has certified that the substitute teachers are replacing only teachers who are participating in the NSF-funded project during the time those teachers are working on the project; (3) substitute teachers are paid in accordance with established school district policies and in lieu of paying teachers participating in the project; and (4) auditable expenditure records, including the above certification, are maintained in the grantee's files documenting the hiring of the substitutes and related participation of the teachers in the NSF project.
- 3. Equipment. Expenditures for general purpose equipment are unallowable, unless the equipment is primarily or exclusively used in the actual conduct of the Awardee's activities and is not included in the 'Awardee's indirect cost pool.
- 4. PreK-12 Curriculum Testing. In accordance with sections 1869a and 1869b of title 42 of the United States Code, the awardee will do the following:
- a. Obtain from the school board or comparable authority responsible for the schools considering participation in the project, written approval prior to involvement of pre-college students in pre-college education research and development, pilot-testing, evaluation, and revision of experimental and innovative pre-college curriculum.
- b. Include in every publication, testing, or distribution agreement involving instructional materials developed under this grant (including, but not limited to, teachers' manuals, textbooks, films, tapes, or other supplementary material) a requirement that such material be made available within the school district using it for inspection by parents or guardians of children engaged in educational programs or projects using such material of that school district.
- 5. Nothing in the above terms supersedes the Foundation's rights under Article 41 "Suspension or Termination for Convenience" of the CA-1.

J. STRATEGIC PLAN

The Partnership will develop a comprehensive 5-Year Strategic Plan with goals and timelines for the five-year period, as stated in Section F 1 of this Agreement. The Plan will encompass those activities described in the proposal EHR-0227016 as modified by emails dated August 2 and September 16, 2002 and must be aligned with the Awardee's project Evaluation Plan. The Plan will include milestones and/or deliverables to measure the progress of the Partnership toward realizing its goals. The Plan will articulate the Partnership vision and goals and will describe strategies the Partnership will employ to realize its goals.

The Strategic Plan will be a living document. In developing the Strategic Plan and associated annual Implementation Plans and budgets that support its execution, awardees are required to ensure that

- 1. Benchmarks. Annual benchmarks are described to determine project progress over time with respect to student achievement and number, quality, and diversity of preK-12 teachers of mathematics and science, as well as in other specified areas. Benchmarks developed must be supportive of the benchmarks and goals outlined in the proposal EHR-0227016 as modified by emails dated August 2 and September 16, 2002. Attainment of and/or progress made towards full achievement of the annual benchmarks must be provided in each Annual Progress Report.
- 2 Student Achievement. A partnership-wide mechanism is being used to determine the degree to which every student is being provided challenging curriculum in mathematics and science classes, as well as the increased participation and success of students in advanced mathematics and science courses. Data describing student achievement in science and mathematics must be collected, reported and used to inform and advance the work of the Partnership, as appropriate, per state and district testing and as delineated in your cooperative agreement. Disaggregated data by race, ethnicity, socio-economic status, gender, and disability must be provided.

- 3. Teacher Quality, Quantity and Diversity. There are specifics related to attaining increases in the number, quality, and diversity of preK-12 teachers of mathematics and/or science consistent with obtaining the stated goal of the proposal and/or the cooperative agreement. Data related to teacher benchmarks in mathematics and science must be provided. Details relative to progress in the further development of a professional education continuum that considers traditional pre-service education as well as alternative routes into the profession, professional development during early phases of a career (i.e., induction), and continued professional growth (in-service) in mathematics and science for preK-12 teachers consistent with the proposal and/or cooperative agreement must also be provided
- 4. Management Plan. A comprehensive Management Plan is included that supports the development of an effective results-oriented, accountable partnership, with shared goals, responsibilities and accountability for supporting high quality science and mathematics teaching and learning. The management plan must delineate how the full-time project director reports, coordinates, and manages progress towards realization of student and teacher outcomes, as well as institutional change.
- 5 Science, Mathematics and Engineering Faculty Participation. There is information regarding the engagement of science, mathematics, and engineering faculty in vital roles that will impact the teacher workforce; these faculty will work with teachers and administrators to substantially improve student achievement.
- 6. Sustainability and Institutional Change: There are particulars associated with the progress towards the implementation of institutional change by each partner as stated in the proposal and/or cooperative agreement. There are strategies to ensure that policies are developed, revised, and implemented that support a high quality science and mathematics education for all students and teachers, inclusive of challenging curriculum and advanced course work.
- 7. Community Engagement: There are ongoing and effective strategies for community engagement, outreach, and parent involvement.

A draft Plan is due within 90 days of the effective date of this Agreement to the cognizant NSF Program Officer for review and approval. The Plan must be finalized within 180 days of the effective date of this Agreement.

II. GENERAL CONDITIONS

The following general terms and conditions are applicable to this award:

- A GC-1 http://www.nsf.gov/home/grants/grants_gac.htm
- B. CA-1 http://www.nsf.gov/home/grants/grants_gac.htm

III. ORDER OF PRECEDENCE

Any inconsistencies of this cooperative agreement shall be resolved by giving precedence in the following order (1) Special Conditions, Section I of the Agreement; and (2) the General Conditions, Section II of this Agreement.

EHR-0227016 000

SUMMARY PROPOSAL BUDGET

Funds

Person MOS

granted

cal acad sumr By NSF

A. (8.00) Total Senior personnel

15.00 7.65 5.51 \$623,431

