CURRICULUM VITA

Mary T. McMahon

Associate Professor of Mathematics

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Education M.S. Mathematics Education - September, 1972

Queens College of the City University of New York

Flushing, New York

B.A. Mathematics - June, 1969

St. John's University

Grand Central and Utopia Parkways

Jamaica, New York

Experience Highlights

Teaching

North Central College to Naperville, Illinois 60540

present Assoc. Professor of Mathematics – presently teaching Quantitative

Reasoning and Techniques in Secondary Education - Mathematics to traditional and non-traditional undergraduates; supervising clinical and student teachers; advising undergraduates. Have previously taught Intermediate Algebra, Finite Mathematics, College

Algebra, Trigonometry, Business Calculus and Statistics, , Elementary Mathematics II (elementary education mathematics content course) and a graduate course, Discrete Mathematics for

Teachers

2009 Mathematics Education Coordinator

to present

2010 Mathematics Mentor on Line and alumni Coach of New Teachers in High

to Need Schools at Associated Colleges of Illinois

2011

2005 Certification Officer for NCC Education Department

to 2009

2003 Assessment coordinator for NCC Education Department

to 2005

1976 1985 College of DuPage

to to Glen Ellyn, Illinois 60137

1977 present Part time Mathematics Faculty - taught Introduction to Mathematics,

College Algebra, Mathematics for Technical Majors and Business Mathematics. independent learning classes (Subject matter ranges from basic algebra and geometry to college algebra, trigonometry

and mathematics for elementary school teachers).

1984 Test Taking Tutors, a college test preparation tutoring business

to present 2003 Illinois State University to Bloomington, Illinois

present University Supervisor - observe and evaluate two mathematics

student teachers during spring semesters.

1988 University of Northern Illinois

to DeKalb, Illinois 60115

1989 University Supervisor - observed and evaluated seven mathematics

student teachers during two spring semesters.

1977 1984 1988 Benedictine University to to Lisle, Illinois 60532

1978 1985 Part time Mathematics Lecturer - taught College Algebra and Finite

Mathematics.

1981 Sacred Heart University

to Bridgeport, Connecticut 06606

1983 Adjunct Instructor - taught "College Algebra" and special classes for mature

people entering college.

1980 Fairfield University

to Fairfield, Connecticut 06430

1982 Adjunct instructor - taught Mathematics for Business and Social Science

Majors which included some calculus.

1979 Marion Heights Academy to Monroe, Connecticut 06468

1980 Part time Mathematics Lecturer - taught Mathematical Analysis and

Consumer Mathematics to high school seniors.

1975 Naperville Community School District 203

to Naperville, Illinois 60540

1976 Mathematics Substitute Teacher - taught high school mathematics on short

term assignments.

1971 Coppinville Junior High School

Enterprise School District

Enterprise, AL.

Mathematics Chairperson - taught and supervised three teachers in regard

to the mathematics curriculum for 350 students. Planned and spent

budget of \$750.

1969 McArthur High School

to Union Free School District No. 5

1971 Levittown, New York

High School Mathematics Teacher - taught algebra, geometry, intermediate

algebra and trigonometry to average and slow students.

Professional Activity - membership

National Council of Teachers of Mathematics (NCTM) Illinois Council of Teachers of Mathematics (ICTM)

Metropolitan Mathematics Club (MMC) Women in Mathematics Education (WME)

Association of Mathematics Teacher Educators (AMTE)

Illinois Mathematics Teacher Educators (IMTE)
Mathematics Department Heads of the Western Chicago Suburbs (MDHWCS)
College Representative on the Steering Committee

presentations

- -"Classroom Snapshots of Implementing the Standards" at the ICTM Annual Leadership Pre-Conference Meeting (refereed), Oct 18, 2001
- -"Interpreting Middle School Students' Proportional Reasoning Strategies:

