Tuesday Program

All sessions and events are located in the Walter E. Washington Convention Center.

NCSM Business Meeting
- State of the Organization
- Sponsor Partner Recognition

Session Types:
- Major Sessions
- Regular Sessions
- Extended Sessions

Commercial Sessions:
- Sponsor Showcases
- Technology Showcases

Caucus Meetings:
- Regional Caucuses
- International Caucus
- Past Presidents' Caucus

Ticketed Events
- Breakfast – Sponsored by Tom Snyder Productions/Scholastic, Inc. (*ticket required*)
- Luncheon – Sponsored by Texas Instruments (*ticket required*)
- Reception – Sponsored by Pearson (*ticket required*)

Sponsor Displays
- Hall B: 8:30 am – 12:15 pm and 2:15 pm – 4:00 pm

Registration
- Hall B: 6:45 am – 12:15 pm and 2:15 pm – 5:00 pm

Use the **Conference Planner** on page 107 to outline your daily schedule.

Wear your NCSM **Conference Name Badge** to gain entrance to sessions, ticketed events, and the sponsor display area.

Follow **Fire Code** standards in Sessions: no standing, no sitting on the floor, no moving of chairs from another room.

Program Summary Information
for Tuesday, April 21, 2009

See page 7 for Conference Strand descriptions.

Tuesday Summary

7:00–7:45: Session 96, Tuesday Breakfast (ticket required), David Dockterman, sponsored by Tom Synder Productions/Scholastic, Inc., Hall B

7:45–8:30: Session 97, NCSM Business Meeting and Sponsor Recognition, Tomothy Kanold, Randy Pippen, Valarie Elswick, Carol Edwards, Hall B

	140AB	143AB	143C	144A	144B	144C	145A
8:45	**Session 113** Primary (PK–2), Strand 3 ***SanGiovanni, Sammons,*** *Basic Facts: Building a Systemic Program for All Learners*	**Session 99** General, Strand 2 ***McKillop,*** *Shifting the Focus to Transformed Thinking*	**Session 100** General, Strand 2 ***Tinto, Zarach, Newman, Gullie,*** *Improving Teaching Strategies and Student Learning by Using a Guided Intervention Process*	**Session 110** General, Strand 4 ***Gummer, Gates, Strowbridge,*** *Formative Assessment Practices that Inform Both Teachers and Students*	**Session 114** Intermediate (3–5), Strand 6 ***Coates, Mayfield-Ingram,*** *Language and Mathematics: Connecting Research to Practice*	**Session 115** Intermediate (3–5), Strand 3 ***Jesberg, Zimmer,*** *Helping Staff Instruct Students in the Academic Vocabulary of Mathematics by Combining High Interest Mathematics Manipulatives and a Six-Step Process*	**Session 101** General, Strand 3 ***Ramsey, Peters, Hemphill, Gautier,*** *Curriculum Alignment: Models, Processes, and Lessons Learned*
9:45							
10:15							
10:30	**Session 131** General, Strand 6 ***McGlone, Barta,*** *Leading by Connecting Culture and Mathematics*	**Session 126** Middle (6–8), Strand 3 ***Phillips,*** *Developing Algebraic Reasoning in the Middle Grades - Coherence or Chaos?*	**Session 120** General, Strand 2 ***Wang-Iverson, Askey, Palumbo,*** *Slow Down to Think Mathematically*	**Session 137** Secondary (9–12), Strand 3 ***Dick,*** *Making Sense of Mathematics: The Answer Is the Question*	**Session 133** Intermediate (3–5), Strand 7 ***Fanning, Crawford, Rooks,*** *Lost in Translation? Learning to Speak the Languages of Fluency and Understanding to Develop Mathematical Proficiency*	**Session 134** Middle (6–8), Strand 2 ***Fagan,*** *Improving Access to Language: A Key to Improving Mathematics Learning*	**Session 121** General, Strand 3 ***Jones, Berry,*** *Changing Their Minds: Making the Textbook a Resource Instead of the Curriculum*
11:15							
12:00							

8:30–12:15: Exhibit Hall Open

12:15–2:15: Session 140, Tuesday Luncheon (ticket required), Sponsored by Texas Instruments, Patricia Wright, Gail Burrill, Jane Gillespie, Carl Veater, Presentation of Iris Carl Grants, Hall B

Tuesday Summary

	140AB	143AB	143C	144A	144B	144C	145A	
2:30	**Session 158** Middle (6–8), Strand 2 ***Maxwell, Poetzl,*** *Providing Responsive Interventions*	**Session 147** Intermediate (3–5), Strand 6 ***Pittock,*** *Research and Best Practices to Help Teachers Motivate Struggling Mathematics Students*	**Session 142** General, Strand 6 ***Hull, Harbin Miles, Balka,*** *Implementing Positive Change in Mathematics Through Research-Based Coaching*	**Session 161** Secondary (9–12), Strand 4 ***Halka, Hull,*** *Achieve's ADP Algebra I and Algebra II Exams: A Multi-State Effort*	**Session 159** Middle (6–8), Strand 1 ***Brodesky,*** *Strategies for Making Middle School Mathematics More Accessible to Students with Learning Disabilities*	**Session 157** Intermediate (3–5), Strand 1 ***Whittington, Belisle-Chatterjee, Molina,*** *Meeting the Needs of Teachers of English Language Learners (ELL) in the Mathematics Classroom*	**Session 143** General, Strand 3 ***Bradsby, Leinwand,*** *A Collaborative Discussion with NCSM Past Presidents about Creating a Rational K-12 Mathematics Curriculum*	**2:15–4:00: Exhibit Hall Open**
3:30								
4:00		**Session 169** ***Barta,*** *Western Region 1 Caucus*	**Session 162** ***Karsten,*** *Canadian Regional Caucus*	All Tuesday 4:00–5:30 sessions are Caucuses.			**Session 165** ***Boswell,*** *Eastern Region 1 Caucus*	
5:30								

5:45–7:00: Session 173, Tuesday Reception (ticket required), Sponsored by Pearson, Hall B

Tuesday Summary

7:00–7:45: Session 96, Tuesday Breakfast (ticket required), David Dockterman, sponsored by Tom Synder Productions/Scholastic, Inc., Hall B

7:45–8:30: Session 97, NCSM Business Meeting and Sponsor Recognition, Tomothy Kanold, Randy Pippen, Valarie Elswick, Carol Edwards, Hall B

	145B	146AB	146C	147A	147B	149AB	150A
8:45	**Session 105** Secondary (9–12), Strand 7 ***DeMille, Pagni,*** *Mathematics Teacher Leaders, PRIMED to Lead: Lessons Learned from Teachers Assisting Students to Excel in Learning Mathematics (TASEL-M)*	**Session 98: Major** General ***Kanold,*** *Becoming a PRIME Stage 2 and 3 Leader: Understanding and Knowing the Power of Our Leadership Influence!*	**Session 106** Secondary (9–12), Strand 3 ***Seeley,*** *Not Your Grandpa's Algebra: Rethinking PK-12 Mathematics for College and Workforce Readiness*	**Session 108: CTB/ McGraw-Hill Sponsor Showcase** General ***Moellering,*** *Transforming Algebra Instruction and Achievement via an Online Formative Assessment Solution*	**Session 109: Pearson Technology Showcase** General ***White,*** *The Power of Student Gaming—Pearson Elementary and Middle School Math Programs*	**Session 116** Middle (6–8), Strand 5 ***Alejandre, Hogan, Martin, Miller,*** *Developing Leadership in Technology Integration: An Effective Online Teacher Workshop Model*	**Session 107** Secondary (9–12), Strand 1 ***Brown, Hull,*** *Changing Their Minds*
9:45							
10:15	**Session 122** General, Strand 7 ***Caldwell, Sykes, Gilstrap, Kopperman,*** *Collaborating to Improve Mathematics Achievement in an Urban District: The Rowan/ Camden Mathematics Partnership*	**Session 119: Major** General ***Adams,*** *The Positioning of African American Schoolgirls as Mathematics and Science Learners*	**Session 123** General, Strand 4 ***Leinwand,*** *Formative Assessment: Moving Behind the Hype and the Rhetoric to Substance and Practice*	**Session 129: Holt McDougal Sponsor Showcase** General ***Trotter, Bailey,*** *Intervention Tools to put Struggling Students Back on Track*	**Session 130: Texas Instruments Technology Showcase** General ***Wilson,*** *What's New At Texas Instruments Now?*		**Session 124** General, Strand 3 ***Briars, Harbin Miles,*** *Knowing and Modeling PRIME Curriculum Leadership!*
10:30							
11:15						**Session 138** Secondary (9–12), Strand 5 ***Rasmussen, Pope,*** *Developing Algebraic Thinking with Technology*	
12:00							

8:30–12:15: Exhibit Hall Open

12:15–2:15: Session 140, Tuesday Luncheon (ticket required), Sponsored by Texas Instruments, Patricia Wright, Gail Burrill, Jane Gillespie, Carl Veater, Presentation of Iris Carl Grants, Hall B

