Modification No. 2 to Agreement No. X259685
between
The Board of Regents of the
University of Wisconsin System
and
Madison Metropolitan School District

The above referenced agreement, which is under the direction of Mary Ramberg, is hereby modified to reflect the following:

Change **Article 1. Period of Performance** as follows:

DELETE: through 12/31/07

INSERT: through 6/30/08

Change **Article 5. Limitation On Costs** as follows:

DELETE: is increased by $413,520 so as not to exceed $633,520

INSERT: is increased by $178,816 so as not to exceed $812,336

By signing below, the Subgrantee also certifies and provides any other assurances of its continued compliance with applicable statutory and regulatory requirements required by the terms of the Prime Award.

Except as modified herein, all terms and conditions of this agreement remain in full force and effect.

The Board of Regents of the University of Wisconsin System

By

Barbara ~~J.~~ Keenan
Administrative Officer

Name & Title

2/12/08

Date

Madison Metropolitan School District

By

Steve Hartley, BOE Secretary

Name & Title

2/4/08

Date

Year 6 Implementation Plan
Madison Metropolitan School District (MMSD)

Plan of Work (Including Timeline and Main Activities)

Prioritized List of Work January 2008 through June 2008

- Complete distribution and implementation of science immersion units
- Embed high school freshman science "equity & excellence" into the MMSD Framework and Smaller Learning Communities grant
- Increase building-based mathematics leadership at middle and high school levels and embed leadership structures into the MMSD Framework K-12 and into the Smaller Learning Communities grant at the high school level

Science

The Teaching and Learning Science division will implement immersion units at third, fourth, sixth, seventh and eight grades in 32 elementary and 11 middle schools by the end of the 2007-2008 school year

1 Investigating Responses Immersion Unit, 3rd Grade:
   - Complete pilot December 2007
   - Revise unit February 2008
   - Print and distribute teacher manuals May 2008

2 Electricity and Magnetism Immersion Unit, 4th Grade
   - Revise unit March 2008
   - Print and distribute teacher manuals May 2008

3 Investigating the Diversity of Life Immersion Unit, 6th Grade
   - Revise unit February 2008
   - Purchase and distribute permanent materials
   - Print and distribute teacher manuals and materials April 2008

4 Exploring Earth's Landforms Immersion Unit, 7th Grade
   - Revise unit January 2008
   - Purchase and distribute permanent materials
   - Print and distribute teacher manuals and materials April 2008

5 Electrical Alarm System Immersion Unit, 8th Grade
   - Print and distribute teacher manuals April 2008

SCALE Immersion unit objectives includes 1, 2, 3 4 and 5 NSF key features

Strategic Rationale for implementing immersion units includes the following reasons:

1. Each immersion unit supports grade level district and 4th, 8th and 10th grade state science standards not taught in the original recommended district curriculum
2. The units provide long term, in depth inquiry experiences for all students
3. The immersion units provide additional content and pedagogical resources for classroom teachers
4. The units provide local experiences and richer classroom activities

5. The immersion units support current research on best practices for science instruction, the use of on-going assessment tools, and are aligned to district priorities and goals
6. In addition, the units were co developed with MMSD classroom teachers, T&L – Science staff, SCALE staff, and UW faculty

Freshman Science Equity & Excellence

MMSD has been committed to the concept of "*Equity and Excellence*" in freshman science for over 3 years *Equity and Excellence* is defined in MMSD according to the following criteria:

All MMSD 9th grade students

- have a right to high quality science instruction;
- will be enrolled in a credit-earning freshman-level course;
- will be provided the instructional scaffolding to assure success throughout the course;
- will earn full credit at the conclusion of the course

Since the spring of 2005, UW-Madison SCALE and STEM faculty have partnered with MMSD in the design and facilitation of professional development seminars for teachers of students in freshman science The initial launch of *Equity & Excellence* in 2005-06 included eight full-day seminars and a one-week summer institute Participants included teachers from all four comprehensive high schools and our MMSD alternative high school Five seminars were conducted in 2006-07 for our district-wide community of teachers of students in freshman science Middle school teachers were included in the year's work to continue to connect the rigor and consistency of the K-8 Science Scope & Sequence to high school science

