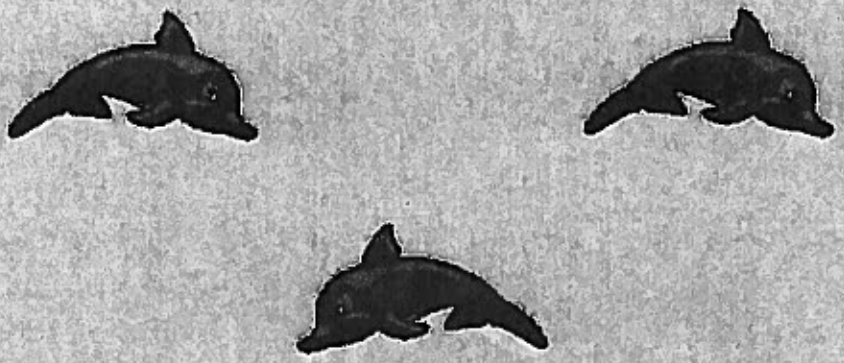
Research Council on Mathematics Learning

Thirty-third Annual Meeting
February 23-25, 2006
Las Vegas, Nevada



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Thirty-third Annual Conference
of the
Research Council on Mathematics Learning
Las Vegas, NV
February 23-25, 2006

Thursday, February 23, 2006
Executive Board meeting

12:00 p.m.-2:00 p.m.
AmeriSuites Hotel

Shuttles to the Mirage will begin leaving the AmeriSuites Hotel at 2:00 p.m.

Opening Session
3:00-4:30 p.m.
The Mirage, Ballroom G
Gather, visit the dolphins, and tour exhibits.

4:30-6:00 p.m.
Ballroom G
Welcome given by Dr. Ronald Yasbin
Dean, College of Sciences, UNLV

Wilson Lecture

Teaching and Learning in the Dolphin World

Scientific research related to Atlantic bottle-nosed dolphins and science education is the focus of the Dolphin Habitat. This collaborative project between the Mirage and UNLV is designed to integrate elements of the habitat's school tour program into lessons for future teachers. Experiences include hands-on activities as a method to present informal science education. This joint effort models the success of a corporation and an educational institution. It is our hope that today's experience can provide, stimulate, and generate ideas for educators.

Missy Giannantonio
Curator of Education
Department of Animal Care
The Mirage

Holley Muraco
Research Consultant

Dinner on your own.

Friday, February 24, 2006

8:00-8:50 a.m.

Roland Pourdavood, Lawrence Svec, and Lynn Cowen 130A

Teachers' Discourse in Teaching Arithmetic Algebraically to Children

This research report will share some third and fourth grade teachers' reflections as they interact with their students while teaching arithmetic algebraically. The primary research questions are: (1) What is the relationship between teachers' mathematical discourse and their classroom discourse? and (2) How may professional dialogue among teachers advance the mathematical learning and performance of their students?

Anna Graeber 130B

Looking at 4th and 5th Grade Mathematics Teaching: How is Mathematics Represented?

Selected quantitative data from a three-year study of fourth and fifth grade mathematics classes will illustrate instruction in schools with relatively high FARMS and ESL enrollments. Factors such as emphasis on conceptual, procedural, or linked knowledge; frequency of higher level tasks and questions to lower level tasks and questions, will be discussed.

Jeannie Conrad Hollar and Anita Navarte Kitchens 130C

Merging Cognitive Restructuring with Mathematics Education

Success in mathematics involves a self-belief that suggests, "I can learn." Many students, based on past experiences have concluded that success is impossible. Cognitive psychology provides a framework for mathematics teachers to assist students in reformulating beliefs and to become successful. This presentation brings cognitive restructuring to the mathematics classroom.

David Boliver 120

Bringing Mathematics to All through Special General Education Programs

Mathematics for All is only possible with general support. We will share how we have been cultivating this support through major presentations to general university audiences of 150-200 and lead discussion on how you may do the same.

Carolyn Pinchback and Carolyn Williams 201

Designing & Assessing Teaching & Learning Tools in Mathematics

Of the five modules in this project, the fourth will be presented. The presenters will share (1) the project participants' determined effective tool assessment (rubric) in assessing students' learning in mathematics, and (2) a teaching portfolio that demonstrated effective assessment strategies.

