

Math in the Middle Institute Partnership

Background Information for Teachers and School Administrators

We are pleased to announce that we are currently accepting applications for a second “OPS Cohort” of teachers who will participate in the Math in the Middle (M²) Institute. This Application Packet provides information about the opportunity and includes the materials that must be part of an application. Additional information can be obtained from Jim Harrington, OPS Supervisor of Mathematics (557-2442) or from the Math in the Middle Web site at <http://scimath.unl.edu/MIM/index.php>. Questions also may be sent to jlewis@math.unl.edu or you may contact the UNL Center for Science, Mathematics and Computer Education (CSMCE) at 402-472-8965.

Math in the Middle is an NSF-funded Math Science Partnership whose core partners include the University of Nebraska-Lincoln and various K-12 school districts and Educational Service Units who have joined together to improve K-12 student achievement in mathematics by developing an accomplished mathematics teacher workforce capable of engaging all students in challenging mathematics courses. A supplement to the original grant enabled us to work with a cohort of OPS middle level (grades 5-8) mathematics teachers beginning January 2, 2009.

We have received word that a second supplement has been recommended for funding that will enable us to work with a second cohort of (10) OPS teachers. In order to select this new cohort of OPS teachers and begin coursework this semester, we will begin accepting applications immediately. **Applications are due by 5 p.m. on Tuesday, September 8, 2009.** We will review applications and announce selections by Friday, September 18, 2009.

The Math in the Middle Institute Partnership seeks to work with experienced OPS classroom teachers who want to deepen their knowledge of mathematics and the teaching of mathematics and to build the leadership skills needed to become master teachers and intellectual leaders in their schools and the Omaha Public Schools. Our NSF grant enables us to immerse teachers in a multi-year program designed to produce graduates capable of being instructional leaders, master teachers and mentors for their peers. As such, they will be resources for their schools and the Omaha Public Schools at large who work with their peers and key administrators on behalf of improved mathematics education in OPS. Cost to the individual teacher is minimal and support for the teacher will be significant.

In order for a teacher to participate in the Math in the Middle Institute, the teacher must have the support of her/his school administration and the Omaha Public School District. Documentation of this support is provided by completing the Administrative Support Form.

By completing the form, your administrator will document their support for the Math in the Middle Institute Partnership through their agreement to a) align their educational improvements in mathematics with this teacher leadership effort, b) offer successful graduates of the M² Institute increased responsibilities as teacher leaders in their school and the district, and c) provide administrative support, time, resources and recognition/rewards commensurate with this increased responsibility.

Math in the Middle is an enriching and rewarding experience, but it is also challenging. Over a 22-month period beginning October 3, 2009, participants will take 12 graduate courses leading to a Master’s Degree from UNL. The program’s academic goals reach far beyond the minimum necessary to teach mathematics in the middle grades. We seek to develop superbly educated mathematics teachers with an especially deep

understanding of school mathematics who are extraordinarily successful both in teaching mathematics to middle-level students and in helping colleagues improve their ability to teach mathematics. While our mathematics instruction focuses on understanding well the mathematics taught in the middle grades and the first few years of high school, some topics will reach well beyond that level. In addition, for some courses (particularly those focused on pedagogy), participants will be asked to read research articles in mathematics education and write thoughtful papers that reflect on their teaching practice.

While the expectations of the program are substantial, the benefit to the teacher is well worth the effort. Math in the Middle has a 93% retention rate. To date, 125 Nebraska teachers have earned a Master's Degree through the program and 20 of your OPS peers are on target to graduate in Summer 2010.

Previous participants say the program is rigorous, but it is an opportunity not to be missed. The Math in the Middle Web site (<http://scimath.unl.edu/MIM/>) includes comments from graduates of the program. In addition, the Web site also lists contact information for your OPS peers who are currently participating in the program. We invite you to contact one of them and learn more about the program and whether it is right for you.

During the academic year, courses will be offered as "blended distance education" courses that combine day-long, face-to-face Saturday classes with additional coursework being completed using UNL's Blackboard Web site. In addition, we will urge you to form study groups to support your work in the course.

During the summer, classes meet 8-5 daily (Monday-Friday) with nightly homework. While this approach is intense, support for participants is substantial. This approach has proved to be quite popular with our teachers because it protects most of the summer for other activities.

At the end of each course (both academic year and summer), teachers complete an End-of-Course Assignment designed to support the long term retention of material studied in the course.

Schedule of courses for M²O², the second OPS Cohort

Academic Year 2009/2010

- Course 1 – October and November, 2009
 - We have scheduled face-to-face class days for Saturday, October 3, 10 & 31, 2009.
- Course 2 – December, 2009 – February, 2010
 - Face-to-face class days will be Saturday, December 5, 2009, January 9 & 23, 2010.
- Course 3 – (late) February – (mid) May, 2010
 - Face-to-face class days to be determined.

Summer 2009

- Courses 4 & 5 – June, 2010 – Dates to be decided
- Courses 6 & 7 – July 12-16 – Dates to be decided

AY 2010-2011

- Courses 8, 9 and 10.

Summer 2011

- Courses 11 and 12.