 Observations From Preservice Teachers", School Science and Mathematics
 Association Annual Meeting (refereed), October 23, 2003
- "Getting Acquainted with Middle School Students' Proportional Reasoning Strategies", Metropolitan Mathematics Club Annual Conference, January 31, 2004
- "Lesson study with Pre-Service Teachers", at annual conference of Illinois Council of Teachers of Mathematics (refereed) on October 15, 2004 in Springfield, IL
- -"Lesson Study with Pre-Service Teachers" at the 9th Annual National Conference of the Association of Mathematics Teacher Educators (refereed) on January 29, 2005 in Dallas, TX
- "Using Writing in the Mathematics Classroom" to high school math teachers at Jefferson H.S. in Rockford for Project REAL (The Rockford Education Alliance, a grant sponsored program with NIU) on April 15, 2005.
- -"Student Teaching: Rite of Passage? Arranged Marriage? Oxymoron???" at the January meeting of the Mathematics Department Heads of the Western Suburbs at Lake Park High School in Roselle, Ill., on Jan. 10, 2006
- -"Certification and Endorsement Issues" with Todd Oberg (Illinois College) at the Illinois State Mathematics Association of America Meeting on April 7, 2006.
- -"An Introductory Experience with Lesson Study." at the Associated Colleges of Illinois Annual Center Arts and Science Colloquium, in DesPlaines, Il on Sept. 29, 2006.
- "LESSON STUDY: Implementation, Best Practice & Professional Development." at the Associated Colleges of Illinois Annual Retreat (refereed), in Springfield, IL on June 21, 2007.
- "Is there an Arranged Marriage in your Future?" at the Illinois Council of Teachers of Mathematics (refereed), in Peoria, IL on October 19, 2007.
- -"Is there an Arranged Marriage in your Future?" at the Illinois Council of Teachers of Mathematics (refereed), in Peoria, IL on October 17, 2008
- -" Mathematics: Tied To Your Students' Present and Future" at the Associated Colleges of Illinois Science and Math Learning Collaborative in Naperville, IL on April 25, 2009
- -" Mathematics: Tied To Your Students' Present and Future" at the Associated Colleges of Illinois Summer Institute in Joliet, IL on June 19, 2009
- "Introduction to Lesson Study" a workshop to teachers from Oak Park Elementary School in East Aurora on Sept. 26, 2009 for the Associated Colleges of Illinois /Science Math Learning Collaborative.
- -"Where's Math?" at the Associated Colleges of Illinois Teacher Induction Academy in Oak Brook, IL on January 29, 2010
- -Wisconsin Mathematics Council 42nd Annual Conference, Green Lake, WI, May 7, 2010, An Introduction to Lesson Study? Is it for my school and me? (refereed)

- "College on the MIND?" for parents at Math Night, an event sponsored by the mathematics department at Neuqua Valley High School on Oct. 27, 2010.
- "Welcome to Discrete Mathematics—The Mathematics that You Never Learned in School" to K-12 teachers at the Associated Colleges of Illinois Teacher Induction Academy, held at Dominican University Jan. 28, 2011
- -"The Common Core State Standards for Mathematics" to K-12 teachers at the Associated Colleges of Illinois Summer Symposium, held at Illinois Math and Science Academy (IMSA) June 24, 2011.
- -"Teaching Mathematics Using the Common Core Standards: What's Really Changed?" cofacilitated to the staff at Goldblatt Elementary School, Chicago, Illinois, September 2, 2011.
- -"A Reasoning-Based Approach to the Algebra Strand of the Common Core Standards" for K-12 teachers at the Associated Colleges of Illinois Teacher Induction Academy at Concordia University in River Forest on Sept. 23, 2011.
- "College on the MIND?" for parents at Math Night, an event sponsored by the mathematics department at Neuqua Valley High School on Oct. 19, 2011.
- "Discrete Mathematics—The Mathematics that You Never Learned in School" to 6-12 teachers at the Illinois Council of Teachers of Mathematics Annual Meeting in Springfield, IL on Oct. 21, 2011 (refereed)
- Science Math learning Collaborative Network Colloquim, September 29, 2012, one of three local moderators.
- Associated Colleges of Illinois Partnership Meeting, December 7, 2012, "Integrating the Common Core Into Pre-Service Preparation"
- "MATHEMATICAL MODELING: WHAT IS IT? WHY DOES IT MATTER? to 6-12 teachers at the Associated Colleges of Illinois Teacher Induction Academy on Friday, April 19th, 2013 at Dominican University, River Forest, IL
- Girls and Math Workshop: 9am-1pm, July 22-26, 2013.
- "Finding Success and Satisfaction in Realizing the Common Core in Mathematics" Single Paper with Multiple Presenters, Association of Teacher Educators 2014 Annual Meeting, St. Louis, Missouri, February 17, 2014
- "Lesson Study: A Mathematics Tool for Teacher Collaboration in the Midst of the Common Core Standards" to K-12 teachers at the Associated Colleges of Illinois Summer Symposium, held at North Central College, June 27, 2014.
- Girls and Math Workshop: 9am-1pm, July 25-29, 2014.
- "From Coloring to Scheduling" for K-12 teachers at the Metropolitan Mathematics Club Annual Conference of Workshops, Stevenson HS, January 24, 2014