Eugene Paik PC

Digital Support for Derivational Solutions in Algebra

Algebraic Solution Evaluator (ASE) is a computer program that provides 1) a user interface that closely mimics the traditional paper-and-pencil format for entering derivational solutions and 2) automated evaluation of those solutions. A functional prototype will be demonstrated and described in terms of design principles, technical challenges, and potential applications.

Darlinda Cassel and Julianna Utley 227

Pre-Service Teachers' Notion About Constructing Ten

Constructing "ten" as an abstract composite is an important concept in early grades. In order to provide worthwhile tasks that will provide opportunities for students to construct ten, teachers must have an understanding of ten. We will report on our research findings about pre-service teachers' ability to construct ten.

Michelle Vander Veldt 333

Exploring the Relationship Between Teachers' Beliefs in Mathematics and Their Instructional Practice

The relationship between elementary teachers' beliefs about mathematics and instructional practices will be explored.

9:00-9:50 a.m.

Robert Andre and Tom Ball 130A

Utilizing Sorting Networks for Reasoning Skills

How students sort numeric values on a graph network, the efficacy of the network in a lesson application, and students' reasoning skills in creation of sorting networks will be discussed.

Daniel Brahier, Janet Emerine, and Debra Shelt 130B

Are You Buying What We're Selling?

Results of a survey involving methods students from early, middle, and secondary settings will be shared. In this session, we will examine the differences and similarities of student needs when compared to instructor priorities. Implications for the design of methods courses in mathematics will be discussed

Cynthia Miller and Karen Yanowitz 130C

Improving Middle Grades Math Achievement by Improving Teachers' Math Content

Learn about an on-going Arkansas State University NCLB Partnership grant to improve math achievement at high-need schools by improve teachers' math content. This is a follow-up presentation to one given last year. More results as well as student achievement gains will be shared.

Adrian M. DeWindt-King 201

Using Class Learning Pattern Profiles to Enhance Student Success

Class profiles of student learning patterns compared to instructor learning patterns can help instructors develop strategies to meet the needs of both the instructor and student. A learning-styles inventory is used to develop a class profile and suggest strategies, which include various pedagogical approaches and class formats.

Michael Mikusa PC

Web-based Mathematics Education: Bringing Together Research and Effective Tools for Teachers

With our Web-based Mathematics Education system, we have created and piloted several topic modules (or units) for teaching 7th grade mathematics. We will explore some of the lessons within these units to see how both teachers and students interact with the WME system. Also during this session the presenter will share student reactions and student work completed using this system.

Mary C. Enderson and Azita Manouchehri 220

Preparing Secondary Teachers: Challenging Their Understanding of Mathematics

Investigations used in methods courses that have been designed to challenge pre-service teachers' understanding of mathematics will be presented. The impact of such practices on pre-service teachers, instructors, and teacher education programs will be shared with the audience.

Sheryl A. Maxwell 227

Making Mathematical Cents of Credit and Investment Principles

This session highlights a study about how pre-service teachers' confidence in teaching components of financial literacy to elementary/middle grade students can be increased. The mathematics focus about the basics of financial education coupled with Jump$tart activities helped pre-service teachers to significantly increased their confidence in teaching two financial education areas.

Andy Carter and Steve Cohen 333

Teaching in Context Project: Using Teaching Experiments to Prepare Teachers

A project designed to provide authentic in-house field experiences for secondary and middle school math education students will be shared. Its focal point is a teaching experiment where prospective teachers design and teach an inquiry-based lesson in a developmental algebra class. Through teaching and reflection, students learn about the realities of mathematics reform.

9:50-10:10 Break Foyer

10:10-11:00 a.m.

Rama Menon 130A

In-service Teachers' Number Sense

What can we learn about the number sense of a group of high school, middle school, and elementary school teachers participating in a professional development project, as assessed by a 10-item pretest? What are some implications to their teaching of math?

William Speer and Greg Levitt 130B

A Peek at the New NCTM Standards for the Mathematics Teaching Profession

Originally published in 1991, NCTM's Professional Standards for Teaching Mathematics attempted to characterize both high-quality mathematics teaching and the support structure that was required to promote and sustain it. Twelve years after publication, updates to the field of mathematics education, including publication of PSSM, prompted the NCTM Board to appoint a task force to update the PTS. The changes reflected in the new document, to be unveiled in Atlanta in 2007, as well as continuing messages will be outlined.

