Mathematics Science Partnership Grant (MSP) Prepares for Third Year

Professor Beverly Smith reports that The CCNY/NYCDOE Mathematics Education Program's Title IIB Math Science Partnership Grant is in its final year of a three-year funding cycle. The MSP grant is for the professional development of teachers currently teaching in public or private schools in New York City. It pays the tuition for eligible teachers as they complete one of the five options described below Although there is only one year of funding remaining, we are still accepting applicants for each of the master's degree and three new 15 credit certificate programs at the elementary, middle and high school levels.

CCNY Master's Degree Programs in Mathematics Education, 5-8 and 9-12

Teachers admitted to this program will be part of a competitive cohort completing thirty graduate credits resulting in the CUNY Master's degree in mathematics education for teachers of grades 5-9 or 7-12. This program focuses on strengthening teachers' content knowledge for teaching, improving teachers' abilities to effectively use technology in the classroom, and enhancing their ability to implement research based strategies found to help all students achieve New York State Common Core Learning Standards in mathematics with a specific focus on college level mathematics readiness. The master's degree will culminate with an action research project that uses inquiry team-work and data analysis as key components, benefiting schools' quality review and data analysis initiatives.

New Certificate Programs Created in Math Education for Elementary, Middle, and High School Teachers

Targeting post-secondary topics embedded within the K-12 scaffold, three new 15 graduate credit mathematics education certificate programs have been created. Each new program focuses on crucial content and rich investigations in mathematics, complementing schools' math inquiry teams and fostering collaboration within the group.

All courses will address both content and pedagogy linking a deeper understanding of mathematics itself with a deeper understanding of the teaching of mathematics. The Common Core Learning Standards Mathematical Practices will be addressed within each content strand. Participants will learn research-based strategies for helping their students develop conceptual understanding, procedural fluency, and the ability to apply mathematical knowledge and skills to solve a wide range of problems. Appropriate technologies will be used throughout the program, and the courses will be offered as a continuum, each drawing on and building on the knowledge from the previous classes.

Certificate Program courses to be offered by grade-level bands are shown below:

High School

- Algebra for High School Teachers
- Geometry for High School Teachers
- Secondary School Mathematics from an Advanced Standpoint
- Teaching Secondary School Mathematics Using Technology
- Mathematical Modeling

Middle School

- Rational Numbers and Proportional Reasoning for Middle School Teachers
- Data Analysis, Probability, and Statistics for Middle School Teachers
- Algebra for Middle School Teachers
- Geometry for Middle School Teachers
- Pre-Calculus and Modeling for Middle School Teachers

• Elementary School Focus

- Whole Number and Operations
- o Rational Number, Real Number, and Proportions
- o Algebra and Functions
- o Geometry and Measurement
- o Elementary Math Education Practicum

Please contact **Professor Beverly Smith** at besmith@ccny.cuny.edu for more information about the MSP Mathematics Professional Development Programs.