**CURRICULUM VITAE**

**Carole E. Greenes, Ed.D.**

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Arizona State University

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**EDUCATION:**

University of Michigan; Ann Arbor, Michigan, B.A. (English Studies and Theater Major; Music Minor)

Boston University; Boston, Massachusetts, Ed.M. (Mathematics Education)

Thesis: Circle Math, An Introduction to Modular Number Systems

Boston University; Boston, Massachusetts, Ed.D. (Mathematics Education)

 Dissertation: Preferences for Certain Attributes in Plane Geometric Figures

**ACADEMIC POSITIONS HELD:**

2019 – Present Professor, Mary Lou Fulton Teachers College

 Arizona State University

Principal Investigator, Vertically Integrated Projects Project (Georgia Tech VIP Consortium)

2014 – 2019 Director, Practice Research and Innovation in Mathematics

Education (PRIME) Center, College of Liberal Arts and Sciences;

Professor, Mathematics Education, Ira A. Fulton Schools of Engineering and the College of Liberal Arts and Sciences, Arizona State University, PI, App Maker Pro (NSF 2015 - 2019), PI, Vertically Integrated Projects (Georgia Tech and the Helmsley Charitable Trust 2016 – 2021).

2009 – 2014 Associate Vice Provost for Science, Technology, Engineering, and Mathematics (STEM) Education, Arizona State University; Professor of Mathematics Education, College of Technology and Innovation; Director of the Practice, Research and Innovation in Mathematics Education (PRIME) Center, College of Liberal Arts and the Sciences.

 PI, Prime the Pipeline Project (NSF) and PI, STEM in the Middle (Helios Foundation), and Associate Education Director, BioXFEL (NSF).

2007 – 2009 Dean and Professor, School of Educational Innovation and Teacher Preparation at the Polytechnic campus of Arizona State University; Professor of Mathematics Education; Director of the Practice, Research and Innovation in Mathematics Education (PRIME) Center. PI, Prime the Pipeline Project (NSF)

2003 – 2007 Professor, Mathematics Education, School of Education, Boston University; Co-PI, Focus on Mathematics (NSF).

1989 – 2003 Associate Dean, Research, Development and Advanced Academic Programs; Dean of Overseas Programs; and Professor, Mathematics Education, Boston University; Member, Chelsea Project Management (School Board) Team (Vice Chairman, 1989-1991); Co-PI, Big Math for Little Kids (NSF) and PI, Evaluation of BMLK (Pearson).

1988 – 1989 Assistant Dean, Academic Programs and The Chelsea Project; Professor of Mathematics Education, School of Education, Boston University; Co-PI, Big Math for Little Kids (NSF)

1987 – 1988 Co-Head, Curriculum and Instruction, Evaluation and Planning Team,

 The Boston University-Chelsea Project; Professor, Mathematics Education, School of Education, Boston University; Joint Appointment, Mathematics, College of Arts and Sciences, Boston University; Project PI and Director, Project FOCUS (FIPSE).

1986 – 1988 Professor of Mathematics Education; Program Coordinator, Mathematics Education Programs; PI and Director; Project PROBE (FIPSE-funded project); Lecturer in Mathematics, College of Liberal Arts, Boston University.

1973 – 1986 Associate Professor of Mathematics Education (with tenure); Lecturer in Mathematics, College of Liberal Arts, Boston University.

1974 – 1975 Director of Elementary Education, Mills College, Oakland, California (on leave from Boston University).

1970 – 1973 Assistant Professor of Mathematics Education, Boston University.

1967 – 1970 Instructor in Mathematics Education, Boston University.

1966 – 1967 Research Associate, U.S.O.E. funded research project, Development of

 A Diagnostic Inventory to Differentiate Levels of Understanding of Plane Geometric Figures. J. Fred Weaver, University of Wisconsin, PI.

1964 – 1966 Teacher, Mathematics Specialist; Newton Public Schools, Newton, Massachusetts.

1962 – 1964 Teacher; Quincy Public Schools, Quincy, Massachusetts.

**OTHER PROFESSIONALAND LEADERSHIP EXPERIENCE:**

1967 – 1969 Project E.P.I.C. (Educating Personnel for the Inner City) Preparing community volunteers for teaching positions.

1969 – 1973 Emmanuel College, Boston, Massachusetts. Lecturer, Department of Mathematics.

1972 – 1973 Lesley College, Cambridge, Massachusetts. Lecturer, Mathematics Specialty Program.

1972 – 1974 Consultant, Mathematics Methods Project, Indiana University.

1972 – 1974 Consultant, U.S.M.E.S. (Unified Science and Mathematics for Elementary Schools) N.S.F. funded project; E. Loman, M.I.T., Director. (Design

 and implementation of a course for teachers at Boston University.

 Title: "Problem Solving as An Educational Goal").

1974 – 1990 Consultant, National Assessment of Educational Progress.

1971 – 1977 President, Vice President, Program Chairman, Member of Constitution Committee, Association of Teachers of Mathematics in Massachusetts

1976 Program Chairman, National Council of Teachers of Mathematics, Boston Conference,

1979 Program Committee, National Council of Teachers of Mathematics Annual Meeting, Boston, April, 1979.

1977 – 1982 Member, Advisory Board, Developmental Learning Materials.

1978 – 1982 Consultant, Commonwealth of Massachusetts, Department of Education

1982 – 1983 Chairman, Editorial Panel, Mathematics Teacher (Journal of the National Council of Teachers of Mathematics), April, 1982 - April, 1983.

1980 – 1984 Member, Executive Committee, Leadership Conference, Calculators in Mathematics Instruction, National Council of Teachers of Mathematics.

1980 – 1983 Member, Editorial Panel, Mathematics Teacher , Journal of the National Council of Teachers of Mathematics; Panel Chairman, 1982-834.

1984 – 1992 Member, Editorial Board, Learning Disabilities Quarterly.

1984 – 2000 College Board, Member, Mathematical Sciences Advisory Committee (1984 – 1990) and Chairman of Committee (1989 - 1992); Member Equity 2000 Advisory Board (1990 – 2000); Member, ALGEBRIDGE Task Force (1992 – 94); Member, Council of Academic Affairs (1989 – 1992); Co-Chairman, Committee on Mutual Concerns (Mathematical Association of America and The College Board) (1989 – 1992); Member, Test Revision Task Force, Descriptive Tests of Mathematics Skills (1987 – 1989); Member, ALGEBRIDGE Task Force, The College Board (1987 – 1989)

1984 – 1986 University Liaison, Computer Access Coalition of Boston.

1985 – 1987 Member, FIPSE (Fund for the Improvement of Post-Secondary Education) Technology Group.

1984 – 1986 Chairman, Faculty Council, School of Education, Boston University

1985 – 1988 Co-Program Director, Specialization in Educational Computing, School of Education, Boston University

1986 – 1988 Program Coordinator, Mathematics Education, Boston University

1986 – Present Member, Upward Bound Advisory Board, Boston University

1987 – 1988 Co-Head, Curriculum and Teaching Evaluation and Planning Team, The Chelsea Project

1989 – 2003 Member, Chelsea Project Management Team, Boston University-Chelsea Partnership, Vice Chairman, 1991 - 1992

1990 – 1996 Member, Massachusetts Science Scholars Nominating Committee; Chairman 1993-94.

1991 - 1996 Member, Advisory Board, Computer Curriculum Associates.

1991 – 1996 Council for Academic Excellence and Equity, Boston Public Schools.

1992 – 1994 Member, Adult Basic Education: Mathematics Project in Massachusetts.

1992 – 1993 Director, SIMBAL Project (senior citizens trained to be math assistants, grades K-4), Boston University-Chelsea Project

1992, 1994 Member, Selection Committee, Presidential Awardees in Mathematics and Science, National Science Foundation.

1992 – 1996 Member, Curriculum Frameworks Committee, Project PALMS, Massachusetts SSI Grant, State Department of Education.

1994 – 1997 Member, Advisory Board, Oklahoma State University, Getting Ready for Algebra Project.

1994 – Present Member, Advisory Board, SmartKids.Com, Needham, MA.

1998 – 2000 Member, Massachusetts Comprehensive Assessment System Performance Standards Advisory Committee.

1998 – 2000 Massachusetts Mathematics Curriculum Frameworks Panel, Chairman.

2000 – 2004 President Elect, President, Past President, National Council of Supervisors of Mathematics

2001 – 2005 Member, Executive Committee, and Member, Conference Board of the Mathematical Sciences

2002 –2005 Editor, Monograph Series for Leaders in Mathematics Education, National Council of Supervisors of Mathematics

2003 – Present Selection Committee for the Massachusetts Mathematics Educators Hall of Fame (Inducted in 2003)

2004 – 2008 Editor, National Council of Teachers of Mathematics 2008 Yearbook, Algebra and Algebraic Thinking

2008 – 2015 Member, All A’s Advisory Board, Rodel Foundation, Phoenix, AZ

2008 – 2019 Member, Advisory Board, Arizona State University Preparatory Academies, Vice Chairman, 2010 - 2013

2008 – Present Member, Advisory Board, Math Museum, New York City.

2008 – Present Author/Editor, *MATHgazine Senior* and *MATHgazine Junior*, PRIME Center, ASU

2010 – 2016 Mathematics Advisor, all three U.S. DOE-funded Ready to Learn Projects

2012 – Present Editorial Board, Arizona Association of Teachers of Mathematics, Journal *OnCore*

2013 – Present Member, Advisory Council, STEM AZ Education Collaborative (AATM, AzTEA, and ASTA)

**GRANTS (Principal or Co-Investigator)**

1985 – 1987 PI, Project PROBE: Probing Difficulties in the Learning of Mathematics. Funded by the Fund for the Improvement of Post-Secondary Education (FIPSE), Department of Education. $170,230.

1989 PI, Technology Laboratory (equipment grant) Hayden Foundation. $102,000.

1989 – 1992 PI, Project FOCUS: A Mathematics Curriculum for Non-Math Majors at the College Level. FIPSE, Department of Education. $234,636.

1989 PI, The IBM Technology Orientation Program Lab (equipment, software,

 travel and training grant). $183,000.

1990 – 1991 PI, High Technology Home Learning Centers Project. IBM. $140,700.

1992 – 1994 PI, Alternative Assessment Materials for Mathematics. Polaroid Corporation. $7,500.

1992 – 1994 PI, High Technology Home Learning Centers Project. IBM. $125,000.

1993 PI, Boston University-Brookline Public Schools; Mathematics Learning Outcomes and Assessment, Massachusetts DOE, Noyce Foundation. $10,000.