Jeff Shih, James Tarr, Oscar Reyes, Barbara Reys, and Bob Reys 130C

Using Hierarchical Linear Modeling to Analyze Mathematics Achievement Data: An Illustrative Example

To reflect the move of the mathematics education field towards more advanced quantitative methodology, this presentation will offer examples of the different types of research questions that can be addressed using hierarchical linear modeling (HLM). Example models from a large-scale mathematics achievement data set that includes fidelity of implementation data will be presented.

Kim Hartweg 120

The Mathematical Content Knowledge of K-8 Teachers

This session will share the findings from a study where the mathematical and pedagogical content knowledge of practicing K-8 teachers and pre-service teachers are compared before/after in-service and pre-service training. The strengths and weaknesses pre-service/teachers have in their understanding and teaching of elementary mathematics will be discussed.

Lynae Sakshaug and Kay A. Wohlhuter 201

Teachers' Journey Toward Teaching Mathematics Through Problem Solving

As part of a graduate elementary mathematics methods course, teachers explored the process of teaching mathematics through problem solving both as a student and as a teacher. The researchers will share the results of the problem-solving action research projects implemented by the teachers in their classrooms.

Keith Adolphson PC

Pre-service Teachers and Technology

This presentation discusses the preliminary results of a study involving the appropriate use of technology to construct meaningful mathematics learning contexts for pre-service elementary education students.

Jerry Obiekwe 220

Evaluation of Deep and Surface Approaches to Learning: Implications to Learning and Teaching Mathematics

The Study Process Questionnaire (SPQ) is an instrument designed for teachers to use in assessing the learning approaches of college students, and in turn their teaching effectiveness. This study examines its construct and predictive validity. The results and its implications to learning and teaching mathematics will be presented.

Anne Reynolds 227

Experiencing a Mathematics Methods Class When One of the Students Is Blind

This presentation reports on the adjustments needed in an undergraduate mathematics methods class when one student in the class was blind. It will focus on adjustments I had to make as instructor and challenges for the class in relation to the NCTM Standards of Representation, Reasoning and Proof, and Communication.

S. Megan Che 333

Cameroonian Mathematics Teachers' Discussions of Culture, Mathematics, and Western Influence

This is a qualitative study of 14 mathematics educators in Cameroon. Meanings they have for mathematics and culture are discussed, as well as classroom mathematical experiences they provide for students. Questions of who creates such mathematical experiences for Cameroonian classrooms and why are discussed.

11:10 a.m. -12:00 p.m.

Pat Lamphere Jordan 130A

Pre-service Secondary Mathematics Candidates' Perception of Proof

Pre-service secondary mathematics candidates' perceptions of "proof" and the implications of that understanding for their future teaching will be discussed.

Juli K. Dixon 130B

Putting Research INTO Practice: Design Research in Pre-service Mathematics Education

The focus of this session is design-based research conducted in a pre-service elementary course. Lessons learned through the course of the project will be highlighted and the potential impact on practice will be shared. Participants will engage in discussion related to reducing barriers in conducting university-specific design-based research.

Elaine Young 130C

Pre-service Teachers' Perceptions of Children's Mathematical Problem Solving

Videotapes of children engaging in problem-solving scenarios are shown to pre-service teachers who have just engaged in the same scenarios. Pre-service teacher perceptions of children's problem-solving abilities may be affected by learning about children's mathematical thinking and understanding.

Virginia Usnick and Marilyn Ford 120

Assessing Pre-service Teachers' Knowledge of Alternative Assessment

Do pre-service teachers incorporate personal experiences with alternative assessments into their repertoire of assessment procedures? A class of pre-service teachers taking an elementary mathematics methods course was asked to discuss ways they had been assessed and how they would assess students. Sample assessment procedures and student responses will be shared.

Diana Perdue PC

Pre-service Teachers' Affect and Attitudes Towards Mathematics Learning

Results of two affective surveys administered to candidates in a teacher education program will be discussed. Topics for discussion include pre-service teachers' notions of responsibility, accountability, expectations, preparedness, metacognition, and learning styles. Sample student responses will be presented and the workshop participants will be encouraged to contribute their experiences.