UW-Madison faculty continues to play an integral role in connecting cutting edge research to high school classroom applications In 2007-08, MMSD submitted a grant to the Department of Education for the support and development of smaller learning communities in all four comprehensive high schools In 2007-08 the UW-Madison SCALE team will work to embed the *Equity & Excellence* goals and structure into District high school community through the teacher-centered, smaller learning community structure The four, full-day seminar series for 2007-08 includes continued:

- capacity- building of instructional skills and differentiation strategies to enable all students to participate in heterogeneously-grouped science classes at the 9th grade level;
- data gathering to refine the pilot projects within each high school around achieving the goals of Equity & Excellence;
- long-term relationship building and involvement of UW-Madison STEM faculty;
- connection of curricula and instructional practices with the K-8 Grade Level Science Standards toward the goal of K-12 science articulation; and
- embedding Equity & Excellence in practices inherent in district-wide smaller learning communities

Mathematics

Throughout the spring of 2008, Madison Metropolitan School District is dedicated to continuing the work of the CMP Leadership Academy. The CMP Leadership Academy representatives will be meeting two days in the spring of 2008 to receive professional development focused on the standards based assessment and instruction initiative in our middle schools The Leadership Academy will continue to develop exemplary standards based unit tests, quizzes and end of year exams to be used district wide Exemplary grade books and plans for job-embedded professional development for their colleagues in their respective schools will also be planned

The representatives from the CMP Leadership Academy will be co-facilitating building-wide professional development days for their respective buildings with district resource teachers focused on standards based assessment and instruction throughout the spring of 2008. The representatives will also continue to facilitate professional development days for teachers that are new to teaching CMP at a particular grade level. During June of 2008, representatives also facilitate professional development for extended learning summer school teachers. In many cases this is the first experience for teachers in the District.

Following the CMP Leadership Academy model, Madison Metropolitan School District is developing leadership committees at the high school level consisting of two representatives from each of the four high schools. The committees focus on the minimal requirement courses that satisfy the Board of Education goal of Algebra and Geometry completion and satisfy our graduation requirements. In addition to the Algebra Leadership Team and the Geometry Leadership Team, an Integrated Mathematics Team is being developed since two years of Integrated Mathematics fulfill the above goal and requirements as well.

The high school leadership teams will be working on developing standards for the content covered in each course and the honors level version of each course. Since Algebra is also taught in all of the middle schools, two representatives from our eleven middle schools will also be included in the Algebra Leadership Team. The future of the high school leadership teams will be to develop district wide assessments that will insure high expectations and standards based assessment in all of our high school required mathematics courses.

To promote building level leadership and job embedded professional development. The District Math Coordinator and the high school math resource teacher will be meeting two additional times during the spring of 2008 with the department chairs from each school. The main goal of these meetings will be to develop a consistent vision and plan of improvement for mathematics in all of our high schools. Additional goals will be determined by the group at our first meeting in October. Some of the topics may include planning for the Smaller Learning Communities grant work and engaging in the American Diploma Project/Partnerships for the 21st Century work at the Department of Public Instruction.

Institutional Change and Sustainability

By building leadership in each of our secondary schools, we will be able to more efficiently deliver professional development as we go forward into tighter budget school years. By taking a representative group of teachers from the schools, we can minimize cost and the effects on student learning from removing entire staffs for a day.

Teacher Quality, Quantity, Diversity

The CMP Leadership Academy representatives consist of our strongest middle school math teachers at their respective grade levels. They provide the lessons learned from years of experience using these curricular materials to our new teachers providing them a significant head start in their career as a middle school math or math support teacher.

Challenging Courses and Curricula
The focus at our secondary schools on standards based assessment and instruction provide students highly engaging and rigorous mathematics experiences in all of our schools Having consistent standards allows teachers to work more collaboratively on lesson development, assessment and interventions for students that are not appropriately challenged in the schools

Objectives and Key Goals

The Madison Metropolitan School District (MMSD) continues to move forward with the implementation our Framework and Strategic Plan The Framework focuses all district resources and efforts on learning, engagement and relationships It is our District belief that in order to build systemic capacity to eliminate race as a predictor of academic achievement, these three non-hierarchical and intersecting guiding premises of learning, engagement and relationships are essential The Department of Teaching & Learning supports the District Framework in all professional development to strengthen teacher capacity, efficacy and pedagogical content knowledge SCALE continues to plays a critical role by supporting our district goals in mathematics and science

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.