1993 PI, College Course Planning Grant, Massachusetts DOE, Project Palms. $3,000.

1993 – 1995 PI, Standards-Driven Reform Initiative, U.S. DOE-OERI. $182,726.

1998 – 2002 Co-PI, PI for Boston, Investigating the Big Ideas: A Mathematics Program for Pre-School and Kindergarten Children, NSF, $301,875; Supplement for $37,000.

1999 – 2001 PI, Making the Connections: Undergraduate Algebra to School Mathematics, NSF, $75,000.

2003 – 2004 PI, Assessment of Children’s Understanding of Mathematics (ACUM), ages 4 -5. Pearson Learning Group, $50,000.

2003 – 2008 Co-PI, Focus on Mathematics. National Science Foundation, $9,598,435

2008 – 2013 PI, Prime the Pipeline Project: Putting Knowledge to Work, National Science Foundation, $1,350,000.

2008 – 2011 Co-PI, Science Teachers in Arizona: Recruitment and Retention (STARR), NSF, $750,000

2009 - 2012 PI, Algebra Project, CK-12 Foundation, $50,000

2009 – 2014 Co-PI, Innovation through Institutional Integration (I3): The Modeling Institute, NSF , $1,500,000

2011 -2014 PI, STEM in the Middle, Helios Education Foundation, $824,000

2013 – 2017 Director, Education Outreach Component of the ASU part of the Science and Technology Center Project (BioXFEL) involving 8 colleges/universities, NSF, $6,125,001

2015 -2019 PI, App Maker Pro (AMP): Motivating STEM Study and Teacher Updating through App Development, NSF, $1,199,910.

2016 – Present PI, Vertically Integrated Projects Program at ASU, Helmsley Charitable Trust through Georgia Tech, $160,000.

**MEMBERSHIP IN LEARNED OR PROFESSIONAL ORGANIZATIONS:**

1964 – 2007 Association of Teachers of Mathematics in Massachusetts (ATMIM)

 President, 1975-1977.

 Vice President and Program Chairman, 1973-1975.

 Program Chair, 1971-1973.

 Co-Chairman, In-service Workshop Program, 1971-1974.

1965 – Present Pi Lambda Theta, National Women's Education Honorary.

1969 – Present National Council of Teachers of Mathematics.

1970 – Present National Council of Supervisors of Mathematics (President, 2001-2003)

1993 – Present Member, Phi Delta Kappa

1999 – 2007 Member, National Association for the Education of Young Children

2001 – 2005 Member, Conference Board of the Mathematical Sciences; 2003 -2005, Member, Executive Committee

2004 – Present Member, TODOS

2008 – 2017 Member, ASCD

2008- Present Member, American Educational Research Association

2008 – Present Member, National Science Teachers Association

2008 – Present Member, International Society for Technology in Education

2008 – Present Member, Arizona Association of Teachers of Mathematics

 Editor, journal *OnCore*, 2012 - Present

2013- Present Advisory Council, STEM AZ Education Collaborative (AATM, AzTEA and ASTA)

**awards:**

* California Math Council Golden Apple Award, for writing and directing the math musical, Ella Cinder, 1994
* Alfred D. Wilde Award Outstanding Educator, Boston University, 1998.
* Massachusetts Mathematics Educators Hall of Fame, inducted into the organization in 2003.
* Arizona Center for Afterschool Excellence: Award for *Prime the Pipeline Project: Putting Knowledge to Work,* 2010

• NCSM Ross Taylor/Glenn Gilbert National Leadership Award in Mathematics Education, 2011

• Arizona Center for Afterschool Excellence: PRIME Center (C.G. Director) award for Outstanding Afterschool Programs in Arizona, 2012. (Declaration from the Governor and statue awarded at the dinner meeting of the After Schools Program Leaders. December 2012.)

* Arizona Association of Teachers of Mathematics Copper Apple Award for Leadership in Mathematics, Phoenix, AZ, October 2016.
* National Council of Teachers of Mathematics, Lifetime Achievement Award, Washington, DC, April 2018

**PUBLICATIONS:**

1. Greenes, C.E., Willcut, R.E. & Spikell, M.A. (1972). *Problem Solving in The Mathematics Laboratory*. Boston, MA: Prindle, Weber and Schmidt.

2. Fitzgerald, W., Greenes, C.E., et al. (1972) *Laboratory Manual for Elementary Mathematics* (2nd ed.). Boston, MA: Prindle, Weber and Schmidt, 1972.

3. Greenes, C. E. (1972) Algorithmic statement of problems. Chapter in *Developing Mathematics*, grade 8, J.F. Fitzgerald, et al. New York, NY: Macmillan.

4. Greenes, C.E., & LeBlanc, JF. (1974) Workbooks and Skill Books to accompany *Mathematics, Grades 3 and 4.* Morristown, NJ: Silver Burdett.

5. Willcut, R.E., M.A. Spikell, & Greenes ,C.E*.* (1974*) .Multibase Block Activities* (Three books: *Base Four, Base Five, and Base Ten*). Palo Alto, CA: Creative Publications.

6. Seymour, D. & Greenes, C.E. (1975). *Activities with Geoblocks*. Palo Alto, CA Creative Publications.

7. Greenes, C.E., Seymour, D., & Gregory, J. (1977*). Successful Problem Solving Techniques.* Palo Alto, CA: Creative Publications.

8. Greenes, C.E., Spungin ,R., & Dombrowski, J.(1977). *Problem-Mathics.* Palo Alto, CA.: Creative Publications.

9. Greenes, C. E., et al. (1977) *The Mathworks*. Palo Alto, CA.: Creative Publications.

10. Greenes, C.E., Schulman, L.,& Spungin ,R.(1979) *How to Solve Story Problems.* Niles, IL.: Developmental Learning Materials.

11. Greenes, C., et al. *Techniques of Problem Solving (TOPS*) (Eight card decks; 200 cards per deck, for students in grades 3-12; Teacher Commentaries to accompany each deck) (1980). Palo Alto, CA: Dale Seymour Publications.

12. Bitter, G., Greenes, C, Sobel, M, & Hill, S. (1980) . *Mathematics* (K-8 basal mathematics textbook program with 9 textbooks and accompanying workbooks). New York, NY: McGraw-Hill Publishing Company.

13. Greenes, et al. (1981). *Choose the Operation: Addition and Subtraction*. (Pupil's and teacher's editions) in the *Techniques of Problem Solving Series*. Palo Alto, CA: Dale Seymour Publications.

14. Greenes, et al. (1981). *Choose the Operation: Multiplication and Division*. (Pupil's and teacher's editions). *Techniques of Problem Solving Series*. Palo Alto, CA: Dale Seymour Publications.

15. Greenes, et al. (1981). *Choose the Operation: One and Two-Step Problems - Level B* (Pupil's and teacher's editions). *Techniques of Problem Solving Series*. Palo Alto, CA: Dale Seymour Publications.

16. Greenes, et al. (1981) *Choose the Operation: One and Two-Step Problems - Level C.*  (Pupil's and teacher's editions). *Techniques of Problem Solving Series.* Palo Alto, CA: Dale Seymour Publications.

17. Greenes, et al. (1981). *Choose the Operation: Two and Three-Step Problems* (Pupil's and teacher's editions). *Techniques of Problem Solving Series*. Palo Alto, CA: Dale Seymour Publications.

18. Greenes, et al. (1981). *Guess and Check* (Pupil's and teacher's editions). *Techniques of Problem Solving Series.* Palo Alto, CA: Dale Seymour Publications.

*19.* Greenes, et al. (1981). *Logical Thinking: Detective Math* (Pupil's and teacher's editions). *Techniques of Problem Solving Series.* Palo Alto, CA: Dale Seymour Publications.

20. Greenes, et al. (1981). *Using Resources* (Pupil's and teacher's editions). *Techniques of Problem Solving Series.* Palo Alto, CA: Dale Seymour Publications.

21. Greenes, et al. (1981). *Problem Solving Skill Sheets, Levels A, B, C, and D*. Palo Alto, CA: Dale Seymour Publications.

22. Greenes, et al. (1981). *Problem Decks for the Gifted (*Elementary, Secondary). Palo Alto, CA: Dale Seymour Publications.

23. Greenes, et al. (1982). *Problem Solving Activities with Transparency Masters.* Palo Alto, CA: Dale Seymour Publications.

24. Greenes, CE. (1982) *Challenges in Mathematics for the Gifted.* Boston, MA: Boston University Press.

25. Greenes, C.E. & Immerzeel, G. (1982). *How to Solve One, Two and Three-Step Problems*. Allen, TX: Developmental Learning Materials.

26. Greenes, et al. (1982). *Problem Solving Skill Sheets, Levels AA, BB*. Palo Alto, CA: Dale Seymour Publications.

27. Greenes, et al. (1982). *Beginning Problem Solving Program* (Four books: *Frederika and the Big Bad Biting Bee; Sam and the Storm at Willow Pond; Maggie, the Mischievous Mouse; When Barney Stopped Laughing*). Palo Alto, CA: Dale Seymour Publications.

28. Greenes, C.E., & Immerzeel, G.(1982). *Moving Up in Fractions.* Allen, TX: Developmental Learning Materials.

29. Greenes, C.E., & Immerzeel, G.(1982). *Moving Up in Decimals*. Allen, TX: Developmental Learning Materials.

30. Greenes, et al. (1983). *Beginning Problem Solving: Problem Card Deck\*\** . Palo Alto, CA: Dale Seymour Publications.

31. Greenes, et al. (1983). *Problem Solving Poster Programs*. (Five: one each for grades 2-6: Integrating mathematics with science, social studies and language arts). Palo Alto, CA: Dale Seymour Publications.

32. Greenes, et al. (1983). *Math Bylines*. (Two books: Grades 3-4; Grades 5-6). Palo Alto, CA: Dale Seymour Publications.

33. Greenes, et al. (1984, 1985, 1986) *ATTACK: Arithmetic Tasks to Advance Computational Knowledge*. (Computation program for students with learning difficulties - 16 books). Cambridge, MA: Educators Publishing Service.

34. Greenes, C., Immerzeel, G., Bondorew, P, et al. (1984). *The REACH Program*. (Books:  *I - Chickabee Corners: The Community; II - Petunias, Potatoes, Pets and People: Living Things; III - Shows, Sports, Stumpers and Stories: That's Entertainment; IV - Get the Message: Communication; V - By Land, By Sea, By Air: Transportation; VI -What's the News?: Headlines of the Past, Present and Future; VII - A Question of Money: Making Sense Out of Cents*.) Palo Alto, CA: Dale Seymour Publications.