Tuesday Summary

	145B	146AB	146C	147A	147B	149AB	150A	
2:30	**Session 144** General, Strand 7 ***Marsh, Davis, Kobett,*** *Got Sense? A Professional Learning Journey for Number Sense*	**Session 141: Major** General ***Kepner,*** *Reasoning and Sense-Making in Mathematics: Issues for Leaders, Teachers, and the Mathematics Community. An Update on NCTM Initiatives and Beyond*	**Session 146** Primary (PK–2), Strand 6 ***Fuson, Ginsburg, Beckmann, Clements,*** *Rept of the Nat'l Rsrch Council's Committee on Early Childhood Mathematics: Learning Paths Toward Excellence and Equity*	**Session 151: America's Choice Sponsor Showcase** General ***Daro,*** *Language, Culture, and Motivation in the Mathematics Classroom Leading Up to Algebra. What to Do When Students Aren't Ready for Algebra*	**Session 152: Explore Learning Technology Showcase** General ***Shuster,*** *Using Online Simulations from Explore-Learning (Gizmos) to Improve Student Achievement in Math*	**Session 153** General, Strand 3 ***Milou,*** *A Balanced Curriculum: The Integration of Basic Skills and Conceptual Understanding*	**Session 149** Middle (6–8), Strand 6 ***Tsankova, Sabinin,*** *Key Components of Effective Prof Dev for Grade 6-8 Teachers: Pedagogical Content Knowledge, Research-Based, Dev of Students' Math Thinking*	**2:15–4:00: Exhibit Hall Open**
3:30								
4:00	**Session 166** ***Kendrick,*** *Eastern Region 2 Caucus*	**Session 171** ***Fulmore,*** *International Attendees Caucus*	**Session 172** ***Bradsby,*** *NCSM Past Presidents Caucus*	**Session 164** ***Schrock,*** *Central Region 2 Caucus*	All Tuesday 4:00–5:30 sessions are Caucuses.		**Session 167** ***Newman,*** *Southern Region 1 Caucus*	
5:30								

5:45–7:00: Session 173, Tuesday Reception (ticket required), Sponsored by Pearson, Hall B

Tuesday Summary

7:00–7:45: Session 96, Tuesday Breakfast (ticket required), David Dockterman, sponsored by Tom Synder Productions/Scholastic, Inc., Hall B

7:45–8:30: Session 97, NCSM Business Meeting and Sponsor Recognition, Tomothy Kanold, Randy Pippen, Valarie Elswick, Carol Edwards, Hall B

	150B	151A	151B	152A	152B	154A	154B
8:45	**Session 102** General, Strand 2 ***Warrick, Dobbins,*** *Develop and Lead with Coaching: Coaches, Teachers, and Parents*	**Session 104** Middle (6–8), Strand 2 ***Novak, Powers,*** *The Lesson Experiment: Learning to Learn from Teaching*	**Session 103** General, Strand 4 ***Moyer,*** *Using Test Development Strategies to Align Instruction and Assessment*	**Session 117** Secondary (9–12), Strand 7 ***Kenney, Hart,*** *Professional Development for Grades 6–12 Teachers that Updates and Connects Content Standards and Models Powerful Pedagogy through Discrete Mathematics*	**Session 118** Middle (6–8), Strand 1 ***Driscoll, Nikula, DiMatteo,*** *Enhancing Mathematics and Language Understanding through Geometry: A Model for Supporting Mathematics Coaches and Teachers Working with English Language Learners*	**Session 111** General, Strand 3 ***Dixon,*** *A Leap of Faith: Transitioning to a Focused Curriculum*	**Session 112** General, Strand 1 ***Crouch, Ficca, Bohan,*** *Implications of Standards-Aligned Systems of Curriculum, Instruction, and Assessment for Improving the Achievement of Students with Disabilities*
9:45							
10:15	**Session 127** Intermediate (3–5), Strand 7 ***Gehron,*** *Coaches, Are You Looking for Ways to Get All Teachers Involved in Professional Development?*	**Session 125** General, Strand 2 ***Pruske, Fossum, Richards,*** *Where in the World Are You? Supporting and Developing School-Based Mathematics Teacher Leaders*	**Session 128** Middle (6–8), Strand 3 ***Gavin,*** *Accent on Algebra: Developing Conceptual Understanding by Making Connections Across the Middle Grades Curriculum*				
10:30				**Session 135** Middle (6–8), Strand 4 ***Webb, Larson, Matassa,*** *The Development of Teacher Expertise in Classroom Assessment as a Context for Deeper Understanding of Mathematics*	**Session 132** Primary (PK–2), Strand 2 ***Smith, Necciai,*** *Leading from Beside: Co-accountability to Foster Teacher Growth*	**Session 136** Middle (6–8), Strand 3 ***Becker,*** *Open-Ended Problems That Fit the Middle School Curriculum—With Extensions*	**Session 139** College, Strand 4 ***Gochenaur, Long,*** *Mining for Gold with Guided Field Investigations*
11:15							
12:00							

8:30–12:15: Exhibit Hall Open

12:15–2:15: Session 140, Tuesday Luncheon (ticket required), Sponsored by Texas Instruments, Patricia Wright, Gail Burrill, Jane Gillespie, Carl Veater, Presentation of Iris Carl Grants, Hall B

Tuesday Summary

	150B	151A	151B	152A	152B	154A	154B	
2:30	**Session 150** Secondary (9–12), Strand 4 ***Maly, Kranendonk,*** *Achieve Equity in Your Classroom by Developing Effective Descriptive Feedback with Assessments Based on Standards*	**Session 148** Intermediate (3–5), Strand 3 ***Yeap,*** *Teach Less, Learn More—Curriculum Implementation in Singapore Schools*	**Session 145** General, Strand 6 ***Heuer, Reed, Klaas,*** *Mathematics Coaching for Principals: Increasing Leadership Content Knowledge (LCK) for Supervision*	**Session 154** General, Strand 6 ***Bastable, Russell, Schifter,*** *Identifying Teacher Moves that Help Students Learn How to Participate in Mathematical Discussion: A Classroom Case from Grade 3*	**Session 155** General, Strand 7 ***Delozier, Baker, Sandoval, Giese,*** *Leading the Learning: A Mathematics Specialist's Journey*	**Session 160** Middle (6–8), Strand 5 ***Vennebush,*** *Developing Teacher Leaders with Online Resources*	**Session 156** General, Strand 3 ***Bohan,*** *Pennsylvania's Standards-Aligned System in Mathematics*	**2:15–4:00: Exhibit Hall Open**
3:30								
4:00	**Session 168** ***Mitchell,*** *Southern Region 2 Caucus*	**Session 163** ***Viktora,*** *Central Region 1 Caucus*	**Session 170** ***Munshin,*** *Western Region 2 Caucus*					
5:30								

All Tuesday 4:00–5:30 sessions are Caucuses.

5:45–7:00: Session 173, Tuesday Reception (ticket required), Sponsored by Pearson, Hall B

Tuesday Sessions by Strand

Strand 1. Equity Leadership		
Session	Room	Time
107	150A	8:45–9:45
112	154B	8:45–10:15
118	152B	8:45–10:15
157	144C	2:30–4:00
159	144B	2:30–4:00

Strand 2. Teaching and Learning Leadership		
Session	Room	Time
99	143AB	8:45–9:45
100	143C	8:45–9:45
102	150B	8:45–9:45
104	151A	8:45–9:45
120	143C	10:15–11:15
125	151A	10:15–11:15
132	152B	10:30–12:00
134	144C	10:30–12:00
158	140AB	2:30–4:00

Strand 3. Curriculum Leadership		
Session	Room	Time
101	145A	8:45–9:45
106	146C	8:45–9:45
111	154A	8:45–10:15
113	140AB	8:45–10:15
115	144C	8:45–10:15
121	145A	10:15–11:15
124	150A	10:15–11:15
126	143AB	10:15–11:15
128	151B	10:15–11:15
136	154A	10:30–12:00
137	144A	10:30–12:00
143	145A	2:30–3:30
148	151A	2:30–3:30
153	149AB	2:30–4:00
156	154B	2:30–4:00

Strand 4. Assessment Leadership		
Session	Room	Time
103	151B	8:45–9:45
110	144A	8:45–10:15
123	146C	10:15–11:15
135	152A	10:30–12:00
139	154B	10:30–12:00
150	150B	2:30–3:30
161	144A	2:30–4:00

Strand 5. Technology Leadership		
Session	Room	Time
116	149AB	8:45–10:15
138	149AB	10:30–12:00
160	154A	2:30–4:00

Strand 6. Leadership Connecting Research & Practice		
Session	Room	Time
114	144B	8:45–10:15
131	140AB	10:30–12:00
142	143C	2:30–3:30
145	151B	2:30–3:30
146	146C	2:30–3:30
147	143AB	2:30–3:30
149	150A	2:30–3:30
154	152A	2:30–4:00

Strand 7. Leading with Professional Learning		
Session	Room	Time
105	145B	8:45–9:45
117	152A	8:45–10:15
122	145B	10:15–11:15
127	150B	10:15–11:15
133	144B	10:30–12:00
144	145B	2:30–3:30
155	152B	2:30–4:00

Tuesday Breakfast

Session 96 **Sponsored by Tom Snyder Productions/Scholastic, Inc.** **Hall B**

7:00 – 7:45 AM

(ticket required)

Scholastic, the global children's publishing, education, and media company, has created products and services that educate, entertain, and motivate children to help enlarge their understanding of the world around them. Tom Snyder Productions, a Scholastic company, creates innovative software products and professional development services to inspire great teaching and improve student learning.