Strategic Rationale for Institutionalization and Sustainability

SCALE Year 5 (2007)
One strategy for supporting the institutionalization and sustainability of SCALE is the incorporation of the SCALE-developed and SCALE-influenced work into the MMSD Framework

- Incorporation of instructional interventions and student supports in mathematics into the Student Intervention Monitoring System (SIMS);
- Incorporation of the K-8 grade level standards instruction, assessment and standards-based grade reporting in science, mathematics as well as all K-8 content areas;
- Infusion of leadership strategies and enhancement of building-based instructional capacity through intensive professional development of middle school learning coordinators;
- Institutionalization of all core science and mathematics instruction and pedagogy into the New Educator Support Course;
- Embedding core learning and practices into the Smaller Learning Communities initiative for high school mathematics and science

A second strategy for institutionalization and sustainability of the work in both mathematics and science in the Madison Metropolitan School District is the on-going professional development for teachers SCALE funds in 2008 will support one Instructional Resource Teacher for middle

A third strategy for supporting the institutionalization and sustainability of the work is the implementation of Title IIb grants Building on the success of the Title IIb Math Masters and Math Masters 2, the Science Masters Institutes (Grades 6-8) and Expanding Math Knowledge (Grades 3-5) continue to build long-term connections among numerous University of Wisconsin faculty and the MMSD Teaching & Learning Department As MMSD staff co-design professional development for teachers in collaboration with UW content experts, the mutual refinement and appreciation of pedagogical content skill will serve not only current K-12 teachers but the educational experience of future teachers as well

A fourth strategy for supporting the institutionalization and sustainability of the work is the collaborative work around the re-design of the core sequences of courses required for certification of middle school science and mathematics courses Modeling the 13x course evaluation of mathematics courses, now in its second year at UW-Madison, Julie Underwood, Dean of the School of Education, has authorized the creation of a similar committee to evaluate and re-design the core sequence of science courses for pre-service middle school teachers The IRT in both mathematics and science are members of these respective committees and are able to bring the richness and insights of both the practical and theoretical aspects gained from our SCALE collaboration Although the full benefit of these efforts will not be realized until well beyond the SCALE funding cycle, the impetus for the creation of the studies is a concrete example of the on-going work to insure the sustainability of SCALE's influence for high quality mathematics and science education for our future

Deliverables and Staffing

Staffing

Laura Godfrey, Instructional Resource Teacher Grades 6-8 Mathematics, 75%
Faye Hilgart, Instructional Resource Teacher Grades 6-8 Mathematics 25%
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

Vacant, Instructional Resource Teacher Grades 6-12 Science,
The professional development plan for science is not being filled in the final 6 months of Year 5 Secondary science professional development projects are being shifted to the Instructional Resource Teacher hired to direct and implement the Title IIb Science Master's Institute

Deliverables by June 2008

- Immersion units in all K-8 schools and materials stocked in the central Science Materials Center for online ordering and replenishment

Standards Based Middle School Report Card in Mathematics and Science Standards Based Differentiated Assessments for Connected Math

Year 6 Budget Request
Madison Metropolitan School District (MMSD)

Cost Category	Year 6 Budget Request
A. Senior Personnel	
1. PI Science & Math Coordinators	
2. Co-PI	
3. Co-PI - adding lines as needed	
Total Senior Personnel	
B. Other Personnel	
1. ( ) Post Doctoral Associates	
2. ( ) Other Professionals	
3. ( ) Graduate Students	
4. ( ) Undergraduate Students	
5. ( ) Secretarial - Clerical (if charged directly)	
6. ( ) Other	$38,187
Total Salaries and Wages (A+B)	$38,187
C. Fringe Benefits	$22,280
TOTAL SALARIES, WAGES, & FRINGE (A+B+C)	$60,468
D. Equipment	
E. Travel	
1. Domestic	$22,600
2. Foreign	
TOTAL TRAVEL (E1+E2)	$22,600
F. Participant Support Costs	
1. Stipends	$14,050
2. Travel	
3. Subsistence	
4. Other	$30,912
TOTAL # OF PARTICIPANTS( )	
TOTAL PARTICIPANT COSTS	$44,962
G. Other Direct Costs	
1. Materials and Supplies	$37,086
2. Publication Costs/Documentation/Dissemination	
3. Consultant Services	
4. Computer Services	
5. Subawards	
6. Other (Substitute Teacher Wages)	
TOTAL OTHER DIRECT COSTS	$37,086
H. TOTAL DIRECT COSTS (A through G)	$178,816
I. Indirect Costs	$13,700
J. TOTAL DIRECT AND INDIRECT COSTS (H+I)	$178,816