35. Greenes, C., Immerzeel,G. ,Schulman,L. &. Spungin,R. (1984) *Focus on Time and Money*. Palo Alto, CA: Dale Seymour Publications.

36. Greenes, C., Immerzeel,G. ,Schulman,L. &. Spungin,R. (1984) *Focus on Solving Story Problems.* Palo Alto, CA: Dale Seymour Publications.

37. Greenes, C., Immerzeel,G. ,Schulman,L. &. Spungin,R. (1984) *TOPS: Canadian (Metric Measures) Cards for Decks A, B, C, and D*. Palo Alto, CA: Dale Seymour Publications.

38. Greenes, C., Immerzeel,G. ,Schulman,L. &. Spungin,R. (1985). *How to Solve One and Two-Step Story Problems.* Allen, TX: Developmental Learning Materials.

39. Greenes, C., Immerzeel,G. ,Schulman,L. &. Spungin,R. (1986). *Getting Ready for Problem Solving.* Allen, TX: Developmental Learning Materials.

40. Greenes, C., Immerzeel,G. , Abramson, M., et al. (1986) *Trivia Math I: An Adventure into Science, Social Studies, Sports and Showtime*. Menlo Park, CA: Creative Publications.

41. Greenes, C., Immerzeel,G. , Abramson, M., et al. (1986) *Trivia Math II: An Adventure into Science, Social Studies, Sports and Showtime*. Menlo Park, CA: Creative Publications

42. Greenes, C., Immerzeel, G., Schulman, L, & Spungin,R. (1987). *Problem Solving Resource Books.*  (9-book program) New York, NY: McGraw-Hill Publishing Company.

43. Greenes, C., Immerzeel, G., Schulman, L, & Spungin,R. (1987). *TOPS: Problem Deck\* (Grade 1).* Palo Alto, CA: Dale Seymour Publications.

44. Bitter, G., Greenes, C. et al. (1987) *McGraw-Hill Mathematics*. (K-8 basal textbook program) New York, NY: McGraw-Hill Publishing Company.

*45.* Greenes, C., Immerzeel, G., Schulman, L, & Spungin,R. (1987). *Moving Up in Percents*. Allen, TX: Developmental Learning Materials.

46. Greenes, C., Immerzeel, G., Schulman, L, & Spungin,R. (1987). *How to Compute with Whole Numbers.*  Allen, TX: Developmental Learning Materials.

47. Greenes, C. (Project Director). *Probe Assessment of Mathematical Abilities (Manual).* (1987) Boston, MA: Boston University.

*48. Greenes, C., Immerzeel, G., Schulman, L, & Spungin,R. (1988) TOPS* *Calculator Problems* (4 decks for grades 3,4,5 and 6). Palo Alto, CA: Dale Seymour Publications.

49. Greenes, C., Immerzeel, G., Schulman, L, & Spungin,R. (1988). *Math Extra* (Maintenance program for students in grades 3-6). Allen, TX: Developmental Learning Materials Teaching Resources.

50. *Greenes, C., Immerzeel, G., Schulman, L, & Spungin,R. (1988)*. *Amazing Facts and Real Problems, Decks I and II (*Reading/mathematics experiences for students in grades 5-10*).* Menlo Park, CA: Creative Publications.

51. Greenes, C., Immerzeel, G., Schulman, L, & Spungin,R. (1989). *Math Gems* (Mathematics/language experiences for primary grade students. Allen, TX: Developmental Learning Materials.

52. Greenes, C., Immerzeel, G., Schulman, L, & Spungin, R. (1989) *Mathematics Storybook*s (Six mathematics storybooks for primary grade children). Allen, TX: Developmental Learning Materials.

 Teaching Resources.

53. Greenes, C. & Schulman, L. (1989) *Homework.* New York, NY: Random House.

54. Greenes, C., Schulman, L, & Spungin, R. (1989). *Thinkermath: Developing Number Sense and Arithmetic Skills*, Books I, II, and III. (Number sense and analytical reading experiences for students in grades 3-4, 5-6, and 7-8). Sunnyvale, CA: Creative Publications.

55. Greenes, C., Schulman, L. Spungin, R., Chapin ,S. & Findell,C.(1989) *Mathletics: Gold Medal Problems*. Providence, RI: Janson Publications.

56. Greenes, C., Schulman, L. & Spungin, R. (1990) *Math Extra: Super Star Edition*. Allen, TX: Developmental Learning Materials.

 Teaching Resources.

57. Greenes, C., et al. (1990). *Mathematics: Exploring Your World.* (K-8 basal textbook program with 9 pupil textbooks and 9 teacher guides). New Jersey: Silver Burdett & Ginn Publishing Company.

. 58. Greenes, C., Chapin, S., Findell, C. & Spungin,R. (1990, 1991, 1992). *FOCUS: Decimals and Computation with Decimals; FOCUS: Graphs and Their Interpretation; FOCUS: Integers and Computation with Integers; FOCUS: Fractions and Computation with Fractions*. Focus project funded by the DOE. Books published by Boston University.

59. Greenes, C., Chapin, S., & Findell,C. (1991, 1992). *Instructor's Guide: Decimals and Computation with Decimals; Instructor's Guide: Graphs and their Interpretation; Instructor's Guide: Integers and Computation with Integers; Instructor's Guide: Fractions and Computation with Fractions.* . Focus project funded by the DOE. Books published by Boston University.

60. Greenes, C., Chapin, S., Findell, C. & Spungin,R. (1991, 1992). *FOCUS: Ratio, Proportion and Percent; FOCUS: Variables and Equations; FOCUS: Problem Solving*. Focus project funded by the DOE. Books published by Boston University.

61. Greenes, C., Chapin, S., & Findell, C..(1992). *Instructor's Guide: Ratio, Proportion and Percent; Instructor's Guide: Variables and Equations; Instructor's Guide: Problem Solving*. Focus project funded by the DOE. Books published by Boston University.

62. Greenes, C., Schulman, L., & Spungin, R. (1992) *TOPS Communication Deck, Grades*

 *3-4.* Palo Alto, CA: Dale Seymour Publications.

63. Greenes, C., Schulman, L., & Spungin, R. (1992) *TOPS Communication Deck, Grades*

 *5-6.* Palo Alto, CA: Dale Seymour Publications.

64. Greenes, C., Schulman, L., & Spungin, R.(1993) *. Charlie Baker, Cookie Maker*. Hands

 on Math Story Book. Columbus, OH: SRA Division, Macmillian/McGraw Hill.

65. Greenes, C., Schulman, L., & Spungin, R.(1993) *.How Many Fish Do You See in the Sea*? Hands on Math Story Book. Columbus, OH: SRA Division, Macmillian/McGraw Hill.

66. Greenes, C., Schulman, L., & Spungin, R.(1993). *The Emerald Forest.* Hands on Math Story Books. Columbus, OH: SRA Division, Macmillian/McGraw Hill, 1993.

67. Greenes, C., Schulman, L., & Spungin, R.(1994) *TOPS Communication Deck, Grades*

 *1 and 2.* Palo Alto, CA: Dale Seymour Publications.

68. Greenes, C*.*(1995) *A Mathematical Historical Tour of Boston*. Palo Alto, CA: Dale Seymour Publications.

69. Kaye, P., Greenes, C.& Schulman, L. (1995) *The Gifted Child: Enrichment Math, Grades 1,2,3,4,5 and 6*.(6 books) Columbus, OH: American Education Publishing.

70. Greenes, C., Chapin, S., Findell, C. & Spungin, R. (1996) *Spotlight on Understanding: Strategies for Solving Problems*. Dedham, MA: Janson Publications, Inc.

71. Greenes, C., Schulman, L., Spungin, R., Chapin, S., Findell, C., & Johnson, A..(1995, 1996) *Math Exploration and Group Activity (MEGA) Projects.* (8 books, 8 sets of project cards, 2 tool boxes) Palo Alto, CA: Dale Seymour Publications/Addison Wesley Alternative Publishing Division.

72. Greenes, C. et al.(1998, 2000) *Mathematics: The Path to Success* (K-6 textbook program, teacher editions.) Parsippany, NJ: Silver Burdett and Ginn (Subsidiary of Simon and Schuster).

73. Greenes, C. & Findell, C (1998). *Algebra Puzzles and Problems (Grade 4*). Mountain View, CA; Creative Publications.

74. Greenes, C. & Findell, C (1998). *Algebra Puzzles and Problems (Grade 5)*. Mountain View, CA; Creative Publications.

75. Greenes, C. & Findell, C (1998). *Algebra Puzzles and Problems (Grade 6).* Mountain View, CA; Creative Publications.

76. Greenes, C. & Findell, C (1998). *Algebra Puzzles and Problems (Grade 7*). Mountain View, CA; Creative Publications.

77. Greenes, C. & Findell, C (1999). *Groundworks: Algebraic Thinking (Grade 1).* Chicago, IL: Creative Publications.

78. Greenes, C. & Findell, C (1999). *Groundworks: Algebraic Thinking (Grade 2*). Chicago, IL: Creative Publications.

79. Greenes, C. & Findell, C (1999). *Groundworks: Algebraic Thinking (Grade 3)*. Chicago, IL: Creative Publications.

80. Greenes, C., Dacey, L. & Spungin, R. (1999) *Hot Math Topics: Number Sense (Grade 1).* White Plains, NY: Dale Seymour Publications.

81. Greenes, C., Dacey, L. & Spungin, R. (1999) *Hot Math Topics: Spatial Sense* (Grade 1), White Plains, NY: Dale Seymour Publications.

82. Greenes, C., Dacey, L. & Spungin, R. (1999). *Hot Math Topics: Addition and Subtraction (Grade 2),* White Plains, NY: Dale Seymour Publications.

83. Greenes, C., Dacey, L. & Spungin, R. (1999). *Hot Math Topics: Time and Money (Grade 2).* White Plains, NY: Dale Seymour Publications.

84. Greenes, C., Dacey, L. & Spungin, R. (1999). *Hot Math Topics: Patterns and Reasoning (Grade 3)*. White Plains, NY: Dale Seymour Publications.

85. Greenes, C., Dacey, L. & Spungin, R. (1999). *Hot Math Topics: Number Sense and Computation (Grade 3)*. White Plains, NY: Dale Seymour Publications.

86. Greenes, C., Dacey, L. & Spungin, R. (1999). *Hot Math Topics: Multiplication and Division (Grade 4),* White Plains, NY: Dale Seymour Publications.