Visit Tom Snyder Productions/Scholastic at Booth # 10 in Hall B or at www.tomsnyder.com and www.scholastic.com.

Cognitive Science: The Implications on Math Education

David Dockterman, Chief Academic Officer, Tom Snyder Productions

David Dockterman is Vice President of Product Development and Chief Academic Officer at Tom Snyder Productions, an adjunct lecturer on education at the Harvard Graduate School of Education, and an author.

Dockterman has dedicated himself to supporting classroom teaching and the successful integration of technology into schools. At Tom Snyder Productions he led the development of educational software for the classroom for more than 20 years. He also co-created and co-wrote the *Science Court TV* series that ran for three years on ABC's *Saturday Morning*, as well as designed the school version of this animated TV show.

Before joining Tom Snyder Productions, Dockterman received his Ed.D. fom the Harvard Graduate School of Education and taught high-school social studies.

NCSM Business Meeting and Sponsor Recognition

Timothy D. Kanold
NCSM President

Randy Pippen
NCSM Treasurer

Valarie A. Elswick,
NCSM Conference Coordinator

Carol A. Edwards
NCSM Event Coordinator

Session 97 **Hall B**

Tuesday 7:45 – 8:30 AM

NCSM President Timothy D. Kanold will provide progress on the 2008-2009 NCSM projects, initiatives, and newly released position papers. Treasurer Randy Pippen will provide information regarding the current financial status of the organization.

NCSM Sponsor Partner Recognition Ceremony

Please join our 2009 Washington, DC, Conference Planning Committee—Valarie A. Elswick, Susan Beal, Linda Fulmore, Carol A. Edwards, Fern A.Tribbey, Steve Tribbey, Diana G. Kendrick, Timothy D. Kanold, Danette Garlock, and Terri K. Belcher—in celebrating the many wonderful commercial companies who sponsor and support the efforts of NCSM members across the country. This is our chance to publicly thank them and celebrate their commitment to the improvement of mathematics education. We thank all NCSM Sponsor Partners for their continued and sustained support of mathematics education leaders and our organization.

Tuesday 8:45–9:45

Session 98: Major Session

General **146ABC**

Becoming a PRIME Stage 2 and 3 Leader: Understanding and Knowing the Power of Our Leadership Influence!

Timothy D. Kanold, President, National Council of Supervisors of Mathematics, Chicago, IL

This session will provide six specific leadership behaviors for each step of the influence process. Based upon the "Influence" research, we will learn how to make change not only achievable and sustainable, but inevitable. The Stage 2 PRIME leader must become skilled at influencing others toward best practice behaviors.

Presider: Diana Kendrick, NCSM Eastern Region 2 Director, Upper Marlboro, MD

Timothy D. Kanold is President of the National Council of Supervisors of Mathmatics (NCSM) and was the lead editor for NCSM's PRIME Leadership Framework. Currently, he presents Professional Learning Community Leadership training for school administrators across the country.

Kanold is co-author of 21 mathematics textbooks grades 6–12, and has published numerous articles on School Leadership. He has presented leadership seminars nationally and internationally over the past two decades, with the primary focus on erasing inequities that exist in student learning experiences for all children in Mathematics and English.

Kanold was Superintendent at Adlai E. Stevenson High School District 125 in Lincolnshire, Illinois, for six years, where he also served as Director of Mathematics and Science for 17 years. He has received many awards, including the Presidential Award for Excellence in Mathematics Teaching in 1986 and the Outstanding School Administrator Award from the Illinois State Board of Education in 1994.

Session 99

General **Strand 2** **143AB**

Shifting the Focus to Transformed Thinking

How many students are still employing a naive strategy, such as counting, to solve most problems long after they have learned other strategies that would be more efficient? In mathematics leaders' work with teachers, has the time come to put the emphasis on curriculum, teaching, and assessment to transform mathematical thinking?

David McKillop, Making Math Matter Inc., Truro, Nova Scotia, Canada

Session 100

General **Strand 2** **143C**

Improving Teaching Strategies and Student Learning by Using a Guided Intervention Process

As one component of professional development for an urban Mathematics Science Partnership project and a Teacher/Leader Quality project, teachers developed Guided Intervention Folders for Grades 6–8 students. This process was successful in improving students' mathematics achievement and as a tool for improving teaching practices.

Patricia Tinto, Syracuse City School District, Syracuse, NY
Nancy Zarach, Syracuse City School District, Syracuse, NY
Dianna Newman, University at Albany, Albany, NY
Kathy Gullie, University at Albany, Albany, NY

Session 101

General **Strand 3** **145A**

Curriculum Alignment: Models, Processes, and Lessons Learned

Is your district in need of curriculum alignment? Join us for lessons learned through different curriculum models and processes that evolved from work with a single district to a cohort of districts to a curriculum product now in use throughout the state.

Tamara Ramsey, Education Service Center Region XIII, Austin, TX
Jo Peters, Education Service Center Region XIII, Austin, TX
Susan Hemphill, Education Service Center Region XIII, Austin, TX
Carol Gautier, Education Service Center Region XIII, Austin, TX

Session 102

General **Strand 2** **150B**

Develop and Lead with Coaching: Coaches, Teachers, and Parents

Looking at a successful multi-dimensional coaching model for low socio-economic schools, participants will discuss an overview of the model; participate in journaling, communication, conferencing, and assessment strategies; and review successful parental invention. The coaching model is aligned with NCTM Standards and the equity indicators and stages of the PRIME Leadership Framework.

Pam Warrick, University of Arkansas at Little Rock, Little Rock, AR
C. Neelie Dobbins, University of Arkansas at Little Rock, Little Rock, AR

Turn in event admission tickets you do not plan to use at the Registration Desk or near room 151.

Tuesday 8:45-9:45 (Regular continued)

Session 103

General **Strand 4** **151B**

Using Test Development Strategies to Align Instruction and Assessment

Assessment is only effective as a tool for informing us about the instruction of students if it is closely aligned with instruction. This session will introduce a planning model that will assist teachers and leaders in aligning instruction and assessment based on strategies test developers use to create effective assessments.

Eric Moyer, Pearson, Austin, TX

Session 104

Middle (6–8) **Strand 2** **151A**

The Lesson Experiment: Learning to Learn from Teaching

This session reports on our efforts to implement Hiebert's (2007) framework for helping "teachers learn how to teach from studying teaching" with pre- and in-service 6th-12th grade mathematics teachers. This framework is a tool to improve instruction and student learning and to generate knowledge for teaching. Handouts and rubrics provided.

Jodie Novak, University of Northern Colorado, Greeley, CO
Robert Powers, University of Northern Colorado, Greeley, CO

Session 105

Secondary (9–12) **Strand 7** **145B**

Mathematics Teacher Leaders, PRIMED to Lead: Lessons Learned from Teachers Assisting Students to Excel in Learning Mathematics (TASEL-M)

Teacher leaders empower colleagues to improve mathematics programs through NCSM's PRIME Leadership Framework and professional learning communities (PLCs). We will share lessons learned through the TASEL-M NSF-funded project with low-performing high schools and feeder middle schools to build teacher capacity and pedagogical content knowledge.

Dianne DeMille, Orange County Department of Education, Costa Mesa, CA
David Pagni, California State University, Fullerton, Fullerton, CA

Session 106

Secondary (9–12) **Strand 3** **146C**

Not Your Grandpa's Algebra: Rethinking PK-12 Mathematics for College and Workforce Readiness

What steps can get us to a continuous, coherent, PK-12 mathematics curriculum that prepares all students to enter college or the workforce in the rapidly changing world of the 21st century? What needs to happen in high school to build on increasing coherence and beginnings of success in elementary and middle school mathematics?

Cathy Seeley, University of Texas Dana Center, Austin, TX

Session 107

Secondary (9–12) **Strand 1** **150A**

Changing Their Minds

Do students' self-beliefs impact their achievement? How about teacher beliefs? The typical culture of the high school mathematics classroom may be creating roadblocks to equity for many students. We will share some fresh ideas for shaping the beliefs and attitudes of teachers and students via a year-long Algebra I intervention.