David Pugalee, Kim Hartman, Jackie Menser, Claudia Cox, and Annie Cox 220

An Assessment of Middle School Students' Quantitative Literacy Abilities

Results from an assessment of over 700 middle-school students will provide insights into students' functioning relative to key components of quantitative literacy highlighting strengths and weaknesses in performance.

Babette M. Benken and Nancy Brown 227

Using a Professional Community Continuum to Facilitate the Learning of Mathematics

Professional learning based on efforts to create a university-school collaborative partnership will be discussed. Within this community continuum we use mathematics as a content vehicle and an inner city charter school as a ripe mini-district context to study the learning of mathematics and effective mathematics teaching.

Zhixia You and Fuhui Tong 333

An Analysis of Teachers' Communication Strategies in Reducing Students' Misconceptions: The Case of Comparing Fractions

By conducting a case study in seven middle school classrooms, we investigate teacher communication strategies and their impact on reducing students' misconceptions on the topic of comparing fractions.

12:00 noon - 1:30 p.m.
130 A, B, and C

Lunch and Annual Business Meeting
(All conference attendees and guests are welcome.)

Welcome given by Jane McCarthy
Interim Dean, College of Education, UNLV

1:30- 2:20 p.m.

Karen Yanowitz and J. Michael Hall 120
Improving Middle-school Math Teachers' Content Knowledge Through Activity-based Exercises

Teachers participated in a two-week summer institute, designed to improve content knowledge. In order to motivate teachers, content knowledge was presented in the context of pedagogy. Results revealed participants believed they had gained both content knowledge as well as new ways of imparting that knowledge to their students.

Tony Thompson 201
Preparing Teachers to Teach Students with Learning Disabilities

Materials and activities used in preparing teachers to teach mathematics to students with learning disabilities (LD) will be discussed. These activities help teachers' understand the cognitive difficulties experienced by students with LD and how technology, alternative assessments, and accommodations are used in teaching students with LD.

Gabriel Matney PC
Relational Spaces for the Learning of Mathematics

Research findings on student learning of mathematics in a "looping" secondary school classroom will be presented. Presenter would like to stimulate conversation as to further research in the area of developing relational spaces in which ALL students can have a deep, connected, and meaningful experience in their study of mathematics.

Thelma Davis, Emily Lin, Jeff Shih, Laura MacDonald, Lori Fulton, and Abby Burke 220
Evaluating Large-scale Mathematics Professional Development

University and school district researchers will discuss the challenges surrounding evaluation of large-scale professional development. The presentation team will outline evaluation design, present preliminary findings, and engage the audience in discussion surrounding lessons learned.

Belvia Martin and Roland Pourdavood 227

African American Parents' and Students' Beliefs and Attitudes Toward Learning Algebra

This study seeks to examine the thoughts of parents and students as they consider the necessity and uses of higher mathematics, specifically algebra. The presentation seeks to address the following questions: What is the vision of the uses of mathematics in the daily or professional lives of many African Americans? Do students of color recognize a context for the use of algebra or does it simply seem unnecessary?

Gwen Carnes, Juliana Utley, and James Carnes 333

Learning in the Algebra Classroom Using Jigsaw III

The Jigsaw III method of instruction encourages student to be actively engaged in the learning process. Communicating their mathematical thinking to classmates during group instruction and discussion, students construct meaning for themselves from the experience. Implemented in a unit on solving quadratic equations, study results indicated positive experiences for students.

2:30-3:20

Bea Babbitt 130A

Is "No Student Left Behind" Coming to Higher Education?

This session will address emerging issues in the assessment of mathematics and math education programs in higher education in response to changing national accreditation standards in higher education. Parallels will be drawn with K-12 "No Child Left Behind" issues. Discussion time will address ways to avoid the pitfalls of the K-12 initiative in institutions of higher education.

Michael Naylor 130B

Patterns of Patterns: The Mathematics of Juggling

Join former circus clown Michael Naylor for a dazzling and dynamic demonstration of the power of mathematics to symbolize, predict, and create. We'll examine how juggling patterns can be symbolized, what rules we can find for manipulating these symbols, and how we can use these rules to discover new juggling tricks.