87. Greenes, C., Dacey, L. & Spungin, R. (1999). *Hot Math Topics: Estimation and Logical Reasoning (Grade 4*). White Plains, NY: Dale Seymour Publications.

88. Greenes, C., Dacey, L. & Spungin, R. (1999). *Hot Math Topics: Fractions and Decimals (Grade 5*). White Plains, NY: Dale Seymour Publications.

89. Greenes, C., Dacey, L. & Spungin, R. (1999). *Hot Math Topics: Geometry and Measurement (Grade 5)*. White Plains, NY: Dale Seymour Publications.

90. Findell, C. & Greenes, C. (2000). *That’s Logical*. (2 Books: Primary and Advanced)

Chicago, IL; Creative Publications.

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16. Greenes, C., Cavanagh, M., Kim, J., Luc, J., Tian, Y. & Wolfram, T.(Spring 2016) Problems without figures: 1909 and 2016. *OnCore*, Journal of the Arizona Association of Teachers of Mathematics. 10-18.
17. Greenes, C. “Mathematicians don’t like to write lots of words: Explorations in mathematics with 6-year olds. *OnCore Journal of the Arizona Association of Teachers of Mathematics*, Fall 2016, pp. 25-28.
18. Greenes, C. (Fall 2017) Challenging young children mathematically. *OnCore Journal of the Arizona Association of Teachers of Mathematics*. 5-16.
19. Greenes, C. & Cavanagh, M. (Spring 2018) Uncovering talent and promoting mathematical thinking. *OnCore Journal of the Arizona Association of Teachers of Mathematics*. 37-45
20. Greenes, C., Cavanagh, J. Ashlock, R., Guetter, L., Westerhausen, M.& Wolfram, T. (Spring 2019) Evaluate apps for instruction, practice, and assessment.” *OnCore Journal of the Arizona Association of Teachers of Mathematics*, 37-47.

**Other Media:**

1, Special Education and the Classroom Teacher: Teaching Mathematics, 60-minute video.

 (Narrator and author of script.) Boston, Massachusetts: Boston University, 1985.

2. Educators’ Update: Teaching Mathematics, Grades K-3, 60-minute video and Teacher's Guide. Allen, Texas: Developmental Learning Materials, 1985.

3. Video Library: Using Manipulatives in the Teaching of Mathematics. Silver Burdett & Ginn Publishing Company, 1990.

4. *Meetchu in Machu Picchu*, 2-CD Album, 2009. Lyricist for two songs*: Drifting* and *Shades of Blue.*

5. *MATHgazine (*two on-line issues per month, 4 pages each, for students in grades 8 – 12, Arizona State University, PRIME Center, 2010 – Present (Initial funding from NSF Pipeline Project)

6. *MATHgazine Junior (*two on-line issues per month, 4 pages each, for students in grades 4 - 8, Arizona State University, PRIME Center, 2011 – Present (Initial funding from the Helios Education Foundation) STEM in the Middle Project

7. Prime the Pipeline: NSF-funded Project. (10-minute video), 2012, Narrator. Arizona State University, TBLR Productions.

8. BioXFEL Outreach Education Program (7-minute video, 2013). Writer and narrator. Arizona State University, TBLR Productions.

9. STEM in the Middle. (10-minute video), 2014, Narrator. Arizona State University, TBLR Productions.

10. BioXFEL Education Program Update (7-minute video, 2015). Writer and narrator. Arizona State University, Chris Lamont, Filmmaker.

11. App Maker Pro: NSF-funded project (10-minute video, 2017; 3-minute video, 2018). C. Greenes, Writer. Arizona State University, Chris Lamont, Filmmaker.

12. Vertically Integrated Projects (VIP) , Georgia Tech-funded project. (8-minute video, 2018). C. Greenes, Writer. Arizona State University, Chris Lamont, Filmmaker)

**INVITED LECTURES AND PRESENTATIONS (since 1988):**

1. San Diego Council of Mathematics Teachers, San Diego, California, February, 1988.

 (“Amazing Facts and Real Problems”)

2. Association of Teachers of Mathematics in New Hampshire, Manchester, New Hampshire, March, 1988. (Breakfast Address: “Challenges for the Gifted”)

3. National Council of Teachers of Mathematics, Annual Meeting, Chicago, Illinois,

 April, 1988. (“Real Problems Hot Off the Press”)

4. National Council of State Supervisors of Mathematics, Chicago, Illinois, April, 1988. (Luncheon Address: “Windows on Mathematics: The Future of Technology in Education”)

5. Massachusetts Math League Winners Awards Banquet, Mansfield, Massachusetts, April, 1988. (Banquet Address: “Trivial Pursuit: Mathematics Edition”)

6. New Jersey State Department of Education's Annual Urban Initiative Conference, May, 1988. (“Motivating Urban Students to Solve Problems”)

7. University of New Hampshire Summer Institute, Durham, New Hampshire, July, 1988. (“Mathematical Problem Solving” and “Mathematical Trivial Pursuit”)

8. International Congress of Mathematical Education, Budapest, Hungary, August, 1988. (“Probing Learning Difficulties in Mathematics”)

9. Boston Leadership Academy, School of Management, Boston University, October, 1988. (“Mathematics Curriculum: Programs, Issues and Trends”)

10. Maryland Council of Teachers of Mathematics, Westminster, Maryland, October, 1988. (Keynote Address: “Number Sense, Analytical Reading and Mathematical Problem Solving”)

11. National Forum of the College Board, Washington, D.C., November, 1988. (“Mathematics Curriculum in the Year 2001”)

12. Mathematics Colloquia, Teachers College, Columbia University, New York, November, 1988. (“A Daring Experiment: University and Community Collaboration

 To Improve Education”)

13. School of Education, George Mason University, November, 1988. (“The Boston University - Chelsea Project”)

14. California Council of Teachers of Mathematics Annual Meeting, Long Beach, California, November, 1988. (“Irresistible Problems”)

15. National Council of Teachers of Mathematics, Boston, Massachusetts, December, 1988. (Keynote Address: “Our Mathematical Heritage: Linking the Past with the Future”; and “Critical Reading, Number Sense and Delightful Trivia”)

16. San Diego Council of Mathematics Teachers, San Diego, California, February, 1989. (“Analytical Reading, Number Sense and Problem Solving”)

17. National Council of Teachers of Mathematics, San Jose, California, February, 1989. (“Smart Kids Want to Know: Nurturing the Gifted”)

18. Board of Directors, American Association of Colleges for Teacher Education, Anaheim, California, March, 1989. (“The Chelsea Project -- A Model for Schools of Education”)

19. Mathematics Colloquium, Department of Mathematics, Rice University, Houston, Texas, April, 1989. (“Mathematics Education in Urban Areas”)

20. National Council of Teachers of Mathematics, annual meeting, Orlando, Florida, April 1989. (“The Mathematics Invasion: A New Curriculum”)

21. Principals' Center, Harvard University, Spring Conference, May, 1989. (“The Boston University-Chelsea Project”)

22. Boston University Alumni Club, Washington, D.C., May 1989. (“The Boston University-Chelsea Project”)

23. Reunion College, Boston University, May, 1989. (“Public Education in America -- Boston University and the Chelsea Project”)

24. Women's Guild, Boston University, October, 1989. (“The Chelsea Project: A Daring Collaboration between A University and A Public School System”)

25. Community and Public Issues Council, Boston, Massachusetts, October, 1989.

 (“The Chelsea Experiment”)

26. National Council of Teachers of Mathematics, Saskatoon, Saskatchewan, October, 1989. (General Session: “The Middle School Years: A Time to Wonder”)

27. College Board Forum, annual meeting, Atlanta, Georgia, October, 1989. (“Higher Order Thinking Skills in Mathematics”)

28. California Council of Teachers of Mathematics, Long Beach, California, November, 1989. (“Problem Solving in the Community”)

29. National Council of Teachers of Mathematics, Philadelphia, Pennsylvania, December, 1989. (“Challenging the Imagination: Irresistible Problems”)

30. New York State Council of University Deans, Winter Meeting, Fordham University, New York, New York, December, 1989. (“The Role of a University in the Community”)

31. Language Development Conference, Singapore, December, 1989. (“Learning Disabilities in Mathematics”)

32. Greater San Diego Mathematics Council, San Diego, California, February, 1990. (“Problem Investigations: There's More to It than Meets the Eye”)

33. Mathematics Department, Boston University, February, 1990. (“Mathematics Education and the Chelsea Project”)

34. National Council of Teachers of Mathematics, Chattanooga, Tennessee, March, 1990. (General Session: “Number Sense, Analytical Reading and Mathematical Reasoning”)

35. Boston Leadership Academy, School of Management, Boston University, March, 1990. (“Mathematics Education Update”)

36. National Council of Supervisors of Mathematics, Salt Lake City, Utah, April, 1990. (Banquet Address: “Fire starter versus The Dead Zone”)

37. AERA Research Pre-session, National Council of Teachers of Mathematics, Salt

 Lake City, Utah, April, 1990. (“Mathematical Abilities of College Students: Results

 of Project PROBE”)

38. National Council of Teachers of Mathematics, annual meeting, Salt Lake City,

 April, 1990. (“Literacy, Mathematics and Thinking: An Integrated Program”)

39. Boston University, Reunion College, May, 1990. (“The Boston University - Chelsea Project”)

40. Overcoming the Barriers: Access to Quality Education in the 90's, Chicago, Illinois, June, 1990. (“Transforming the Teaching of Mathematics: Minority Access to Quality Education”)

41. Metropolitan Mathematics Club of Chicago, September, 1990. (“A Daring Venture into University-Community Collaboration: The Chelsea Project”)

42. Boston University Women's Guild, Boston, Massachusetts, September, 1990. (“Chelsea Update: What's New and What You Can Do”)

43. Fifth Annual Jones Institute Distinguished Lecture Series, Emporia State University, Emporia, Kansas, October, 1990. (“How Many Seconds is Baryshnikov Suspended in Mid-Air? OR Learning Mathematics: A Time to Wonder”)

44. National Council of Teachers of Mathematics, Parsippany, New Jersey, October, 1990. (Banquet Address: “A Mathematical Who Done It!”)