Lisa Brown, University of Texas Dana Center, Austin, TX
Susan Hudson Hull, University of Texas Dana Center, Austin, TX

Session 108: CTB/McGraw-Hill Sponsor Showcase

General **147A**

Transforming Algebra Instruction and Achievement via an Online Formative Assessment Solution

Tom Moellering, CTB/McGraw-Hill, Monterey, CA

Acuity Algebra provides a comprehensive standard-based online or paper-and-pencil solution to assess student readiness, benchmark understanding of algebraic concepts and gauge student proficiency. This session will detail best practices in a district's implementation of Acuity Algebra and show how resulting data identifies strengths and weaknesses in comprehension and helps modify instruction.

Session 109: Pearson Technology Showcase

General **147B**

The Power of Student Gaming—Pearson Elementary and Middle School Math Programs

Kristin White, Pearson, Glenview, IL

The world is changing and so are your students! Pearson is proud to reach today's digital natives with an exclusive partnership with Tabula Digita! Connect to today's learners through DimensionM™'s Single and Multiplayer immersive educational gaming, tied directly to enVision Math and Prentice Hall Middle[EL] School Mathematics. Explore new gaming methods to engage, motivate, and inspire your students while offering additional mathematics practice.

Turn cell phones off or put on vibrate while in sessions.

Nominations for 2010 NCSM Board positions are open. See page 84.

Tuesday 8:45–10:15 (Extended)

Session 110

General **Strand 4** **144A**

Formative Assessment Practices that Inform Both Teachers and Students

Facilitating incorporation of formative assessment practices is the focus of the National Science Foundation (NSF) / Interagency Education Research Initiative (IERI) study of a mathematics problem solving model. This session explores the challenges and successes teachers experience using a trait-based feedback guide to respond to students engaged in problem solving.

Edith Gummer, Northwest Regional Educational Laboratory, Portland, OR
Claire Gates, Northwest Regional Educational Laboratory, Portland, OR
Jessica Strowbridge, University of Idaho, Moscow, ID

Session 111

General **Strand 3** **154A**

A Leap of Faith: Transitioning to a Focused Curriculum

Florida was the first state to base its standards on Curriculum Focal Points. Experienced-based aspects of transitioning to a curriculum that is focused on depth rather than breadth will be shared with special attention given to the process of leading teachers and administrators to understand what it means to teach deeply.

Juli Dixon, University of Central Florida, Orlando, FL

Session 112

General **Strand 1** **154B**

Implications of Standards-Aligned Systems of Curriculum, Instruction, and Assessment for Improving the Achievement of Students with Disabilities

This session will describe a standards-aligned system that provides a common framework based upon research and best practice for continuous school enhancement/improvement. Such a system has tremendous implications for improving mathematical understanding and state assessment results for students with disabilities. Specific examples will be provided and discussed.

Cecil Crouch III, PA Training and Technical Assistance Network, Pittsburgh, PA
Tracy Ficca, PA Training and Technical Assistance Network, Harrisburg, PA
Jim Bohan, Intermediate Unit #13, Lancaster, PA

Session 113

Primary (PK–2) **Strand 3** **140AB**

Basic Facts: Building a Systemic Program for All Learners

Basic facts are the building blocks for mathematics success. Students must attain automaticity through a structured curriculum that focuses on strategies and differentiation. This session will share the research and development of a district-wide basic fact program.

John SanGiovanni, Howard County Public School System, Ellicott City, MD
Kay Sammons, Howard County Public School System, Ellicott City, MD

Session 114

Intermediate (3–5) **Strand 6** **144B**

Language and Mathematics: Connecting Research to Practice

In this interactive session, we will experience a professional development model which highlights the interplay between acquiring language and learning mathematics. The theoretical foundation for the work includes the tenets of adult learning and conditions that foster change.

Grace Coates, University of California, Berkeley, CA
Karen Mayfield-Ingram, University of California, Berkeley, CA

Session 115

Intermediate (3–5) **Strand 3** **144C**

Helping Staff Instruct Students in the Academic Vocabulary of Mathematics by Combining High Interest Mathematics Manipulatives and a Six-Step Process

Investigate how to use mathematics manipulatives with Marzano and Pickering's "Six-step process for direct instruction in subject-area vocabulary," to help students speak, write, and listen to the language of mathematics. Participate in hands-on activities that are mathematically sound and supportive of one or more of the Six Steps Marzano outlines.

Robert Jesberg, K'NEX Education, Hatfield, PA
Janie Zimmer, Research-Based Education, Reading, PA

Attend your Regional Caucus Session. See page 58.

Support the Iris Carl Mathematics Leadership Fund. See pages 51 and 85.

Tuesday 8:45-10:15 (Extended continued)

Session 116

Middle (6–8) **Strand 5** **149AB**

Developing Leadership in Technology Integration: An Effective Online Teacher Workshop Model

Examine a model of professional development from the Math Forum @ Drexel that provides opportunities for teachers to build their understanding of mathematical concepts, explore ways that they can create similar experiences for students, and learn more about resources and support which will enable them to become leaders in this community.

Suzanne Alejandre, The Math Forum at Drexel University, Philadelphia, PA
Marie Hogan, Traweek Middle School, West Covina, CA
Glenys Martin, W. P. Sandin Composite High School, Shellbrook, Saskatchawan, Canada
Ashley Miller, China Grove Middle School, China Grove, NC

Session 117

Secondary (9–12) **Strand 7** **152A**

Professional Development for Grades 6–12 Teachers that Updates and Connects Content Standards and Models Powerful Pedagogy through Discrete Mathematics

NCTM's Navigating through Discrete Mathematics, Grades 6–12 is a practical resource for lively, interactive professional development. Authors model and discuss professional development that deepens teachers' content knowledge, provides suggestions for integrating number, algebra, geometry, and discrete mathematics standards, and focuses on powerful pedagogy.

Margaret Kenney, Boston College, Chestnut Hill, MA
Eric Hart, Maharishi University of Management, Fairfield, IA

Session 118

Middle (6–8) **Strand 1** **152B**

Enhancing Mathematics and Language Understanding through Geometry: A Model for Supporting Mathematics Coaches and Teachers Working with English Language Learners

Learn how mathematics teachers and coaches in three New York City schools improved support for English language learners by using protocols focused on academic language and mathematical understanding to guide both lesson planning and coaching discussions about lesson observations. Share benefits from the perspectives of the teachers and coaches.

Mark Driscoll, Education Development Center, Newton, MA
Johannah Nikula, Education Development Center, Newton, MA
Rachel Wing DiMatteo, Education Development Center, Newton, MA

Tuesday 10:15–11:15

Session 119: Major Session

General **146AB**

The Positioning of African American Schoolgirls as Mathematics and Science Learners

Thomasenia Lott Adams, University of Florida, Gainsville, FL

The speaker, a mathematics educator, is Co-Principal Investigator on a three-year National Science Foundation-funded study to explore how African American girls within impoverished communities position themselves in relation to mathematics and science learning and the impact of teachers, counselors and parents' positionality on the girls' science and mathematics learning experiences.

Presider: Carol Newman, NCSM Southern 1 Region Director, Plantation, FL

Thomasenia Lott Adams is professor of mathematics education in the College of Education, University of Florida, is the current President of the Florida Association of Mathematics Teacher Educators, serves on the board of directors of the Florida Council of Teachers of Mathematics, and is the out-going editor of the Mathematical Roots Department of Mathematics Teaching in the Middle School.

Her scholarship includes publishing and presenting her work. A recent publication is based on the three-year research grant funded by the National Science Foundation to study the positionality of rising sixth-grade girls toward mathematics and science.

Adams received the 2007 Mary L. Collins Award from the Florida Association of Teacher Educators.

Session 120

General **Strand 2** **143C**

Slow Down to Think Mathematically

This session will introduce participants to "problems without figures," which encourage students' mathematical thinking and discussion of diverse strategies. Without the distraction of figures (numbers), students can focus on how they would approach solving a problem.

Patsy Wang-Iverson, The Gabriella and Paul Rosenbaum Foundation, Bryn Mawr, PA
Richard Askey, University of Wisconsin-Madison (retired), Madison, WI
Marian Palumbo, Bernards Township Schools, Basking Ridge, NJ

Tuesday 10:15-11:15 (Regular continued)

Session 121

General **Strand 3** **145A**

Changing Their Minds: Making the Textbook a Resource Instead of the Curriculum

Alignment of state curriculum frameworks with district resources is fundamental to student achievement. Curriculum frameworks will be analyzed and subdivided into more precise skills. Textbooks will be examined to see if they meet the framework requirements. Gaps between the curriculum frameworks and textbooks will be identified.

Kimberly Jones, The Learning Institute, Hot Springs, AR
Pam Berry, The Learning Institute, Hot Springs, AR

Session 122

General **Strand 7** **145B**

Collaborating to Improve Mathematics Achievement in an Urban District: The Rowan/Camden Mathematics Partnership

This presentation will describe the mathematics coaches' collaborative and will focus on the viewpoints of the coaches, the district mathematics supervisors, the university facilitator, and the project director. The session will include sample activities and agendas, with opportunities for questions and discussion.