Carryn Bellomo 130C

Using Student-Centered Projects to Teach Mathematics Content Standards to Middle School Teachers

It is essential to develop substantive college-level math courses for pre-service and in-service teachers. These courses should deliver mathematical content in a relevant way. As part of a grant funded through the Department of Education, two college level courses that deliver mathematical content standards to middle-school teachers have been designed. The primary purpose of this presentation is to share the projects used to develop content understanding in mathematics topics, such as geometric relationships, the Pythagorean Theorem, area and volume, linear and exponential equations, financial and economic analysis and probability.

Helen Khoury and Ellen Hines 120

The Emergence of Professional Development Schools: What Did We Learn?

Results of the work of Project REAL, a major DOE-funded University-Schools Partnership program, will be presented regarding the instructional, administrative, cognitive, and societal factors influencing the mathematical learning of students of two large emerging professional development schools: one middle school and one high school. Challenges and success will be discussed.

Cynthia Hernon 201

Connecting the Mathematical Content of Abstract Algebra to Teaching Practice

The effectiveness of the mathematics education component in an online course in promoting connections between abstract mathematical content and the teaching of algebra at the secondary level will be presented.

James Telese PC

An Analysis of the van Hiele Levels of NAEP Geometry Items

NAEP items were examined for van Hiele levels of geometric thinking.

Phyllis Bolin, Connie Yarema, Jason Holland, and David Hendricks 220

A Two-Population Model for a Core Curriculum Mathematics Course

When your university eliminates developmental mathematics classes, what do you do? Come see one university's innovative solution. This presentation will discuss the organization of the courses and share the data from student performance.

Teruni Lamberg and Bob Quinn 227

Implications of the Northeastern Nevada Math Project on Professional Development

A variety of entities influence professional development and math teaching practices. Communication among these groups is critical but often lacking. The Northeastern Nevada Math Project involved collaboration among these communities. Qualitative data on the nature of these collaborations and their impact on the design of professional development will be presented.

Zhonghe Wu 333

Using the Model-Strategy-Application Approach to Developing Pre-service Teachers' Pedagogical Content Knowledge

This study uses a model-strategy-application (MSA) approach to develop pre-service teachers pedagogical content knowledge and assess their progress in the mathematics method courses. A total of 180 students from four mathematics methods classes participated in this study. The results indicate that the MSA model is an effective approach that provides pre-service teachers with a strong knowledge base and proficient skills on how to teach mathematics effectively with new perspectives.

3:20-3:40 p.m. Break Foyer

3:45-4:45 p.m.
130A and B

Keynote

The Definition of "Highly-qualified Teacher" Depends on the Qualifications of the Definer

Skip Fennell
President-elect, NCTM

Dinner on your own.

Saturday, February 2, 2006

8:30 am sessions

Robert Mann 130A
NIMS 2: Data Analysis, Probability, and Science for 5th -8th Grade Teachers
Research on the professional development offered to middle school teachers involved in the Northwestern Illinois Mathematics and Science Project will be shared. The focus of the second year of this project was the integration of mathematics and science concepts and activities with a mathematical emphasis on data analysis and probability.

Alan Zollman 130B
What's Really Being Taught vs. What's Really Being Tested vs. What's Said
This is a study of the mathematics content correlations of one state's high-stakes tests compared to the state's learning standards, and compared to the enacted curriculum actually taught in six school districts. The results identify why money and effort have not changed test scores.

Tom Ball and Teruni Lamberg 130C
The Effect of Construction Models on Attainment of the Concept of Angles
A widely-available construction set, K'nex®, is used to allow sixth-grade students to experiment with angles. Using constructions, students formulate and describe their own working definitions of an angle. Of interest is the effect this presentation cycle has on students' perceptions of the nature and attributes of an angle.

Mary B. Swarthout 120

Professional Development Through Learning Stations for English Language Learners

This presentation shares results of a professional development project that focused on improving teachers' mathematics content understanding and understanding of English Language Learners (ELLs) through teacher-created learning stations. Examples of learning stations, the professional development delivery design and research results from the project will be presented.

