

CONTENTS

Position Statement of the National Council of Teachers of Mathematics: Induction and Mentoring of New Teachers	ix
Preface	xi
<i>Michaele F. Chappell, Middle Tennessee State University, Murfreesboro, Tennessee</i>	
Introduction	1
<i>Jane F. Schielack, Texas A&M University, College Station, Texas</i>	
<i>Sharon Zagorski, Milwaukee Public Schools, Milwaukee, Wisconsin</i>	
Section 1: Professional Growth	3
Four Crucial Insights for First-Year Teachers of Mathematics	5
<i>Steve Leinwand, American Institutes for Research, Washington, D.C.</i>	
Seven Things I Never Learned in Methods Class	6
<i>Margaret R. Meyer, University of Wisconsin—Madison, Madison, Wisconsin</i>	
Choosing and Working with a Mentor	6
<i>Sharon Zagorski, Milwaukee Public Schools, Milwaukee, Wisconsin</i>	
Keeping a Professional Journal	7
<i>Susan Kyle Arn, Metro Technology Center, Oklahoma City, Oklahoma</i>	
Team Teaching in Mathematics	8
<i>Amy Weber-Salgo, Marvin Moss Elementary School, Sparks, Nevada</i>	
Top Ten Things I Wish I Had Known When I Started Teaching	8, 17, 22, 23, 26, 36, 41, 46, 54, 55
<i>Cynthia Thomas, Washington State University, Pullman, Washington</i>	
Remember—Write It Down!	9
<i>Barbara A. Burns, Canisius College, Buffalo, New York</i>	
Keeping a Proper Perspective about Your Students	9
<i>Duane A. Cooper, Morehouse College, Atlanta, Georgia</i>	
Section 2: Curriculum and Instruction	10
PLANNING	
Useful Questions for Planning Instruction	12
<i>Lee Anne Coester, Washburn University, Topeka, Kansas</i>	
Getting to Know Your Students—Graphically!	13
<i>Ruth Shane, Kaye College of Education, Beersheva, Israel</i>	
Mathematics Centers	14
<i>Marcia Clafford, Milwaukee Public Schools, Elm Grove, Wisconsin</i>	
Three Birds with One Stone! Integrating, Mathematics, Reading, and Writing	16
<i>Connie Dierking, Ponce de Leon Elementary School, Clearwater, Florida</i>	
Primary Mathematics Interest Centers: Journal Writing	16
<i>Denise Edelson, Hannah G. Solomon Elementary School, Chicago, Illinois</i>	

Beginning the Mathematics Lesson	17
<i>Dorothy Y. White, University of Georgia, Athens, Georgia</i>	
Tap into the Magic of Your Students	17
<i>Claudia Bertolone-Smith, Minden Elementary School, Minden, Nevada</i>	
Journal Writing: Documenting What Students Have Learned	18
<i>Shannon Hart, James M. Kieran School, Bronx, New York</i>	
Help to Begin Teaching in a Problem-Solving Mode	18
<i>Keith Kull, L. L. Teach Incorporated, Bridgewater, New Jersey</i>	

QUESTIONING AND DISCLOSURE

Motivating Every Student through Effective Questioning	19
<i>Jane M. Wilburne, Shippensburg University, Shippensburg, Pennsylvania</i>	
Using Learning Logs in the Mathematics Classroom	19
<i>Roni Jo Draper, Brigham Young University, Provo, Utah</i>	
<i>Margaret E. McIntosh, University of Nevada—Reno, Reno, Nevada</i>	
Benefiting from Unexpected Discussions	21
<i>Ji-Eun Lee, Auburn University—Montgomery, Montgomery, Alabama</i>	
A Beginning Teacher's Testimonial	21
<i>Travis Olson, University of Missouri—Columbia, Columbia, Missouri</i>	
Students Sharing Their Mathematical Thinking	22
<i>Danielle Legnard, West School, New Canaan, Connecticut</i>	

TOOLS

Maximizing Manipulatives	22
<i>Thomasenia Lott Adams, University of Florida, Gainesville, Florida</i>	
Using Manipulatives Successfully	24
(Reprinted from October, 1990, <i>Arithmetic Teacher</i>)	
<i>Jeanne M. Joyner, North Carolina Department of Public Instruction, Raleigh, North Carolina</i>	
Students Choosing Manipulatives in the Elementary Classroom	25
<i>Gail Englert, School of International Studies at Meadow Brook, Norfolk, Virginia</i>	
Mathematics Learning with Technology	26
<i>Ed Dickey, University of South Carolina, Columbia, South Carolina</i>	
<i>Melina Deligiannidou, Lancaster High School, Lancaster, South Carolina</i>	
<i>Ashley Lanning, Swansea High School, Swansea, South Carolina</i>	
Ideas for a Successful Mathematics Classroom	27
<i>Lee Anne Coester, Washburn University, Topeka, Kansas</i>	