Janet Caldwell, Rowan University, Glassboro, NJ
Jacqueline Sykes, Camden City Schools, Camden, NJ
Daphne Gilstrap, Camden City Schools, Camden, NJ
Alexis Kopperman, Rowan University, Glassboro, NJ

Session 123

General **Strand 4** **146C**

Formative Assessment: Moving Behind the Hype and the Rhetoric to Substance and Practice

Formative assessment has typically become the latest buzzword and most recent panacea presented with great hype and much blather. This session will engage participants in the substance behind the jargon and take a practical look at the formative assessment practices that research suggests can make a difference in student achievement.

Steven Leinwand, NCSM Past President, American Institutes for Research, Washington, DC

Session 124

General **Strand 3** **150A**

Knowing and Modeling PRIME Curriculum Leadership!

This interactive session will provide participants with the opportunity to develop understanding of the Curriculum Principle leadership actions as described in The NCSM PRIME Leadership Framework. Participants will spend time using self assessment tools to connect the Curriculum Principle actions into the context of their workplace. The latest PRIME Toolkit materials will be provided.

Diane Briars, NCSM President-Elect, Pittsburgh, PA
Ruth Harbin Miles, NCSM Membership Chair, Hays, KS

Session 125

General **Strand 2** **151A**

Where in the World Are You? Supporting and Developing School-Based Mathematics Teacher Leaders

How do mathematics teacher leaders (MTLs) at different stages of their own leadership trajectory effect change with teachers, students, administrators, and climate in their buildings? Examine the work of MTLs in classrooms and schools across a large urban district that fosters professional growth and leadership development in mathematics education.

Lee Ann Pruske, Milwaukee Public Schools, Milwaukee, WI
Astrid Fossum, Milwaukee Public Schools, Milwaukee, WI
Paige Richards, Milwaukee Public Schools, Milwaukee, WI

Session 126

Middle (6–8) **Strand 3** **143AB**

Developing Algebraic Reasoning in the Middle Grades - Coherence or Chaos?

With 50 different state frameworks, it is difficult to maintain coherence and integrity of any mathematics curriculum. This talk will present examples of students' algebraic reasoning in middle grades from classrooms using a National Science Foundation-funded curriculum and raise issues about the challenges in developing algebraic reasoning.

Elizabeth Phillips, Michigan State University, East Lansing, MI

Session 127

Intermediate (3–5) **Strand 7** **150B**

Coaches, Are You Looking for Ways to Get All Teachers Involved in Professional Development?

Learn about one school's journey to raise student achievement in mathematics through unique job-embedded professional development that transfers to classroom practice, even with reluctant teachers. I will share processes and activities used in coaching and building professional learning communities. Outcomes that include student data and teacher feedback will be reported.

Elizabeth Gehron, Seminole County Public Schools, Sanford, FL

Session 128

Middle (6–8) **Strand 3** **151B**

Accent on Algebra: Developing Conceptual Understanding by Making Connections Across the Middle Grades Curriculum

The NCTM Curriculum Focal Points emphasize a strong focus on algebra during middle school. Learn how teachers can help students gain a deeper understanding of algebra with curriculum specifically designed to make connections among prior experiences. Participants will explore activities across grades 6, 7, and 8 that showcase such connections.

Katherine Gavin, University of Connecticut, Storrs, CT

Session 129: Holt McDougal Sponsor Showcase

General **147A**

Intervention Tools to put Struggling Students Back on Track

Heather Trotter, Holt McDougal, Austin, TX
Sherry Bailey, Holt McDougal, Austin, TX

Struggling students often need more time for intervention with prerequisite skills as well as on-level topics. Holt McDougal offers a variety of resources to help students get back on track. Our intervention systems provide complete support for teachers. Attendees will receive a CD-ROM or workbook. Supplies are limited.

Session 130: Texas Instrument Technology Showcase

General **147B**

What's New at Texas Instruments Now?

Robb Wilson, Texas Instruments, Dallas, TX

Updates on the latest Texas Instruments products and free resources: thousands of free calculator lesson plans, SAT and ACT practice tests from the Princeton Review, funding resources, and more.

Tuesday 10:30–12:00 (Extended)

Session 131

General **Strand 6** **140AB**

Leading by Connecting Culture and Mathematics

Leaders recognize that mathematics teaching and learning occur in a cultural context. This presentation will describe our attempt to illustrate the role of culture in the mathematics classroom. Participants will explore culturally-based tasks and discuss the ways to use them in mathematics lessons.

Chadd McGlone, University of North Carolina - Chapel Hill, Chapel Hill, NC
Jim Barta, NCSM Western Region 1 Director, Utah State University, Salt Lake City, UT

Session 132

Primary (PK–2) **Strand 2** **152B**

Leading from Beside: Co-accountability to Foster Teacher Growth

Come and explore a professional development model that actively involves teachers in planning, teaching, and reflecting on lessons to increase students' understanding of concepts and use of mathematical language. This model fosters co-accountability, augments cooperation to promote appropriate learning, and fosters teacher ownership of professional development that increases student achievement.

Susan Smith, Pittsburgh Public Schools, Pittsburgh, PA
Rodney Necciai, Pittsburgh Public Schools, Pittsburgh, PA

Session 133

Intermediate (3–5) **Strand 7** **144B**

Lost in Translation? Learning to Speak the Languages of Fluency and Understanding to Develop Mathematical Proficiency

How can districts transition to the National Advisory Panel's recommendations? The key is translation—making sure teachers and students understand the Panel's statement, "The curriculum must simultaneously develop conceptual understanding, computational fluency, and problem solving skills." Learn how one district balances procedural facility with the ability to reason mathematically.

Lori Fanning, Fulton County Schools, Atlanta, GA
Debbie Crawford, Curriculum Professional Development - Pearson, Glenview, IL
Patricia Rooks, Fulton County Schools, Atlanta, GA

Session 134

Middle (6–8) **Strand 2** **144C**

Improving Access to Language: A Key to Improving Mathematics Learning

Participants will experience professional development activities that they can use with teachers in their districts to address the key questions: What strategies can help students access language so that they can learn mathematics? What does the research say about these strategies? Participants view classroom video of strategies in action.

Emily Fagan, Education Development Center, Newton, MA

Session 135

Middle (6–8) **Strand 4** **152A**

The Development of Teacher Expertise in Classroom Assessment as a Context for Deeper Understanding of Mathematics

This interactive session will highlight assessment/content-related activities and teacher-designed materials developed in the Boulder Partnership for Excellence in Mathematics Education. This partnership, involving middle grades mathematics teachers, Colorado University faculty, and Freudenthal Institute researchers, focused on the design of classroom assessment as a context for deepening generative understanding of mathematics.

David Webb, University of Colorado at Boulder, Boulder, CO
Paige Larson, Boulder Valley School District, Boulder, CO
Michael Matassa, Boulder Valley School District, Boulder, CO

Session 136

Middle (6–8) **Strand 3** **154A**

Open-Ended Problems That Fit the Middle School Curriculum—With Extensions

Participants will engage in considering a different view of good problems for the middle school curriculum: simple rule to begin, engage in mathematical thinking, computational practice while solving the problem, and connect to mathematics at a higher level. See that once we get the answer, mathematics begins. Useful Handouts.

Jerry Becker, Southern Illinois University Carbondale, Carbondale, IL

Tuesday 10:30-12:00 (Extended continued)

Session 137
Secondary (9–12) **Strand 3** **144A**

Making Sense of Mathematics: The Answer Is the Question

Too often students learn rote procedures with little understanding and consequently cannot transfer their learning to any new setting. Using technology and a focus on inquiry, asking questions that engage students in thinking and reasoning about the mathematics and about the procedures can make a real difference in student learning.

Tom Dick, Oregon State University, Corvallis, OR

Session 138
Secondary (9–12) **Strand 5** **149AB**

Developing Algebraic Thinking with Technology

Successfully developing high achievement in algebra for all learners requires systemic vision, incorporating research-based instructional strategies, appropriate use of technology, and curriculum that empower conceptual learning. This session will present examples of how curriculum with embedded technology can be used to enable teachers to increase student capacity for algebraic thinking.

Steve Rasmussen, Key Curriculum Press, Emeryville, CA
Timothy Pope, Key Curriculum Press, Emeryville, CA

Session 139
College **Strand 4** **154B**

Mining for Gold with Guided Field Investigations

During field experiences pre-service teachers often fill their daily journals with the minutiae of classroom activities, forgetting that it is the teacher they are observing, not just the students. Using guided investigations will help to focus pre-service teachers on key skills and the nuances that make teaching an art form.