Robert J. Quinn and John Robert Perrin 201

Teacher Perceptions of Division by Zero

Division by zero can be confusing for students at all levels. Themes emerging from teacher perceptions of division by zero collected from 36 teachers participating in the Northeastern Nevada Mathematics Project will be described. The effects of these often-flawed beliefs will be considered, as will implications for teacher education.

Sally Robison and James Fulmer PC

Using Concept Mapping to Assess Mathematical Understanding of Pre-service Teachers

Concept mapping is an effective way to plan a teaching unit, disseminate information visually while showing connections within mathematics, and assess students' conceptual understanding. In this presentation, you will learn how to use concept maps, begin making your own mapping, and obtain examples to use in your classroom.

Barbara Boschmans, April Hoffmeister, Michele liams, Hortensia Soto-Johnson, and Todd Oberg 220

The Impact of KTEM on Pre-service Elementary Teachers

Results of our attempt to change the attitudes and beliefs of pre-service elementary teachers through use of excerpts from Liping Ma's work will be reported. Through the analysis of writing assignments, surveys, and pre- and post-tests, we demonstrate how KTEM provided a catalyst for change in their attitudes and beliefs.

M. Lynn Breyfogle 227

Applying a Model to Describe the Development of Reasoning Processes in Prospective Elementary Teachers

Last year I described a model created to analyze cases written by prospective elementary teachers to expose changes in their reasoning. This presentation describes categories of this model and shares how the application of this model to 38 participants illuminates the types of development in reasoning observed.

Meixia Ding and Xiaobao Li 333

Errors in Students' Transition from Verbal to Symbolic Understanding: A Case Study

Both teachers and researchers have generally overlooked errors in students' transition from verbal to symbolic understanding in mathematics classroom. In our study, we suggest that teachers could capitalize on this type of error to deepen students' mathematical understanding and contribute to their future learning.

9:30-10:20 a.m.

Stacy Reeder and Juliana Utley 130A

Unlearning Fractions: Working with Teacher Candidates to Build Fraction Number Sense

Elementary and intermediate teacher candidates can "unlearn" harmful algorithms used with fractions as they are invited to develop fraction number sense. In this session, preliminary results of a qualitative study on developing fraction number sense with teacher candidates will be presented. Additionally, participants will be involved in a variety of activities and tasks used for the development of fraction number sense.

Kathy Burgis and Angela Krebs 130B

Preparing Elementary Teachers for the Curriculum of the 21st Century: The Role of Algebra

The role of algebra in the curriculum has changed over the past few decades. This session will examine how we can better prepare our elementary pre-service teachers to effectively teach the algebra of the current elementary curriculum. We will share a survey, discuss preliminary findings, and solicit feedback.

Bill Hanlon 130C

Algebra, So Your Students Can Do It!

This session will address best practices and proven strategies for learning algebra with an emphasis on linking topics to previously learned mathematics and outside experiences. Based upon the presenter's knowledge of mathematics combined with his knowledge and insight of working with struggling students and students living in poverty, recommendations will be provided to make classroom teachers more confident in their ability to succeed in raising student achievement.

Johanna Hadden, Dixie Metheny, and David Davison 201

Analyzing Voting Statistics with Middle School Students

The presenters have partnered with a local school district to help middle-school math and social studies teachers become more adept at integrating subject areas. The presenters will review the program components and discuss the results of the integrated lessons. In addition, student work and teacher commentary from the lessons will be presented.

Irene F Mackay and Melfried Olson PC

TI Navigator System and Classroom Research

This presentation examines a research project using TI Navigator in a Grade 10 Mathematics class. Results of teacher formative assessment, student attitudes and achievement, and instructional problem-solving situations that arose while implementing the research will be addressed.

Robert M. Capraro, Mary Margaret Capraro, Tamara Carter, Margaret Sulentic, Joan Cook, Carl Lager, Shirley Matteson 220

Mathematical Fluency

This presentation will focus on the nexus of reading and mathematics that is complimentary, interconnected, and interdependent content areas explicating the foundations on which mathematics success is dependant on reading skills. We will use specific examples from middle grades through post secondary school preparation of teachers.

Sue Brown 227

Preparing Elementary Teachers to Teach Geometry: A 12-Month Program

This session will describe a 12-month program developed to prepare elementary teachers to teach geometry. Course syllabi and resources will be shared. In addition, the effect of the program on teachers' content and pedagogical knowledge will be discussed. Post-observation of classroom teaching and examples of children's work will be presented.