Section 3: Classroom Assessment 28

Ways to Get Students' Thinking on Paper: Recording More Than Just the Answer	30
<i>DeAnn Huinker, University of Wisconsin—Milwaukee, Milwaukee, Wisconsin</i>	
<i>Janis Freckmann, Milwaukee Public Schools, Milwaukee, Wisconsin</i>	

Supporting Students in Recording Their Thinking	31
<i>DeAnn Huinker, University of Wisconsin—Milwaukee, Milwaukee, Wisconsin</i>	
<i>Janis Freckmann, Milwaukee Public Schools, Milwaukee, Wisconsin</i>	
Problem Posing: What's in a Word?	31
<i>Fiona Thangata, University of Florida, Gainesville, Florida</i>	
Let <i>All</i> Students Show What They Know	31
<i>Patricia A. McCue, Isaac E. Young Middle School, New Rochelle, New York</i>	
<i>Jennifer Lana-Etzel, The Donald Hertz School, Bronx, New York</i>	
Section 4: Classroom Management and Organization	33
Nobody Can Really Take Your Place, but a Substitute Has to Try:	
Hints to Make Having a Substitute a Positive Experience	35
<i>Nancy Powell, Bloomington High School, Bloomington, Illinois</i>	
<i>Cathy Denbesten, Bloomington High School, Bloomington, Illinois</i>	
Making Group Work Effective in the Mathematics Classroom	36
<i>Abbe H. Herzig, University of Albany, Albany, New York</i>	
<i>David T. S. Kung, Saint Mary's College of Maryland, Saint Mary's City, Maryland</i>	
Topic Files as an Organizational Tool for the Classroom	37
<i>Susie Tummers, El Camino College, Torrance, California</i>	
Student Data Are As Close As Your Clipboard	38
<i>Denise Mewborn, University of Georgia, Athens, Georgia</i>	
<i>Patricia Huberty, University of Georgia, Athens, Georgia</i>	
Tips and Advice for Beginning Teachers	38
<i>Carolyn L. Pinchback, University of Central Arkansas, Conway, Arkansas</i>	
<i>Kathi Sweere, Ida Burns Elementary School, Conway, Arkansas</i>	
<i>Sara Dean, Ellen Smith Elementary School, Conway, Arkansas</i>	
Tips and Tidbits for Classroom Management	39
<i>Danielle Legnard, West School, New Canaan, Connecticut</i>	
Grouping Techniques: Ideas from Adventure Education	40
<i>Diana S. Perdue, Virginia State University, Petersburg, Virginia</i>	
Section 5: Equity	42
Addressing the Needs of All Students in the Elementary Mathematics Classroom	44
<i>Julie A. Sliva, San Jose State University, San Jose, California</i>	
<i>Mary Fay-Zenk, Joaquin Miller Middle School, San Jose, CA</i>	
Research Findings Involving English-Language Learners and Implications for	
Mathematics Teachers	45
<i>Sylvia Celedón-Pattichis, University of New Mexico, Albuquerque, New Mexico</i>	
Mathematics Instruction That Works for Girls	46
<i>Abbe H. Herzig, University of Albany, Albany, New York</i>	
<i>Rebecca Ambrose, University of California—Davis, Davis, California</i>	
<i>Olof Steinhorsdottir, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina</i>	
Tips for Teaching Culturally Diverse Students	47
<i>Joan Cohen Jones, Eastern Michigan University, Ypsilanti, Michigan</i>	

Bringing High Expectations to Life in an Urban Classroom 49
 Ido Jamar, George Westinghouse High School, Pittsburgh, Pennsylvania
 Vanessa R. Pitts, University of California at Berkeley, Berkeley, California

Section 6: School and Community 51

 Suggestions to Welcome Parents into the Mathematics Classroom 52
 Denise Edelson, Hannah G. Solomon Elementary School, Chicago, Illinois

 Calling Home: Keeping in Contact with Students’ Families 53
 Laura Brader-Araje, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina

 Sharing Your Principles and Standards with Parents 54
 Mark W. Ellis, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina
 Robert Q. Berry III, Old Dominion University, Norfolk, Virginia

 Bulletin Board Idea: Student History Time Lines 55
 Debra Daniels, Orlando, Florida

 Things I Never Learned in Methods Class: Support Staff 55
 Margaret R. Meyer, University of Wisconsin—Madison, Madison, Wisconsin

Online Resources for the Beginning Teacher 56

References 57