-publications

- Published paper: Hines, E. & McMahon M. (2005). Interpreting middle school students' proportional reasoning strategies: Observations from preservice teachers. *School Science and Mathematics*, 105(2), 88-100.
- Published in electronic journal: McMahon M. [2006]. An Introductory Experience with Lesson Study. *Success in High Needs Schools*, *Vol2*, *Issue 3*, *2006*, http://www.successinhighneedschools.org/journal/issue/2/3?ACISESSID=6e3cb042d2f845 b3179d949681a72530
- Published paper: McMahon M. [2008]. "An Introductory Experience with Lesson Study" in *Illinois Mathematics Teacher*, Spring 2008
- -Published paper: Hines, E. & McMahon M. (2008). "Lesson Study with Preservice Teachers" *Mathematics Teacher*.

-Published paper: Ellen Hines, Ed.D., Max McGee, Ph.D., Mary McMahon, Todd Oberg, Ph.D., Julie Tonsing-Meyer, Ed.D., and Jan Fitzsimmons, Ph.D (2013) "Realizing the Common Core: Integrating the Math Common Core Practices and Standards into Instruction", Success in High-Need Schools Journal Volume 10, #1

-grants

Summer Faculty Research Grant – Summer 2005

Worked on paper entitled "Lesson Study with Preservice Teachers"

Faculty Enhancement Grant and Associated Colleges of Illinois Grant

- Teacher In-Service for 10 teachers at Cowherd Middle School: July 12-14, 2006 detailed in published article
- Teacher In-Service for 7 teachers at Cowherd Middle School:
 August 23, September 11, 15, 25, October 16, 30 and November 13, 14, 2006 facilitated a complete cycle of lesson study.

Sonia Kovalevsky Grant from the Association of Women in Mathematics and National Science Foundation.

 Co-led a workshop in math activities on deciphering codes, Fibonacci numbers, golden rectangles and tessellations for middle school Junior Scholar girls in April and May 2011.

FIHE grant

- Associated Colleges of Illinois Basic Skills Boot Camp Task Force, Summer 2011

Science Math learning Collaborative Network Grant 2012-13

-Lead Faculty for the North Central College Regional PLC

- past attendance and participation at the following:

- NSF sponsored Chautauqua Short Course for College Teachers entitled "Abandoning Dead Ends: Presenting the Heart of Mathematics", University of Texas – Austin, May 21-23, 2001 (three days)
- -NSF SENCER (Science Education for New Civic Engagement and Responsibility) Conference, Santa Clara University, Aug 9-13, 2001, (five days)
- NSF sponsored Chautauqua Short Course for College Teachers entitled "Statistics: An Indispensable Tool for Decision Making in a World of Data", Christian Brothers University, Memphis, TN, June 27-29, 2002 (three days)
- Participated in the NASA Solar System Exploration Project Summer 2003
- Illinois Mathematics Teacher Educators Annual Meeting
- ICTM Annual Meeting and Pre-Conference (three days)
- Women Count and MAA Mathfest August 2007
- DuPage Valley Mathematics Conference (one day a year with students)
- Planned and orchestrated annual student/alumni/faculty Pi Day Celebration
- Illinois State Board of Education Certification Meetings
- Associated Colleges of Illinois Mentor Leader for New Teachers
- Associated Colleges of Illinois Alumni Coach of Teachers in high need schools