45. Nova Scotia Council of Teachers of Mathematics, Halifax, Nova Scotia, October, 1990. (Keynote Address: “Locked In/Locked Out: A Real Mathematics Problem”)

46. Association of Teachers of Mathematics in New England, Newport, Rhode Island, November, 1990. (“Developing the Mathematical Imaginations of Children”)

47. New York State Teachers of Mathematics, Catskill, New York, November, 1990. (Banquet Address: “Fire starter versus The Dead Zone”)

48. Greater San Diego Mathematics Council, San Diego, California, February, 1991. (“Reading, Mathematics, and Problem Solving”)

49. National Council of Teachers of Mathematics, Sacramento, California, February, 1991. (“Mathematical Challenges for High School Students”)

50. IBM High Technology Home Preschool Project, Chelsea, Massachusetts, February, 1991. (“Mathematical Concept Development in Young Children”)

51. Virginia Council of Teachers of Mathematics, Roanoke, Virginia, March, 1991. (Luncheon Address: “Promoting Students' Understanding and Use of Mathematics”)

52. West Hartford, Connecticut Administrators' Conference, April, 1991. (“Chelsea Project Update”)

53. National Council of Supervisors of Mathematics, Annual Meeting, New Orleans, Louisiana, April, 1991. (Banquet Speaker: “A Mathematical Musical Mystery”)

54. National Council of Teachers of Mathematics, Annual Meeting, New Orleans, Louisiana, April, 1991. (“Developing the Mathematical Imagination”)

55. Boston University Alumni Association, Boston, Massachusetts, April, 1991. (“Educational Reform in Chelsea”)

56. Chelsea Teacher Appreciation Tea, Chelsea, Massachusetts, May, 1991. (“Sonya Kovalevsky”)

57. Education Commission of the States, National Forum and Annual Meeting, Denver, Colorado, July, 1991. (“The Equity Agenda: Minority Preparation, Participation, and Success in College”)

58. IBM High Technology Home Preschool Project, Chelsea, Massachusetts,

 September, 1991. (“Spatial and Reasoning Abilities of Young Children”)

59. Oxford Conference on Schools and Society, Oxford University, Oxford, England, September, 1991. (“The Teaching of Mathematics: Issues of Affinity, Choice, and Equity”)

60. Psychology of Mathematics Education--North America, 13th Annual Meeting, Blacksburg, Virginia, October, 1991. (“Mathematical Performance of Non-Math Majors at the College Level”)

61. New York Legislature, Policy Studies Seminar, Albany, New York, October, 1991. (“Implications of the Chelsea Project for New York Schools”)

62. National Council of Teachers of Mathematics, Albuquerque, New Mexico, November, 1991. (“Number Sense, Problem Solving, and Mathematical Thinking”)

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63. National Council of Teachers of Mathematics, Nashua, New Hampshire, November, 1991. (Breakfast Address: “A Mathematical Who Done It in Two Acts” and “Developing Mathematical Reasoning Ability with Challenging Tasks”)

64. Phi Delta Kappa, Norfolk, Virginia, December, 1991. (Banquet Address: “Fire starter versus the Dead Zone”)

65. Greater San Diego Mathematics Council, San Diego, California, February, 1992. (“‘Talk Math’: Communication, Problem Solving, and Assessment”)

66. Annual Science and Mathematics Middle School Conference, Lesley College, Cambridge, Massachusetts, February, 1992. (Luncheon Address: “The Haj Paj Box: A Mathematical Musical Mystery”)

67. Association of Teachers of Mathematics in Massachusetts, Annual Meeting, Worcester, Massachusetts, March 1992. (Luncheon Address: “A Mathematical Who Done It”)

68. OERI Study Group, Achieving World Class Standards: The Challenge for Educating Teachers, Washington D.C., April, 1992. (Paper and presentation: “Teaching to Achieve World Class Standards”)

69. National Council of Teachers of Mathematics, Annual Meeting, Nashville, Tennessee, April, 1992. (“Talk Math: Developing Students’ Investigation, Reasoning, and Communication Skills”)

70. Minnesota Council of Teachers of Mathematics, Annual Meeting, Brainerd, Minnesota, April, 1992. (General Session: “Communication, Problem Solving and Mathematical Thinking”)

71. New England Research Organization, Annual Conference, Portsmouth, New Hampshire, May 1992. (“Research in Mathematics Teaching and Learning”)

72. Mathematics and Computer Science Collaborative, Annual Meeting, Bridgewater State College, May 1992. (Luncheon Address: “Fire starter Versus the Dead Zone”)

73. Balominos Memorial Lecture, National Council of Teachers of Mathematics, Hartford, Connecticut, October, 1992. (General Session: “A Daring Adventure into Mathematical Thought”)

74. OERI, Secretary’s Conference on Improving Mathematics and Science Teaching

 and Instructional Resources, Washington, D.C., October, 1992 (Paper Presentation: “What Teachers Need to Know to Teach for Understanding” and Panel: “The Role

 of Schools of Education and Colleges of Liberal Arts”); videotape follow-up; portions of paper cited in Improving Math and Science Teaching, A report on the Secretary’s Second Conference on Mathematics and Science, OERI of the U.S. Department

 of Education, February, 1993.

75. National Council of Teachers of Mathematics, Minneapolis, Minnesota, November, 1992. (General Interest Session: “Developing a Mensa Mind for Math”)

76. National Council of Teachers of Mathematics, Little Rock, Arkansas, November, 1992. (“Developing Reasoning, Communication Ability and Mathematical Big Ideas Through Unique Investigations”)

77. Japan-United States Symposium, Sponsored by The University of Tokyo, Harvard University, and the Center for Japan-U.S. Business and Economic Studies,

 New York University, “Towards Happy Old Age: Economic and Medical Perspectives.” Tokyo, Japan, November, 1992. (Paper presented: “Volunteerism

 and Project SIMBAL in Chelsea, Massachusetts”)

78. Greater San Diego Mathematics Council, Annual Conference, San Diego, California, February, 1993. (“Paths to Math Through Literature, Science and the Arts”)

79. Time Life Books, Washington, DC, March, 1993. ("Mathematical Concept Development in Young Children”)

80. Melrose, Massachusetts, Community Night. April, 1993. (“A Mathematical Musical Mystery: The Case of Pulvinia Pratt”)

81. Phi Delta Kappa, Marblehead, MA, October 1993. (Dinner Speaker: “Meeting the Math Challenge: New Content, New Pedagogy and New Assessment”)

82. National Council of Teachers of Mathematics, Southern Regional Conference, Jackson, Mississippi, October 1993. (“Integrating Mathematics with Literature, Science, Social Studies, and the Arts”)

83. National Council of Teachers of Mathematics, Northeastern Regional Conference, Pittsburgh, Pennsylvania, October, 1993. (“Paths to Math Through Literature, Science, and the Arts”)

84. Association of Teachers of Mathematics in New England, Annual Conference, Springfield, Massachusetts, November, 1993. (“Paths to Math Through Literature, Science and the Visual and Performing Arts.”)

85. Northern California Mathematics Council, Annual Meeting, Asilomar, California, December, 1993. (Major Session: “Maximize Learning, Build on Differences: Integrated Projects”)

86. Special Education Graduate Program Seminar, Boston University, December,

 1993. (“Students At-Risk of Failure in Mathematics”)

87. National Council of Teachers of Mathematics, Richmond, Virginia, February, 1994. (Major Session: “Preparing At-Risk Students for Higher Level Mathematics: What

 to Teach and How to Teach It”)

88. Association of Teachers of Mathematics in Massachusetts, Holy Cross College, Worcester, Massachusetts, March, 1994. (“Maximize Learning, Build on Differences: Integrated Projects”)

89. Silver Burdett and Ginn Professional Development Program, Danvers, Massachusetts. (Dinner Speaker: “Paths to Math Through Literature, Science,

 and the Arts”)

90. Montgomery County Maryland, Professional Day Seminar Series, March, 1994.

 (1. “Integrating Mathematics with the Other Disciplines”; 2. “Problem Solving Challenges for Secondary School Students”)

91. National Council of Teachers of Mathematics, Annual Meeting, Indianapolis, Indiana, April, 1994. )”Footprints: Linking Mathematics to Science, Social Studies, Art, Music, and the Language Arts”)

92. Orton Dyslexia Society, New York Branch, Annual Meeting, New York City, April 1994. (“Preparing At-Risk Students for Higher Level Mathematics”)

93. NSF High School Mathematics-Science Project, Bridgewater State College, Bridgewater, Massachusetts, April, 1994. (Banquet Address: “Teaching to

 Achieve World Class Standards: Critical Elements and Vignettes”)

94. Brookline Public Schools Professional Day, Brookline, Massachusetts, May 1994. (“Studying Children’s Thinking: A Mathematical Historical Tour of Boston”)

95. Westwood Public Schools, Math Night, Westwood, Massachusetts, May 1994. (“Mathematical Musical Mystery: Pulvinia Pratt and The Inlaid Chest of Gold”)

96. Northwest Conference, Victoria, BC, October, 1994. (“Integrating the Disciplines”

and “Preparing At-Risk Students for Higher Level Mathematics”)

97. Cleveland Council of Teachers of Mathematics, Cleveland, Ohio, November, 1994. (Banquet Address: “Teaching to Achieve World Class Standards in Mathematics: Manute Bol and Hungry Ants”)

98. National Council of Teachers of Mathematics, Somerset, New Jersey, November, 1994. (“Big Projects: Integrating the Disciplines”)

99. Southern California Council of Teachers of Mathematics, Palm Springs, CA, November, 1994. (“Banquet: “A Mathematical Musical Who-Done-It: The Case

 of the Missing Mustard”; and “MEGA Projects.”)