Debbie Gochenaur, Elizabethtown College, Elizabethtown, PA
Mike Long, Shippensburg University, Shippensburg, PA

Complete the Conference Feedback Survey and turn it in at the Registration Desk or at the Wednesday luncheon.

Student Recognition Certificates are available at the Registration Desk.

Tuesday Luncheon

Session 140 **Sponsored by Texas Instruments** **Hall B**

12:15 PM – 2:15 PM *(ticket required)*

Texas Instruments helps educators teach and students succeed in mathematics and science by providing research-based technology for instruction and assessment, curricular materials and professional development—essential components proven to deliver greater student achievement.

Visit Texas Instruments at Booth # 7 or at www.TI.com.

Aligning for Algebra Success

Student success in Algebra is a focus for many of us. In this presentation, we will explore how some educators are approaching this challenge and reaching algebra and pre-algebra students with greater effectiveness.

Patricia Wright is Virginia's Superintendent of Public Instruction, serves as executive officer of the Virginia Department of Education (VDOE), and serves as secretary of the Board of Education. She has worked with the VDOE for more than 20 years, including her role as state mathematics supervisor. Prior to that she taught secondary and middle school mathematics for 10 years. She received her doctorate in mathematics education from the University of Virginia.

Gail Burrill is currently a Mathematics Specialist in the Division of Science and Mathematics at Michigan State University, directs the Institute for Advanced Study's International Seminar, directs a component of the Park City Mathematics Institute, is a T^3 instructor, and is an advisor to TI Education Technology. She has served as President of the National Council of Teachers of Mathematics (NCTM) and as Director of the Mathematical Sciences Education Board (MSEB).

Jane Gillespie is a mathematics teacher at Fresno Christian Schools. She is currently teaching pre-algebra and geometry to junior high and high school students. Jane graduated from Fresno Pacific University in 2004 and earned her teaching credential from Fresno State University in 2006.

Carl Veater is currently the 7-12 Mathematics Coordinator for the Fresno County Office of Education. Prior to this role, Carl was a high school mathematics teacher for 12 years, a department chair, and a master teacher.

4th Annual Presentation of the Iris Carl Travel Grants

Iris Carl was an international leader in mathematics education, an NCSM Past President, and a Glenn Gilbert Award recipient, who worked tirelessly to support other mathematics education leaders. NCSM honors her through the presentation of the NCSM Iris Carl Travel Grant.

NCSM established the Iris Carl Mathematics Leadership Fund, within the NCSM Charitable Trust, which endows the Grant. As long as there are sufficient funds, NCSM will annually provide up to three Iris Carl Travel Grants to eligible NCSM members to attend the NCSM Annual Conference.

The fund continues to grow through generous contributions. NCSM will mail a thank you letter suitable for use in informing the IRS that no goods or services were provided in return for the contribution.

The Iris Carl Travel Grant application and criteria can be found at mathedleadership.org.

2009 Grant Recipients

Jennifer Bednarczyk, Richton Park, IL
Therese Forsythe, Berwick, Nova Scotia, Canada
Lisa Lunney Borden, Antigonish, Nova Scotia, Canada
Nancy Krueger, Sioux Falls, SD
Juli Schexnayder, Phoenix, AZ

2008 Grant Recipient

Comfort Akwaji-Anderson
Iowa City Community School District, Iowa City, IA

The Tuesday Luncheon program recognitions continue on pages 52 and 53.

Recognition of NCSM Board Members

NCSM is built upon a foundation of volunteers that help create our success as a mathematics education leadership organization. Serving on the NCSM Board requires the conscious choice to volunteer many hours of personal time and talent to the mission and purpose of NCSM. We are grateful for their belief and passion for the cause of mathematics education leadership.

Outgoing NCSM Board Members

First Vice President – Susan Beal

Southern Region 1 Director – Carol Newman

Western Region 1 Director – James J. Barta

Secretary – Mona Toncheff

Journal Managing Editor – Gwen Zimmermann

Conference Coordinator – Valarie A. Elswick

Event Coordinator – Carol A. Edwards

Nominations Chair – Vanessa Cleaver

Sponsor Liaisons – Steve and Fern Tribbey

Continuing/Transitional Board Members

Immediate Past President – Timothy D. Kanold

President – Diane J. Briars

First Vice President – Linda Fulmore

Awards Chair – Donna Simpson Leak

Membership & Marketing Chair – Ruth Harbin Miles

NCTM Representative – Jerry Cummins

Newsletter Managing Editor – Kay Gilliland

Position Papers Editor – Kit Norris

Treasurer – Randy Pippen

Newly Elected NCSM Board Members

2nd Vice President – Sandie Gilliam

Southern Region 1 Director – Susan Birnie

Western Region 1Director – Richard Seitz

Newly Appointed NCSM Board Members

Secretary – Janet Sinopoli

Journal Managing Editor – Linda Ruiz Davenport

Nominations Chair – TBD

Sponsor Liaisons – Janet Falkowski & Mary Lynn Raith

e-Mail Newsletter and Web Editor – TBD

A Tribute to Carol A. Edwards, NCSM Event Coordinator

An NCSM Leader Who Has Made a Difference

Carol A. Edwards is an NCSM leader who, for more than 40 years, has made a difference in the lives of many other mathematics education teachers and leaders. Those who know Carol think first and foremost of service, volunteerism, service again, and whatever it takes to get the job done. They also think of having a great and meaningful conference or event experience!

Functions that you have attended at this conference have largely been a result of the unending hours of devotion to detail over the past 12 months by a "behind the scenes," "don't give me the credit"-type servant-leader—NCSM's very own and very beloved Carol A. Edwards. More importantly, Carol has served faithfully and unfailingly in the capacity of NCSM Functions/Events Coordinator, and Annual Conference guru for this entire decade.

In 2000, Carol began her journey as our 2nd Vice President, and she has continued to dedicate almost 10 years of volunteer service to the NCSM Board and its members. After serving in the elected offices of 2nd and 1st Vice President for two years, Carol became an invaluable appointed NCSM Board member—appointed by President Carole Greenes to serve as Function and Events Chair for all NCSM Board meeting events and for the Annual Conference. Since first being elected, Carol has faithfully served five NCSM Presidents and trained them all on how events are delivered with precision, class, and high expectations for excellence.

A great question of leadership is 'how do I make everything more personal?' That has been Carol's greatest strength. She has had certain gifts to offer all of us, certain talents to share, and certain contributions to make. Carol's gifts are those of a leader who is a quiet hero who makes sure everything works like clockwork, while the spotlight shines on others. NCSM will be forever a better organization because of the work of Carol A. Edwards.

On April 22, 2009, at the end of this Conference, Carol will officially 'retire' from her role as NCSM Board member and Event Coordinator. The Board cannot thank her nearly enough for the way she has served the Board with grace, dignity, effort, and humility for so many years. If you see Carol during the conference, please give her a big hug and tell her '*thank you*' for all she has done to serve so many during this past decade of growth for NCSM.

Thank you, Carol. We love you and we will all miss you in this capacity.

An NCSM Tribute to the Legacy of Ross Taylor

On February 7, 2009, NCSM lost one of its founding fathers, Bennett "Ross" Taylor. He was a part of the heart and soul of the organization for the past 4 decades, a "Leader of Leaders" in mathematics education, and a driving force behind the birth of the National Council of Supervisors of Mathematics.

Ross facilitated and led the first planning and organizational meeting of NCSM in Minneapolis in 1969 and served as the Second President of the organization from 1971–1973. When mathematics education was faced with a national "basic skills" movement, he led the 1976 development of an NCSM Position Paper, *New Basic Skills*, which led to the redefinition of basic skills to include problem solving and the use of calculators.

In his own words, here is what Ross had to say about the early NCSM years:

> *When I started as the Mathematics consultant for the Minneapolis Public Schools in the fall of 1967, I found no structure for networking with my supervisor colleagues throughout North America. In the spring of 1968, the annual NCTM meeting in Philadelphia included a section for mathematics supervisors. At that meeting it was decided we would establish an organization for school district supervisors at the next (1969) NCTM meeting in Minneapolis.*

Ross had an instant and positive impact on all that knew him. Shirley Frye, NCSM President from 1981–1983, noted, "Ross was indeed an inspiration to everyone in NCSM over the years. I recall our first supervisor meetings sitting around in a circle and sharing our challenges. Ross was always a catalyst to move the group to action."

Sally Sloan, NCSM President from 1983–1985, said, "I was President when Ross received the Glenn Gilbert Award. An indication of Ross' enormous effect on people, 10 of his resource teachers from Minneapolis Public Schools flew across the country to honor him as he received the award."

Jerry Cummins, NCSM President from 1999–2001, indicated, "Ross took me under his 'wing' in 1965. He helped me design an Honor's Geometry Course at Proviso West High School. I turned to him frequently as a youthful math teacher who became the Department Chair and was in dire need of advice and help. He never failed me."