Teacher Benefits for Participating in the Math in the Middle Institute

- Teachers chosen as participants in the program will increase their knowledge of mathematics and pedagogy, positioning themselves to be teacher-leaders in the Omaha Public Schools
 - Teachers will earn a Master's Degree from UNL
 - Courses will be offered on site in Omaha
 - Teachers will receive outstanding support from the Math in the Middle instructional team
 - Tuition and most fees will be waived for participating teachers
- Participants will receive a \$5,000/semester salary supplement from the grant (salary supplements will be paid by UNL) from Fall 2009 through Spring 2010, a \$20,000 benefit
- Participants will receive a \$1,000/week stipend for their participation in the 4-week Math in the Middle Summer Institute (i.e., a \$4,000 stipend in Summer 2010 and a \$2,000 stipend in Summer 2011)
- Most teachers will benefit significantly because of salary advancement based on graduate education (An OPS teacher with a Master's Degree earns \$5,165 more than a new teacher with a bachelor's degree.)

For more Information

Interested teachers are invited to come to a Math in the Middle information meeting scheduled at the TAC building.

- Thursday, August 27, 2009, 4:00 – 5:30 p.m., Board Dining Room, 5th floor cafeteria, TAC building

Math in the Middle Institute Partnership

Application Information for OPS teachers

A complete application form includes:

A. Teacher Applicant Information

- a. Cover Page (including required signature)
- b. Vitae (including the following required information)
 - i. Your teaching experience (locations, roles, and lengths of time)
 - ii. Any teacher-leadership experiences (serving on or leading committees, writing curriculum, etc.)
 - iii. List your professional development experience (participant or presenter) in mathematics content and instruction (include graduate coursework, conferences, etc.)
- c. Responses to the following Essay Questions (Your response is limited to 2 pages total.)

1. Teacher Leadership:

Serving as a mathematics teacher leader is an important aspect of your participation in the Math in the Middle Institute Partnership.

Please describe the key challenges faced by you and others who teach mathematics in your school as you strive to provide challenging mathematics courses and curricula that enable students to meet high standards.

2. Mathematics Content Knowledge:

The Math in the Middle Institute curriculum will include rich and challenging mathematics content which is designed to enhance your understanding of mathematics and how best to teach mathematics in the middle grades.

Please assess your current knowledge for teaching mathematics at your current grade level and describe your interest in expanding your mathematical content knowledge.

B. Two Letters of Recommendation

(including one from your building level administrator and one from a colleague)

Taken together, the recommendations should address:

- Your potential to succeed in a graduate program that includes challenging mathematical and pedagogical content designed to produce academic leaders at the (5-8) middle level
- Your ability to take on challenges and to grow professionally
- Your leadership experiences or qualities

C. Administrative Support Information (including required signatures)

Applications should be typed. Completed applications must be received in our office by 5 p.m., Tuesday, September 8, 2009. Applications may be sent by FAX (402-472-9311), e-mail (msquared@unl.edu) or by U.S. mail. Please mail completed application to:

Math in the Middle Institute Partnership
c/o CSMCE
251 Avery Hall
University of Nebraska – Lincoln
Lincoln, NE 68588-0134

Math in the Middle Institute Partnership
OPS Applicant Cover Page

Name: _____

School: _____

School Address: _____

School Phone: _____ School FAX _____

Home Address: _____

Home Phone: _____ Email _____

Current Grade level/position _____

Years at current school _____ Number of years teaching _____

Undergraduate Degree _____

(institution, year, major)

Graduate Education _____

(institution, major, hours earned, degrees awarded)

Educator License Endorsements _____

Applicant Agreement: I understand that I am making a three-year commitment, including approximately twenty-two months of graduate coursework and my commitment to play a leadership role in mathematics in my school, district and ESU for at least one year after the end of my participation in the M² institute. As part of this commitment, I will engage in classroom-based observation and feedback sessions with M² staff, and I will cooperate with M² researchers and with evaluators from RMC Research Cooperation, who may need to observe my class, interview me, and have access to the achievement data of my students.

Signature of Applicant

Date

Due Date: This application is due **Tuesday, September 8, 2009.**

Math in the Middle Institute Partnership
OPS Administrative Support Form

Name of Applicant _____

School Principal _____

School _____

School Address _____

OPS Administrator _____

Principal's Agreement:

I have reviewed the above named teacher's application to participate in the Math in the Middle Institute and I am pleased to indicate my support for this application. I understand that if this teacher is chosen for the M² Institute, my school and district's obligations will include:

- i. Providing the teacher-participant with release time (2 days per academic year) necessary to participate with their OPS-M² peers in joint activities to develop plans for strengthening the teaching and learning of mathematics in OPS schools;
- ii. Participating with my school's teacher-participant(s) as part of the development of a mathematics school improvement plan;
- iii. Cooperating with Math in the Middle researchers and with evaluators from RMC Research Corporation who may need to observe classes in my school, to interview me or teachers in my school or to have access to student achievement data; and
- iv. Supporting my school's teacher-participant(s) in their efforts to engage in school-based research or to work with our school's teachers and administrators to improve mathematics teaching and learning in our school.

Principal's Signature

Date

OPS Administrator's Agreement:

The Omaha Public Schools is a Math in the Middle core partner. We support the above named teacher's application and will work with and support this teacher if chosen to participate in the Math in the Middle Institute.

OPS Administrator's Signature

Date