100. Rockville, MD Public Schools, February, 1995. (“Number Sense, Problem Solving and Mathematical Thinking”)

101. Rockville, MD Public Schools, March, 1995. (“Methods of Reasoning in

 Mathematics and Literacy”)

102. Teachers College Colloquium, Columbia University, New York, March 1995. (“Changing the Teaching and Learning of Mathematics in Urban Schools:

 Chelsea Project Update”)

103. National Council of Teachers of Mathematics, Annual Meeting, Boston, MA, April, 1995. (Minicourse: “A Mathematical Historical Tour of Boston”)

104. National Council of Teachers of Mathematics, Knoxville, Tennessee, October, 1995. (“Integrating the Disciplines: MEGA Projects)

105. National Council of Teachers of Mathematics, St. John’s, Newfoundland, Canada, October, 1995. (“Preparing At-Risk Students for Higher Level Mathematics” and

“Math Exploration and Group Activity Projects for Grades 1-8”)

106. California Mathematics Council, Southern Section, Annual Meeting, Palm Springs, California, November, 1995. (“Developing Reasoning Abilities in Mathematics and Literacy” and “Knowing What Kids Know”)

107. National Council of Teachers of Mathematics, Houston, Texas, November, 1995. (“MEGA Projects: Interdisciplinary Investigations That Develop Mathematical Thinking and Communication Skills”)

108. National Council of Teachers of Mathematics, Philadelphia, Pennsylvania,

 November, 1995. (“Knowing What Kids Know: Tools for Assessment”)

109. Association of Teachers of Mathematics in New England, Annual Meeting,

 Portland, Maine, December, 1995. (Luncheon Address: “Sprint vs. AT & T: Developing Mathematical Reasoning”)

110. Orton Society of North America, Annual Meeting, New York, NY, March, 1996. (“Number Sense, Analytical Reading and Mathematical Thinking”)

111. National Council of Supervisors of Mathematics, Annual Meeting, San Diego, CA,

April, 1996. (“Upgrading Mathematics Instruction in Urban Schools”)

112. Technion University, Haifa, Israel, May, 1996. (Seminar Series: “Mathematics Learning and Knowing”)

113. Weizmann Institute, Rehovot, Israel, June, 1996. (Seminar Series: “Mathematics Learning and Knowing”)

114. Association of Mathematics Teachers in New York State, Summer Institute, State University of New York, Oneonta, New York. August, 1996. (Keynote Speaker: “Teaching to Achieve World Class Standards: What Do Nolan Ryan and Mikhail Baryshnikov Have in Common?”)

115. National Council of Teachers of Mathematics, Vancouver, British Columbia, August, 1996. (“Knowing What Kids Know: Methods for Investigating Students’ Thinking”)

116. North Carolina Teachers of Mathematics, Greensboro, North Carolina, October, 1996. (“Assessing Reasoning Strategies in Mathematics and Literacy”)

117. National Council of Teachers of Mathematics, Baltimore, Maryland, October, 1996. (Keynote Address: “Honey I Shrunk the Kids: Promoting Proportional Reasoning Across the Disciplines”)

118. Project Connect, BBN, Miami, Florida, October, 1996. (Banquet Address: “Virtual Tours: A Mathematical Historical Tour of Boston”)

119. New Jersey Association of Teachers of Mathematics, East Brunswick, New Jersey, October, 1996. (Breakfast Address: “Shaq’s Suits Fit” and General Session:

 “A T & T vs. Sprint: Developing Algebraic Thinking”)

120. Southern California Council of Teachers of Mathematics, Palm Springs, California, November, 1996. (“Honey I Shrunk the Kids: Developing Proportional Reasoning Across the Disciplines”)

121. National Council of Teachers of Mathematics, Atlanta, Georgia, February, 1997. (“Preparing for Algebra and Higher Level Mathematics”)

122. National Council of Teachers of Mathematics, San Jose, California, March, 1997. (“Preparing for Algebra” and “The Plot Thickens”)

123. Association of Teachers of Mathematics in Massachusetts and Math West, Worcester, Massachusetts, April, 1997. (Banquet Address with Carol Findell: (“Musical Mathematical Memories”)

124. National Council of Supervisors of Mathematics, Annual Meeting, Minneapolis, Minnesota, April, 1997. (co-presented with Carol Findell: “Pre-X: Preparing for Algebra”)

125. National Council of Teachers of Mathematics, Annual Meeting, Minneapolis, Minnesota, April, 1997. (“Developing Algebraic Reasoning Through Stories, Plays, and Games”)

126. National Council of Teachers of Mathematics, Rochester, New York, May, 1997.

 (A Mathematical Musical Mystery: “Phantom of the Opry”)

127. New Jersey Council of Teachers of Mathematics, E. Brunswick, New Jersey, October 1997. (“Phantom of the Opry” and Luncheon Address, “Mathematical Musical Memories: The History of Mathematics Education.”)

128. Southern California Council of Teachers of Mathematics, Palm Springs, California, November 1997. (“Identifying Mathematically Promising Students and Developing Their Talents”)

129. Association of Teachers of Mathematics in New England, Annual Meeting, Nashua, New Hampshire, November, 1997. (“The Big Ideas of Algebra”)

130. National Council of Teachers of Mathematics, Long Island, New York, December, 1997. (“Phantom of the Opry” and “Developing Algebraic Reasoning”)

131. Early Numeracy Conference, Massachusetts Department of Education, Worcester, Massachusetts, March 3, 1998. (Keynote Address, “Developing Young Children’s Mathematical Thinking”)

132. National Council of Teachers of Mathematics, Harrisburg, Pennsylvania, March, 1998. (“Getting to Know the Big Ideas of Algebra”)

133. Brookline Foundation, Brookline, Massachusetts, March, 1998. (“Mathematics Literacy”)

134. National Council of Supervisors of Mathematics, Annual Meeting, Washington, D.C., March, 1998. (“Building the Bridge From Arithmetic to Algebra”)

135. National Council of Teachers of Mathematics Annual Meeting, Washington, D.C., April, 1988. (“Teachers as Talent Scouts: Identifying Mathematically Promising Underachievers and Developing their Talents”)

136. American Educational Research Association, Annual Meeting, San Diego, California, April, 1998. Paper Presentation. (“Listening to Children During Problem Solving”)

137. Association of Teachers of Mathematics in Massachusetts, Braintree, Massachusetts, May, 1998. (“Problems, Activities, Stories and Games that Focus on the Big Ideas)

 138. CAMT, Annual Meeting, San Antonio, Texas, July, 1998. (“Honey I Shrunk the Kids: Developing Algebraic Reasoning”)

139. Career Decisions 2000, Boston University, September, 1998. (‘Getting Published”)

140. Teachers College, Colloquium Series on Advances in the Teaching of Mathematics, Columbia University, New York, October, 1998. (“The History of Mathematics Education”)

141. Northwest Mathematics Conference. Spokane, WA, October, 1998. (“Developing Algebraic Thinking: Getting to Know The Big Ideas”)

142. Teachers College, Columbia University, October, 1998. (Seminar in Developmental Psychology: “Big Math for Little Kids”)

143. New Jersey Council of Teachers of Mathematics, Long Branch, New Jersey, October, 1998. (Keynote: “Developing Algebraic Reasoning Abilities”)

144. Southern California Council of Teachers of Mathematics, Palm Springs, California, November, 1998. (“Building The Bridge from Arithmetic to Algebra”)

145. National Association of Gifted Children, Annual Meeting, Louisville, KY. November, 1998. (Panel: “The Ultimate Challenge: Developing Mathematical Talent”)

146. Norwood Public Schools, Norwood, MA, January, 1999. (“Mathematics Education: New Directions”)

147. Association of Teachers of Mathematics in Connecticut, Annual Meeting, Cromwell, CT, March, 1999. (Two Keynote Addresses, one for elementary school teachers and one for middle, high school and college teachers: “Mathematics Education in the Next Decade”)

148. Association of Teachers of Mathematics in Massachusetts, Annual Meeting, Boxborough, MA, April, 1999. (“Identifying and Honing the Talents of Mathematically Promising Students”)

149. National Council of Supervisors of Mathematics, Annual Meeting, San Francisco, CA, April, 1999. (“Building the Bridge from Arithmetic to Algebra: Research Results”)

150. National Council of Teachers of Mathematics, Annual Meeting, San Francisco, CA, April, 1999. (“Big Math for Little Kids”)

151. Confratute at The University of Connecticut, Storrs, CT., July, 1999. (Seminar Series

 (5 lectures) “Developing Mathematical Talent”)

152. CAMT, Dallas, TX, July, 1999. (“Mathematically Promising Students”)

153. National Council of Teachers of Mathematics, Pittsburgh, PA; October, 1999.

 ("Developing Algebraic Thinking")

154. Alberta Association of Teachers of Mathematics, Jasper, Alberta, Canada, October, 1999. (Keynote: "Identifying Mathematically Promising Students and Developing Their Talents," and "Developing Algebraic Thinking")

155. California Council of Teachers of Mathematics, Southern Section, Palm Springs, CA, November, 1999. ("Developing Mathematical Talent")

156. National Association for the Education of Young children, Annual Meeting, New Orleans, LA, November, 1999. ("Big Math for Little Kids: A Research and Development Project)

157. National Council of Teachers of Mathematics, Phoenix, AZ, December, 1999. (Keynote: "Math in the Middle: A New Look at Mathematics for Middle-School Students")

158. Edison Middle School, Boston, MA, February, 2000. ("Proportional Reasoning")

 159. National Council of Teachers of mathematics, Mobile, AL, March, 2000. (Keynote: "Building the Bridge from Arithmetic to Algebra")

 160. National Council of Supervisors of Mathematics Annual Meeting, Chicago, IL, April, 2000. (Presidential Acceptance Speech, "We Must Lead and Not Be Led")

161. National Council of Teachers of Mathematics, Annual Meeting, Chicago, IL, April, 2000. ("Big Math for Little Kids")

162. American Education Research Association, Annual Meeting, New Orleans, LA, April, 2000. (Paper presentation: "Artful Guidance")

163. National Science Foundation, Conference on Early Childhood Mathematics, Arlington, VA, May, 2000. (Paper presentation: "Big Math for Little Kids")

164. National Council of Teachers of Mathematics, Halifax, Nova Scotia, July, 2000. (Opening Keynote - with C. Findell): "History of Mathematics Education in Story

 and Song, "Developing Algebraic Reasoning")

165. National Council of Teachers of Mathematics, Philadelphia, PA, October, 2000. ("Identifying Mathematically Promising Students and Developing Their Talents")

166. Northwest Mathematics Conference, Victoria, BC, October, 2000. (General Session: "Developing Talents of Mathematically Promising Students" and "Big Math for Little Kids")

167. Bureau of Jewish Education, Newton, MA. November, 2000. ("Big Math for Little Kids")

168. California Council of Teachers of Mathematics, Southern Section, Palm Springs, CA, November, 2000. ("Developing Algebraic Reasoning in Grades 3-5")

169. Greater San Diego Mathematics Conference, San Diego, CA, February, 2001. ("Developing Algebraic Reasoning")

170. Association for Supervision and Curriculum Development, Boston, March, 2001. ("A Research-Based Approach to Early Mathematics")

171. National Council of Supervisors of Mathematics, Orlando, FL, April, 2001. ("Navigating Through Algebra,” "Big Math for little Kids, “and "Seize the Opportunity: Provide the Leadership" - Presidential Address.)

172. National Council of Teachers of Mathematics, Orlando, FL, April, 2001. ("Navigating Through Algebra and Geometry, Pre-Kindergarten through Grade 2" and "Big Math for Little Kids.")