Ross was also a constant encourager and supporter of those who addressed inequities in mathematics education for underrepresented groups and placed issues of equity and equitable practices at the front of the NCSM agenda. According to Ross:

> *An early issue for NCSM was defining its membership. During the civil rights activities of the sixties when professional organizations were desegregating, NCTM adopted a policy of not affiliating with organizations that restricted their membership. NCSM chose not to restrict its membership to supervisors, and* ***welcomed all leaders of mathematics education****.*
>
> *My personal goals for NCSM were to provide an opportunity for networking and to improve the role of mathematics education leaders as professionals.*

Dorothy Strong, NCSM President from 1977–1979 and a fellow founding member indicated, "Ross always faced challenges with action. His life left all of us with the challenge of Henry Wadsworth Longfellow in the poem, *The Psalm of Life:*

> Lives of great men all remind us
> We can make our lives sublime,
> And, departing, leave behind us
> Footprints on the sands of time.

Ross's legacy lies in the hearts, minds, and actions of all that benefited from his leadership, his passion, his purpose, his voice, and from his courage. He will be fondly remembered and greatly missed by the NCSM community of leaders in mathematics education.

Tuesday 2:30–3:30

Session 141: Major Session

General **146AB**

Reasoning and Sense-Making in Mathematics: Issues for Leaders, Teachers, and the Mathematics Community. An Update on NCTM Initiatives and Beyond

Henry (Hank) Kepner, President, National Council of Teachers of Mathematics, Reston, VA

This session will challenge leaders to impact student sense-making and proficiency in mathematics across each leader's areas of responsibility. How can leaders support teachers and the mathematics community to engage students in stimulating, sound mathematical learning? Current initiatives of the National Council of Teachers of Mathematics will be discussed.

Presider: Connie Schrock, NCSM Central 2 Region Director, Emporia, KS

Henry Kepner is President of the National Council of Teachers of Mathematics and a Professor in the Department of Curriculum and Instruction at the University of Wisconsin-Milwaukee.

He was a founding member and first president of the Association of Mathematics Teacher Educators. He has served five years as program officer at NSF in Washington, DC. Kepner has also served as President of the National Council of Supervisors of Mathematics, the Wisconsin Mathematics Council, and the Milwaukee Educational Computing Association. He served on the boards of directors of the National Council of Teachers of Mathematics and the School Science and Mathematics Association.

He received the School Science and Mathematics Association Distinguished Service Award in 2003, the University of Wisconsin-Milwaukee School of Education Teaching Award in 2004, and the North Shore United Educators' Award of Excellence in 2008.

Session 142

General **Strand 6** **143C**

Implementing Positive Change in Mathematics Through Research-Based Coaching

Mathematics coaches have a challenging and demanding job. This session provides practical advice on effective coaching practices based upon research and personal experience. What educational factors do coaches need to focus their efforts in order to improve classroom instruction?

Ted Hull, Hull Educational Consulting, Pflugerville, TX
Ruth Harbin Miles, NCSM Membership and Marketing Chair, Consultant, Madison, VA
Don Balka, Saint Mary's College, Notre Dame, IN

Session 143

General **Strand 3** **145A**

A Collaborative Discussion with NCSM Past Presidents about Creating a Rational K-12 Mathematics Curriculum

Building from the PRIME Leadership Principle for Curriculum Leadership, this session will blend small group discussion and large group sharing to address strategies for creating a more rational K-12 mathematics curriculum. An experienced group of NCSM Past Presidents will facilitate the discussions and model the process of collaborative discussion.

Larry Bradsby, NCSM Past President, Lakewood, CO
Steve Leinwand, NCSM Past President, Washington, DC

Session 144

General **Strand 7** **145B**

Got Sense? A Professional Learning Journey for Number Sense

This interactive session will discuss a three-year professional development plan to support quality teaching, with a focus on Number Sense. It will also share specific grade level professional development, use of technology, resources, classroom strategies, and funding from the viewpoints of a mathematics coach, mathematics consultant, and principal.

Laurel Marsh, Howard County Public Schools, Columbia, MD
Jonathan Davis, Howard County Public Schools, Columbia, MD
Beth Kobett, Stevenson University, Stevenson, MD

Session 145

General **Strand 6** **151B**

Mathematics Coaching for Principals: Increasing Leadership Content Knowledge (LCK) for Supervision

How can mathematics specialists help principals develop the Leadership Content Knowledge (LCK) needed for effective teacher supervision? This interactive panel presentation will share findings from a study of nearly 500 K-8 principals to show how administrator coursework combined with district and building-based support can affect principals' LCK.

Loretta Heuer, Education Development Center, Inc., Newton, MA
Kristen Reed, Education Development Center, Inc., Newton, MA
Kathi Klaas, Sun Prairie Area School District, Sun Prairie, WI

Volunteer to help at the 2010 Annual Conference in San Diego. The form is available at www.mathedleadership.org.

See page 86 for future NCSM Annual Conferences and Regional Events.

Tuesday 2:30-3:30 (Regular continued)

Session 146
Primary (PK–2) **Strand 6** **146C**

Report of the National Research Council's Committee on Early Childhood Mathematics: Learning Paths Toward Excellence and Equity

The National Research Council recently completed a study of early childhood mathematics, synthesizing and analyzing research from a number of disciplinary fields. Authors of the report draw implications for leadership, policy, and practice that will help all children, especially vulnerable children, get a strong start in learning mathematics.

Karen Fuson, Northwestern University, Fallbrook, CA
Herbert Ginsburg, Teachers College Columbia University, New York, NY
Sybilla Beckmann, University of Georgia, Athens, GA
Douglas Clements, University at Buffalo, State University New York, Buffalo, NY

Session 147
Intermediate (3–5) **Strand 6** **143AB**

Research and Best Practices to Help Teachers Motivate Struggling Mathematics Students

Effort counts. Teachers who believe this have a good start with struggling students, but another piece to the puzzle is motivating students to invest effort. What can research and effective teachers tell us about motivating students who struggle with mathematics and who don't believe they can or want to do it?

Janet Pittock, Scholastic, New York, NY

Session 148
Intermediate (3–5) **Strand 3** **151A**

Teach Less, Learn More—Curriculum Implementation in Singapore Schools

Using selected topics such as area and fractions, the speaker illustrates how the goal to teach less so that students can learn more can be achieved in the implementation of a national curriculum. Teach Less, Learn More is an initiative in Singapore schools across subject areas.

Ban Har Yeap, Nanyang Technological University, Singapore

Session 149
Middle (6–8) **Strand 6** **150A**

Key Components of Effective Professional Development for Grade 6-8 Teachers: Pedagogical Content Knowledge, Research-Based, Development of Students' Mathematical Thinking

What constitutes a quality professional development? In this session, we will share our successful experiences in designing and implementing professional development institutes for Grades 6–8 inservice teachers. We will provide a sample of a Department of Education (ED) funded proposal including rationale, scope and sequence, day-by-day syllabus, and activities.

Jenny Tsankova, Roger Williams University, Bristol, RI
Polina Sabinin, Boston University, Boston, MA

Session 150
Secondary (9–12) **Strand 4** **150B**

Achieve Equity in Your Classroom by Developing Effective Descriptive Feedback with Assessments Based on Standards

Experience the process Milwaukee Public Schools' teachers use to collaboratively analyze student work samples using a protocol that identifies key mathematics features, anticipates misconceptions, gives descriptive feedback, and determines next steps. We will discuss assessment research, correlations with student achievement, and connections with the PRIME Leadership Framework Assessment Principle.

Laura Maly, Milwaukee Public Schools, Milwaukee, WI
Henry Kranendonk, Milwaukee Public Schools, Milwaukee, WI

Session 151: America's Choice Sponsor Showcase

General **147A**

Language, Culture, and Motivation in the Mathematics Classroom Leading Up to Algebra. What to Do When Students Aren't Ready for Algebra

Philip Daro, America's Choice, San Francisco, CA

Join a lively, informed discussion about the mathematics, pedagogy, and student motivators that effective readiness courses need to succeed. Learn how targeted support, including interventions that repair engrained misconceptions about math concepts, can help striving students succeed once they enroll in algebra.

Session 152: Explore Learning Technology Showcase

General **147B**

Using Online Simulations from ExploreLearning (Gizmos) to Improve Student Achievement in Mathematics

David Shuster, ExploreLearning, Charlottesville, VA

Learn how to use online simulations to put research about effective instructional strategies into practice in classrooms. We will summarize Marzano's research showing that computer-based simulations are powerful instructional aids. We will also demonstrate our online simulations, ExploreLearning Gizmos, which promote inquiry and understanding for students in grades 3-12.

Attend an NCSM Summer Leadership Academy. See behind the "Monday Program" tab and page 86.

Tuesday 2:30–4:00 (Extended)

Session 153

General **Strand 3** **149AB**

A Balanced Curriculum: The Integration of Basic Skills and Conceptual Understanding

This session will provide supervisors and teachers with strategies to develop and implement curriculum that integrates conceptual understanding and basic skills in mathematics. Participants will be involved in activities that can foster support for such in school mathematics and lead to standards-based reforms that are supported by all stakeholders.