Year 6 Budget Request
Madison Metropolitan School District
January 1 – July 30, 2008

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

Science
The professional development plan for science includes support to:

- Embed high school freshman science Equity & Excellence into smaller learning communities in each high school and institutionalize the best practices district-wide; and
- Complete distribution and implementation of science immersion units

Mathematics
The professional development plan for mathematics includes two central staff Instructional Resource Teacher positions (0 75 FTE and 0 25 FTE) 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 the continued focus on middle school mathematics teachers, the district will also focus SCALE resources on support of high school mathematics departments through 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)

Personnel

Other Professionals
Mathematics Professional Development Teacher: salary of a teacher with expertise in mathematics and professional development That teacher will work with classroom teachers on implementing in their classrooms strategies to transform mathematics teaching so every student experiences deep conceptually based instruction on core mathematics concepts
1 0 FTE from 1/07 through 6/07 After 7/07, the position is shared 0 75 FTE and 0 25 FTE between two staff (SCALE Goal 1)

Fringe Benefits
The fringe benefit rates are 34% (Mathematics Professional Development Teacher)

Travel

Science Travel: 3 IRT to National Science Teachers Association Conference (3 @ $1800)
Mathematics Travel: 20 Middle and High School Leaders to Wisconsin Mathematics Council Conference (20@ $500) and 4 IRT to National Council of Supervisors of Mathematics & National Council of Teachers of Mathematics Conference (4 @ $1800)

Participant Support

Stipends
Mathematics Teacher Leaders: compensation for non-contract work (summer) Teacher leaders will provide professional development for a cohort of high school teachers who will be part of a teaching laboratory/extended student learning summer school experience and for Algebra teams All professional development is focused on implementing classroom strategies to transform mathematics teaching so every student experiences deep, conceptually based instruction on core mathematics concepts (SCALE Goal 1)

Science Teacher Leaders: extended employment for non-contract work (after school day) Science Instructional Resource Teachers that facilitated science inquiry leadership development will plan academic year professional development for 2008-09 and will complete distribution of science immersion units in all schools and consumable supplies in the Science Materials Center (SCALE Goal 1 and Goal 2)

Other
Substitute Teachers for Science: substitute teachers will provide class coverage to release science, ESL and Special Education teacher teams from all four high schools for Equity & Excellence seminar sessions (25 teachers x 2 days = 50 sub release days) Science teachers are released from classroom responsibilities so teachers can participate in science pedagogy development to facilitate student success and build capacity to implement standards-based curriculum and to increase excellence and equity K- 9th grade (SCALE Goal 1, Goal 2 and Goal 4)
50 subs @ $184 per sub day

Substitute Teachers for Mathematics: substitute teachers will provide class coverage to release mathematics, ESL and Special Education teacher teams from all schools for professional development Teams consist of elementary (200 teachers x 1 days = 200 days), middle (CMP - 15 teachers x 4 days, NTT – 20 teacher x 3 days = 120 days) and high school (20 teachers x 4 days = 80 days) Mathematics teachers are released from classroom responsibilities so teachers can participate in mathematics pedagogy development to facilitate student success and build capacity to implement standards-based curriculum and to increase student understanding and achievement in mathematics (SCALE Goal 1 and Goal 4)
118 subs @ $184 per sub day

Other Direct Costs

Materials & Supplies
Instructional Materials - Science: Printing and binding of science immersion units to complete district-wide implementation; purchase of 7th grade earth science instructional materials to complete district-wide instructional equity

Professional Development Materials - Science: purchase of reference materials to support professional development in science inquiry and instruction including Atlas of Science Literacy (NSTA,) and How Students Learn Science (AAAS)

Instructional Materials - Mathematics: Purchase of class sets of graphing calculators for professional development participants at the secondary level ($100/per X 30/set 4 high schools)

Professional Development Materials - Mathematics: purchase of reference materials to support professional development in mathematics instruction including How Students Learn Mathematics (AAAS) and Fair Isn't Always Equal: Assessing & Grading in the Differentiated Classroom (Wormelli)

Indirect Costs

Calculated based on a 3.1% rate