173. Association of Teachers of Mathematics in Massachusetts, Braintree, MA, April, 2001. ("Navigating Through Algebra, Pre-Kindergarten through Grade 8")

174. Massachusetts Department of Education, New Directions in Mathematics Education Conference, Westborough, MA, May, 2001. ("Big Math for Little Kids: The Early Years are Critical" - Presentation at panel discussion of key issues in pedagogy

and content.)

175. National Association for The Education of Young Children, Washington, DC, June, 2001. ("Developing and Assessing Young Children's Mathematical Knowledge")

176. CAMT, San Antonio, TX, July, 2001. (Keynote Address: "Developing Algebraic Thinking" and "Big Math for Little Kids")

177. National Council of Teachers of Mathematics, Somerset, New Jersey, October, 2001. (“Navigating Through Algebra: Building the Bridge from Arithmetic to Algebraic Reasoning”)

178. Thousand Oaks Math Conference, Thousand Oaks, CA, November, 2001. (“Groundworks: Algebraic Reasoning”)

179. California Council of Teachers of Mathematics, Southern Section, Palm Springs, CA, November, 2001. (“Jump Start on Algebra”)

180. Best Practices in Education, Russian-American Conference, Honolulu, HI, January, 2002. (Panel: “The Elkonin-Davydov Curriculum”)

181. Greater San Diego Mathematics Conference, San Diego, CA, February, 2002. (“Big Math for Little Kids”)

182. Association of Teachers of Mathematics in New England, Boxboro, MA; April, 2002. (Luncheon Address: “Solving Together”)

183. National Council of Supervisors of Mathematics, Las Vegas, NV, April, 2002. (“Big Math for Little Kids: Lessons Learned,” Major closing address: “What’s the S?: History of Changes in Leadership”)

184. National Council of Teachers of Mathematics, Las Vegas, NV, April, 2002. (“Big Math for Little Kids,” “Navigating Through Mathematics,” and “Jump Start on Algebra”)

185. Head Start National Research Conference, Washington, DC, June, 2002. (Panel: “New Mathematics Programs for Young Children”)

186. Conference on Early Mathematics Learning, Rutgers University, July, 2002. (“What Children Learn from a Big Math Approach”)

187. National Council of Teachers of Mathematics, Montreal, Canada, August, 2002. (“Navigating Through Algebra” and Panel: “Big Math”)

188. Northwest Mathematics Conference, Portland, OR, October, 2002. (“Jump Start on Algebra” and “Big Math for Little Kids”)

189. Association of Teachers of Mathematics of New York State. (Opening Session: “Mathematical Musical Memories: A History of Math Education in the Last 100 Years”)

190. California Council of Teachers of Mathematics, Southern Section, Palm Springs, CA, November, 2002. (“Developing Algebraic Reasoning and Measurement Sense” and “Big Math for Little Kids”)

191. Riverside County and San Bernardino County Math Day, Riverside, CA, November, 2002. (“Algebraic Reasoning”)

192. National Council of Teachers of Mathematics, Boston, MA, November, 2002.

((1) Opening Session: “One if By Land, Two if By Sea, Math in Our Nation’s History,” (2) “Big Math for Little Kids,” and (3) “Navigating Through Mathematics, Grades PreK-2”)

193. National Association for the Education of Young Children, Annual Conference, New York City, NY, November, 2002. (“Lesson Learned from Implementation of Big Math for Little Kids”)

194. Association of Teachers of Mathematics in Connecticut, Hartford, CT, March, 2003. (“Big Math for Little Kids and The Assessment of Children’s Understanding of Mathematics.”)

195. National Council of Teachers of Mathematics, Annual Conference, San Antonio, Texas, April, 2003. ((1) “Big Math for Little Kids;” (2) “Navigating Through Algebra, Grades PreK-2;” (3) Banquet Presentation, “One If By Land, Two if By Sea, Math in Our Nation’s History.”)

196. National Council of Supervisors of Mathematics, Annual Conference, San Antonio, Texas, April, 2003. ((1) “History of NCSM : The Past, The Present, The Future;” (2) “Big Math for Little Kids: Lessons Learned;” (3) “Groundworks: Algebraic Reasoning, Next Steps.”)

197. Early Childhood Educators Conference, Springfield, MA, April, 2003. (“Big Math for Little Kids”)

198. Showcase Mathematics Conference, Hartford, CT, May, 2003. (“Big Math For Pre- School Children”)

199. Houghton Mifflin Leadership Conference, New Orleans, LA, September, 2003. (“Making the Connections: Arithmetic to Algebra” and “Algebra for Primary Students”)

200. ATMNE Centennial Celebration Conference: Looking Back and Looking Ahead, 1903 – 2003, Manchester, NH, November, 2003. (Centennial Session: “The Present is the Past in Disguise”)

1. Early Childhood Institute, Framingham, MA, November, 2003. (Plenary/Closing Session: “Artful Guidance: The Pedagogy of Creating Powerful Mathematical Learning Environments for Young Children.”)

202. San Diego Council of Teachers of Mathematics, San Diego, CA, February, 2004. (“Algebraic Reasoning and Measurement Sense”)

1. National Council of Supervisors of Mathematics, Philadelphia, PA, April, 2004. (“Preparing Teachers to Develop Students’ Measurement Sense” and “Preparing Teachers to Develop Students’ Algebraic Reasoning Abilities”)
2. National Council of Teachers of Mathematics, Philadelphia, PA, April, 2004. (“Developing Algebraic Thinking”)

1. National Association for the Education of Young Children Institute, Baltimore, MD, June, 2004. (“Big Math for Little Kids: Lessons Learned in Implementing a Comprehensive Research Based Early Childhood Program.”)
2. International Congress of Mathematics Education, Copenhagen, Denmark, July, 2004. (Keynote Address: “Challenging Young Children Mathematically: The Big Math for Little Kids Approach”)

207. Groundworks Conference, Brisbane, Australia, August, 2004. (Keynote Address: “Building the Bridge from Arithmetic to Algebra”; and “Reasoning with Numbers”)

208. Association of Teachers of Mathematics in New England, Annual Conference, Providence, Rhode Island, October, 2004. (“Developing Algebraic Reasoning and Measurement Sense”)

209. Southern California Mathematics Conference, Palm Springs, CA. November, 2004. (Two keynote presentations: “The abc’s of Problem Solving and Algebraic Reasoning”)

210. Early Childhood Conference on Math, Bedford, MA, February, 2005. (“Navigating Through Number and Operations in Pre-Kindergarten – Grade 2”)

211. Greater San Diego Mathematics Conference, February, 2005, San Diego, CA (“ Making the Connections: Algebra to Number, Measurement, Geometry and Data Analysis”)

212. Association of Teachers of Mathematics in New England, Annual Conference, Providence, RI. March, 2005. (Banquet speaker: “Developing Algebraic Reasoning: Why? When? What?”)

213. National Council of Supervisors of Mathematics, Annual Conference, Anaheim, CA, April, 2005. (1. “Preparing Teachers to Develop Students’ Algebraic Reasoning and Problem Solving Abilities” and 2. “Curriculum Review Process”)

214. National Council of Teachers of Mathematics, Annual Conference, Anaheim, CA, April, 2005. (“Making the Connections: Algebra to Number, Measurement, Geometry and Data”)

215. CAMT (Texas State Mathematics Conference), Dallas, TX, July, 2005. (Three keynote addresses: 1. “Artful Guidance: A Pedagogical Approach for Developing Young Students’ Understanding of and Love for Mathematics,” 2. “Developing Students’ Algebraic Reasoning Abilities in Grades PreK – 3,” and 3. “Developing Students’ Algebraic Reasoning and Problem Solving Abilities in Grades 6 – 9.”)

216. National Council of Teachers of Mathematics, Hartford, CT, October, 2005. (Keynote address for Early Childhood Strand: “Artful Guidance: Challenging Young Children Mathematically”)

217. Northwest Mathematics Conference, Portland, OR, October, 2005. ( 1. Keynote address: “Developing Algebraic Reasoning Through Explorations in Number, Geometry, Measurement and Data Analysis” and 2. “Artful Guidance”)

218. Southern California Mathematics Conference, Palm Springs, CA. November, 2005. (Two key note presentations: “Developing Algebraic Thinking through Explorations in Number and Measurement”)

219. Long Island Association of Teachers of Mathematics, SUNY-Old Westbury, March, 2006. (Banquet speaker: “The Tipping Point in Mathematics Education Reform: The Mavens, The Connectors, and The Salesmen”)

220. National Council of Supervisors of Mathematics Annual Conference, St. Louis, MO, April, 2006. (Major Speaker: “The Tipping Point in Mathematics Education Reform: The Mavens, The Connectors, The Salesmen, and The NCSM Leaders”)

221. National Council of Supervisors of Mathematics Annual Conference, St. Louis, MO, April, 2006. (Past Presidents’ Presentations: “Advice to New Mathematics Leaders: Providing Professional Development”)

222. National Council of Supervisors of Mathematics Annual Conference, St. Louis, MO, April, 2006.

 (“The Focus on Mathematics Professional Development Activity: Uncovering High School Students’ Difficulties with Concepts of Linearity”)

223. National Council of Teachers of Mathematics Annual Conference, St. Louis, MO, April, 2006. (“The abc’s of Algebraic Thinking and Problem Solving”)

224. National Council of Teachers of Mathematics, Regional Conference, Atlantic City, NJ, October, 2006. (Featured speaker: “Representing Mathematical Relationships: The Key to Algebraic Thinking”)

225. Southern California Mathematics Conference, Palm Springs, CA. November, 2006. (Two key note presentations: “Algebraic Thinking and Problem Solving: The Dynamic Duo”)

226. Boston University, School of Education Panel Discussion “Accelerating Learning for All Students: Panel Discussions with Elementary and Secondary Educators”, November, 2006. (“Accelerating Learning of All Students in Mathematics”)

227. National Council of Teachers of Mathematics, Annual Conference, Atlanta, GA, March, 2007. (“Developing Algebraic Thinking, Problem Solving and Communication Skills”)

228. National Council of Supervisors of Mathematics, Annual Conference, Atlanta, GA, March 2007. (“Preparing Elementary School Teachers to Develop Students’ Algebraic Thinking and Problem Solving Abilities”)

229. Psychology of Mathematics Education-International, International Conference, Seoul, Korea, July, 2007. ( ” International Study of Secondary School Students’ Understanding of Key Concepts of Linearity: A Three-Country (US, Israel and Korea) Investigation”)

230. New York State Association of Mathematics Supervisors, Albany, NY, September, 2007. (“The Tipping Point in Mathematics Education Reform: The Mavens, the Connectors and the Salesmen”)