Eric Milou, Rowan University, Glassboro, NJ

Session 154

General **Strand 6** **152A**

Identifying Teacher Moves that Help Students Learn How to Participate in Mathematical Discussion: A Classroom Case from Grade 3

In this interactive session, participants will examine transcripts of a third grade classroom at two different times of the school year to identify teacher moves designed to help students learn how to engage in mathematical discussions. Participants will also discuss the implications of this work for teacher-leaders.

Virginia Bastable, Mount Holyoke College, South Hadley, MA
Susan Jo Russell, TERC, Cambridge, MA
Deborah Schifter, Education Development Center, Newton, MA

Session 155

General **Strand 7** **152B**

Leading the Learning: A Mathematics Specialist's Journey

One district will share its journey in establishing a job-embedded professional development coaching model, including strategies used in creating a culture of collaboration. Participants will explore the significance of the coach-principal and coach-teacher relationship and gain tools to develop and strengthen these relationships to ultimately achieve the school's mathematics vision.

Debbie Delozier, Stafford County Public Schools, Stafford, VA
JoAnne Baker, Rocky Run Elementary School, Fredericksburg, VA
Melody Sandoval, Rocky Run Elementary School, Fredericksburg, VA
Barbara Giese, Rocky Run Elementary School, Fredericksburg, VA

Session 156

General **Strand 3** **154B**

Pennsylvania's Standards-Aligned System in Mathematics

Pennsylvania had created a system of educational components and resources to provide focus and coherence for all mathematics classrooms in the Commonwealth. This session will detail and show examples of these standards-aligned components and the professional development program that supports its implementation. Exemplars of the web tool will be shared.

Jim Bohan, Lancaster-Lebanon Intermediate Unit 13, Lancaster, PA

Session 157

Intermediate (3–5) **Strand 1** **144C**

Meeting the Needs of Teachers of English Language Learners (ELL) in the Mathematics Classroom

The Chicago Bilingual Mathematics Laboratory is a professional development program for teachers of ELL students. Learn about how this project integrates mathematics professional development with the arts, ELL strategies, and lesson study to help teachers meet the needs of all students.

Alison Whittington, Chicago Public Schools, Chicago, IL
Ava Belisle-Chatterjee, Columbia College Chicago, Chicago, IL
Barbara Molina, Chicago Public Schools, Chicago, IL

Session 158

Middle (6–8) **Strand 2** **140AB**

Providing Responsive Interventions

How do we design professional development that deepens teachers' content knowledge as it provides them with effective intervention strategies for their at-risk students? This session will incorporate the strategies that we use with teachers, how teachers implement these strategies, and results of student and teacher assessments.

Valerie Maxwell, University of Delaware, Newark, DE
Christina Poetzl, University of Delaware, Newark, DE

Session 159

Middle (6–8) **Strand 1** **144B**

Strategies for Making Middle School Mathematics More Accessible to Students with Learning Disabilities

Participants will experience professional development activities that they can use with teachers to address the key question: What are ways to make lessons more accessible to students with disabilities while maintaining the integrity of the mathematics content? They will learn about strategies, view a video, and examine student work.

Amy Brodesky, Education Development Center, Newton, MA

Tuesday 2:30-4:00 (Extended continued)

Session 160
Middle (6–8) **Strand 5** **154A**

Developing Teacher Leaders with Online Resources

Illuminations develops leaders by allowing enthusiastic teachers to share their ideas with others and by providing standards-based resources for all teachers to access online. This session will investigate resources created by participants in the 2008 Illuminations Summer Institute and will highlight the Illuminations Game Room, our newest initiative.

Patrick Vennebush, National Council of Teachers of Mathematics, Reston, VA

Receive a 25% discount at NCTM Bookstore on Wednesday afternoon by wearing your NCSM name badge. See page 9.

Nominate a leader in mathematics education for the Glenn Gilbert Award. See pages 77 and 85.

Session 161
Secondary (9–12) **Strand 4** **144A**

Achieve's ADP Algebra I and Algebra II Exams: A Multi-State Effort

A consortium of states is partnering with Achieve and Pearson to create common mathematics exams. The Algebra II Exam was first administered in 2008, while the Algebra I Exam will be first administered in 2009. We will share the exams' format, released items, and tasks created by the Dana Center.

Tracy Halka, Achieve, Inc., Washington, DC
Susan Hudson Hull, University of Texas Dana Center, Austin, TX

Submit articles for the NCSM Newsletter. See page 87.

Special Interest Group meetings are open to all Conference participants. See page 79.

Caucuses

4:00 – 5:30 PM

The Caucuses provide an opportunity for NCSM members' voices to be heard! Your NCSM Regional Director, as the Caucus facilitator, will share information on the NCSM *PRIME Leadership Framework*, related projects, initiatives, and future events. Come network and celebrate regional success with fellow mathematics leaders. There will also be drawings for door prizes. We hope to see you there!

Session 162 143C

Canadian Regional Caucus

Donna Karsten, NCSM Canadian Regional Director, Halifax, Nova Scotia, Canada

Alberta, British Columbia, Manitoba, New Brunswick, Newfoundland, Northwest Territories, Nova Scotia, Nunavut, Ontario, Prince Edward Island, Quebec, Saskatchewan, Yukon

Session 163 151A

Central Region 1 Caucus

Steven Viktora, NCSM Regional Director C1, Winnetka, IL

Illinois, Indiana, Kentucky, Michigan, Ohio

Session 164 147A

Central Region 2 Caucus

Connie Schrock, NCSM Regional Director C2, Emporia, KS

Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota, Wisconsin

Session 165 145A

Eastern Region 1 Caucus

Laurie Boswell, NCSM Regional Director E1, Monroe, NH

Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, Vermont, Military State AE (Armed Forces Africa, Canada, Europe, and Middle East)

Session 166 145B

Eastern Region 2 Caucus

Diana Kendrick, NCSM Regional Director E2, Upper Marlboro, MD

Delaware, District of Columbia, Maryland, New Jersey, Pennsylvania, West Virginia

Session 167 150A

Southern Region 1 Caucus

Carol Newman, NCSM Regional Director S1, Fort Lauderdale, FL

Bermuda, Florida, Georgia, North Carolina, Puerto Rico, South Carolina, Virginia, Virgin Islands, Military State AA (Armed Forces America)

Session 168 150B

Southern Region 2 Caucus

Suzanne Mitchell, NCSM Regional Director S2, Jacksonville, AR

Alabama, Arkansas, Louisiana, Mississippi, Oklahoma, Tennessee, Texas

Session 169 140AB

Western Region 1 Caucus

Jim Barta, NCSM Regional Director W1, Salt Lake City, UT

Alaska, Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming

Session 170 151B

Western Region 2 Caucus

Sara Munshin, NCSM Regional Director W2, Los Angeles, CA

California, American Samoa, Federated States of Micronesia, Guam, Marshall Islands, Northern Mariana Islands, Palau, Hawaii, Oregon, Washington, Military State AP (Armed Forces Pacific)

Session 171 146AB

International Attendees Caucus

Linda Fulmore, NCSM Second Vice President, Cave Creek, AZ

Anyone from outside the United States and Canada

Session 172 146C

NCSM Past Presidents Caucus

Larry Bradsby, NCSM Past President, Lakewood, CO

NCSM Past Presidents

Volunteer to help at the 2010 Annual Conference in San Diego. The form is available at www.mathedleadership.org.

Tuesday Refreshments for Caucuses

Sponsored by Kaplan K12 Learning Services, GeoLeg Geometry, and Pearson

4:00 – 5:30 PM

Kaplan K12 Learning Services partners with schools and districts to measurably propel student achievement. Each year districts from across the country engage Kaplan K12 in a collaborative effort to support their students through programs that help build mathematics proficiency, increase reading success, meet and exceed state standards, improve college admission rates, and amplify teaching and learning.

The GeoLeg program helps K–12 students develop geometry relationships and measurements connections between geometric shapes. The program engages students in learning through measuring, drawing, and forming language and algebraic conclusions.

Pearson is an international media company with world-wide businesses in education, business information, and consumer publishing. The company helps children and adults to learn, business people to make good decisions, and readers to enjoy a good book.

Visit Kaplan K12 Learning Services at Booth # 1 in Hall B or at www.KaplanK12.com; GeoLeg at www.GeoLeg.com; and Pearson at Booth # 8 in Hall B or at www.Pearson.com.

Tuesday Reception

Session 173 **Sponsored by Pearson** **Hall B**

5:45 – 7:00 PM

(ticket required)

Pearson is an international media company with world-wide businesses in education, business information, and consumer publishing. The company helps children and adults to learn, business people to make good decisions, and readers to enjoy a good book.

Visit Pearson at Booth # 8 in Hall B or at www.Pearson.com.