231. Northwest Mathematics Conference, Seattle, WA, October, 2007. (“ Algebraic Thinking and Problem Solving, The Dynamic Duo”)

232. New England Association of Teachers of Mathematics, Springfield, MA, October, 2007.

 (2 General Sessions: “The Tipping Point in Mathematics Education: The Mavens, Connectors, Salesmen and Implementers” and “More Math Education History in Story and Song”)

233. Southern California Mathematics Conference, Palm Springs, CA, November, 2007.

 ( “Talk Math: Reasoning, Communicating and Solving Number, Measurement and Algebra Problems”)

234. National Council of Supervisors of Mathematics, Salt Lake City, UT, March 2008. (“Preparing Teachers to Ease the Transition to Algebra”)

235. National Council of Teachers of Mathematics, Salt Lake City, UT, March 2008 (“Easing the Transition to Algebra: Developing Algebraic Thinking Through Explorations in Number and Measurement”)

236. National Council of Teachers of Mathematics, Cleveland, Ohio, October 2008, (“Think and Talk Math”)

237. National Council of Supervisors of Mathematics, Washington, DC, April, 2009. (Major Address: “Proportional Reasoning and Success with Algebra: The Incredible Hulk and The Shrunken Kids”)

238. National Council of Teachers of Mathematics, Annual Conference, Washington, DC, April 2009. (“Proportional Reasoning and Success with Algebra”)

239. National Council of Teachers of Mathematics, Boston, MA, October, 2009. (“ Developing Proportional Reasoning: Shrinking Elephants, Growing Scorpions, Baby Boas”)

240. National Council of Teachers of Mathematics, Annual Conference, San Diego, CA, April, 2010. (“Reasoning Proportionally and Talking Math Lead to Success with Algebra”),

241. National Council of Supervisors of Mathematics, San Diego, CA, April, 2010. (“PRIME the PIPELINE Project: Updating Teachers and Preparing STEM Students”)

242. National Council of Teachers of Mathematics, Denver, CO, October 2010. (“Reasoning Proportionally and Talking Math Lead to Success with Algebra”)

243. Ohio Council of Teachers of Mathematics, Akron, OH, October, 2010. (“The Not So Common Core: Thinking Algebraically, Reasoning Logically and Talking Math”)

244. First Baptism Church of Phoenix, January, 2011. (“Proportional Reasoning and Success with Algebra”)

244. National Science Teachers Association, San Francisco, CA, March, 2011. (“Prime the Pipeline Project: Putting Knowledge to Work”)

245. National Council of Supervisors of Mathematics, Indianapolis, IN, April, 2011. (“What’s the *x*? Developing Algebraic Thinking through Explorations in Number, Measurement, Geometry and Probability”)

246. National Council of Supervisors of Mathematics, NCSM Past Presidents Presentation for Leaders, Indianapolis, IN, April 2011 ( “Leading with No Money”)

247. National Council of Supervisors of Mathematics, Philadelphia, PA, April, 2012. (“Leading OnCore”)

248. National Council of Supervisors of Mathematics, NCSM Past Presidents Presentation for Leaders, Philadelphia, PA, April, 2012. (“In-service Programs that Make a Difference.”)

249. SkySong Conference, Tempe, AZ, May 2012. ( “Capturing and Nurturing Imaginations and Talents in STEM Fields”)

250. NSF STEM Smart Conference, Las Vegas, NV, September, 2012. (“Implementing STEM Programs that Capture and Nurture Imaginations and Talents”)

251. Arizona Association of Teachers of Mathematics, Tempe, AZ, September 2012. (“Mystifying Math Puzzlers” and “Proportional Reasoning OnCore.”)

252. National Council of Teachers of Mathematics, Hartford, CT, October 2012. (“Crosswalks and the Hairs on Your Head: Developing Logical Reasoning”)

253. Teachers College, Columbia University Mathematics Symposium, October 2012. (“Implementing STEM Programs”)

254. National Council of Supervisors of Mathematics, Annual Conference, (with Mary Cavanagh) Denver, CO, April 2013. (“ Assessing and Developing Algebraic Thinking and Reasoning Methods”)

255. National Council of Teachers of Mathematics- Research Conference (with Valentina Postelnicu), Denver, CO, April 2013. (“Assessing Problem Difficulty: Linearity and Linear Functions”)

256. National Council of Teachers of Mathematics (with Mary Cavanagh), Annual Conference, Denver, CO, April 2013. (“Balancing at a Mile High”)

257. Arizona Association of Teachers of Mathematics, Annual Conference, Tempe, AZ, September 2013 (“Developing Algebraic Thinking and Math Talk: OnCore”)

258. European Conference on Educational Research, Istanbul, Turkey, September 2013 (“Scientific Village Strategy for Enhancing the Pipeline to STEM Education”)

259. Northwest Conference, Bellevue, Washington, October 2013 ( Major Address: “Using Assessment Tasks to Identify and Develop Algebraic and Problem Solving Talents, ”Mystifying Mathematical Puzzlers”)

260. National Council of Teachers of Mathematics, Louisville, KY, November 2013 (Major Address: “Identifying and Developing Strengths of Gifted Students: Scientific Village Strategy”)

261. National Council of Teachers of Mathematics, New Orleans, LA, April 2014 (“Tasks to Identify and Develop Algebraic and Problem-Solving Talents”)

262. National Council of Supervisors of Mathematics, New Orleans, LA, April 2014 (“Designing Tasks to Reveal and Develop Students’ Mathematical Problem Solving Talents”)

263. National Council of Supervisors of Mathematics, New Orleans, LA, April 2014 (“Effective Professional Development” – Panel of past presidents of NCSM)

264. Arizona Association of Teachers of Mathematics, Fall Conference, Tempe, AZ, September 20, 2014 (“One if By Land, Two if By Sea, Math in Our Nation’s History: A Mathamusical Adventure”).

265. Southern California Association of Mathematics Teachers Conference, Palm Springs, CA, Fall 2014 (“ Barbie, Ken and STEM: Tasks and Projects to Advance Learning.”)

266. National Council of Supervisors of Mathematics, Boston, MA, April 2015 (“ Do You Know What Your Students Know? Strategies for Updating Teachers in Content and Assessment”)

267. National Council of Supervisors of Mathematics, Boston, MA, April 2015 (“Situational Learning: Learning at Point of Need” –Panel of Past Presidents of NCSM)

268. National Council of Teachers of Mathematics, Boston, MA, April 2015 (“Barbie, Ken and STEM: Adventures in Proportional and Logical Reasoning”)

269. Arizona Association of Teachers of Mathematics, Fall Conference, Tempe, AZ, September 19, 2015. (“MATHadazzles: Promoting Curiosity, Creativity and Logical Reasoning”)

270. Central Arizona AWIS, Tempe, AZ, January 15, 2016. (“Jumpstarting STEM Careers –Mathematics Panel”)

271. STEM AZ Collaborative (Arizona Science Teachers Association, Arizona Association of Teachers of Mathematics, and Arizona Technology in Education Association), 21st Century STEM: Integrate 2 Innovate Conference, Phoenix Convention Center, Tempe, AZ, January 22, 2016. (“Implementing STEM Programs that Capture and Nurture Imaginations and Talents”) (Carole Greenes and Mary Cavanagh)

272. Basis School Ahwatukee, Spring Science Fair, January 22, 2016, Phoenix, AZ. (“Science, Math, Art, Sports and History (SMASH) Jeopardy”)

273. National Council of Supervisors of Mathematics, Oakland, CA, April 2016 (“Speed Chats Exploring Critical Leadership Issues and Solutions”–Panel of Past Presidents of NCSM)

274. National Council of Teachers of Mathematics, San Francisco, CA, April 2016 (“High on a Hill: Visualization, Spatial Reasoning, and Geometric Modeling”) (Mary Cavanagh and Carole Greenes)

275. Teachers College, Columbia University Colloquium, New York, NY, September 2016 (“Implementing STEM Programs That Capture and Nurture Imaginations and Talents”)

276. National Council of Teachers of Mathematics, Phoenix, AZ, October 2016. (“Identifying Mathematically Promising Students and Developing their Talents”)

277. National Council of Supervisors of Mathematics, San Antonio, TX, April 2017 (“Creating MATHadazzles and Math Adventures: Update and Motivate Teachers to Learn and Teach More Advanced Mathematics”)

278 National Council of Supervisors of Mathematics, San Antonio, TX, April 2017 (“Speed Chats Critical Challenges and Effective Solutions”–Panel of Past Presidents of NCSM)

279. First Things First Early Childhood Summit 2017, Phoenix, AZ, August 2017. (“Challenging Young Children Mathematically: Capitalizing on Their Interests and Informal Knowledge”)

280. Arizona Association of Teachers of Mathematics, Phoenix, AZ, September 2017 (“75% Off Original Price After 50% Off Reduced Price: Huh?”)

281. Basis School Ahwatukee, Spring Science Fair, January 26, 2018, Phoenix, AZ. (“Science, Math, Art, Sports and History (SMASH) Jeopardy”)

282. National Council of Supervisors of Mathematics, Washington, DC, April 2018 (“Assessment Strategies” Speed Chats–Panel of Past Presidents of NCSM)

283. National Council of Supervisors of Mathematics, Washington, DC, April 2018 (“Musical Celebration of the 50th Anniversary of NCSM” in story and song.)

283. National Science Foundation, ITEST Community, Alexandria, VA, May 2018. (“App Maker Pro (AMP): Motivating STEM Study through App Development – Engaging Family and the Community”.)

284. TODOS, Scottsdale, AZ, June 2018 (“Curiosity Prompts Persistence and Learning by All Students: The Use of Context Rich Projects for Instruction and Assessment.”)

285. Arizona Association of Teachers of Mathematics, Tempe, AZ, September, 2018 (“Developing Algebraic Reasoning through Measurement Explorations”)

286. National Council of Supervisors of Mathematics, San Diego, CA, April, 2019 (“Project, Product, Performance: The 3P Approach to Professional Development”)

287. National Council of Supervisors of Mathematics, San Diego, CA, April, 2019 ( Past Presidents “Speed Chats”)

288. National Council of Teachers of Mathematics, San Diego, CA, April 2019 (Invited presentation: “Engagement Prompts Learning: Context Rich Projects and Puzzles for Instruction and Assessment”)

289. Mathematics in the Mountains Conference, Flagstaff, AZ, May 2019 (Invited presentation: “The 3P Approach to Stimulate Exploration, Persistence, and Learning in Mathematics”)