John Robert Perrin and Robert Andre 333

Exploring the Efficacy of Investigative Calculus Projects: Teacher Perceptions of Division by Zero

This session discusses preliminary results, including the implications for practice, of a new instructional technique in high-school calculus aimed to instill a deeper understanding of the subject and to stir students' interest in calculus. Data gathered on the efficacy of student constructed investigative projects in calculus will be presented.

10:30-11:20 a.m.

Clare Banks 130A

Themes Which Emerged from Open-ended Questions about Pre-service Teachers' Epistemological Beliefs

In analyzing data collected from open-ended questions about pre-service teachers' personal epistemological beliefs, unanticipated themes and patterns emerged from the analysis that point to other areas deserving of research. Areas such as the uniqueness of mathematics; innate limits; accounting for their beliefs; structure of mathematics, and how mathematical knowledge changes should be researched.

Jessica Hollums and Mary Margaret Capraro 130B

Questioning in the Mathematics Classroom

This presentation will focus on examining the questioning techniques and dialog between teachers/students and students/students in two different sixth-grade mathematics classrooms. In addition to quantifying and classifying questions, we will share specific video clips of dialogs from these classrooms.

Dixie Metheny, David Davison, and Tony Hecimovic 130C

Middle School Math Teachers Reflect on Their Teaching Practice

The presenters have partnered with a local school district to help middle-school math teachers become highly qualified in accordance with the NCLB Act. Further results from the program will build on last year's presentation.

Nancy Cerezo 120

Problem-based Learning in the Middle Grades Classroom

What do teachers say about the implementation of problem-based learning in the middle school? Five middle grades math and science teachers in the southeast region participated in a case study to probe this issue. Are the results positive? Visit the presentation to discover the answer.

Vicki Flournoy 201

The Challenges Encountered by Pre-service Elementary Teachers When Applying Problem-Solving Strategies and Manipulatives to Solving Mathematical Tasks

This presentation will focus on the challenges faced by pre-service teachers with in-class mathematical tasks, challenging what they believe to be true with their own mathematical thinking and the prior mathematical experiences they had in their K-12 educational experience. Attendees will participate in a mathematics activity given to the students in this class for an authentic look at the task while being asked to challenge themselves and reflect on their own mathematical thinking.

Brian Beaudrie PC

Changing College Algebra Delivery from Direct Instruction to Web-Based Instruction

The purpose of this study was to investigate the relationship between communication and achievement among cooperative learning groups performing problem-solving activities in a WWW-based geometry course.

Judith Olson, Claire Okazaki, Melfried Olson, and Fay Zenigami 220

Gender Equity and Mathematics: A Journey, Not a Destination

Gender differences in performance on complex mathematics tasks often do not appear until adolescence. However, preliminary results of research, along with classroom video and student work from primary-aged students suggest a difference in understanding between boys and girls as well as the manner in which they communicate their understanding.

Winifred Mallam 227

What's Your Strategy?

Problem-solving activities for Grades 3-5 will be shared. Solutions and reactions of teachers and their students toward problem solving will be shared.

Xiaobao Li and Meixia Ding 333

A Meta-analysis of Effects of Standards-based Curriculum on Student Achievement

This study will implement the meta-analysis method to investigate the magnitude of effects of standards-based curricula on student achievement, which is assessed by combined effect size. This study will also analyze the variation of this magnitude by considering other factors, such as professional development, student's socioeconomics status, etc.

Lunch
11:30--???
130 A, B, and C

1:00-3:00 p.m. 333
Executive Board Meeting

Adolphson, Keith	F 10:00
André, Robert	F 9:00, S 9:30
Babbitt, Bea	F 2:30
Ball, Tom	F 9:00, S 8:30
Banks, Clare	S 10:30
Beaudrie, Brian	S 10:30
Bellomo, Carryn	F 2:30
Benken, Babette	F 11:10
Bolin, Phyllis	F 2:30
Boliver, David	F 8:00
Boschmans, Barbara	S 8:30
Brahier, Daniel	F 9:00
Breyfogle, M. Lynn	S 8:30
Brown, Nancy	F 11:10
Brown, Sue	S 9:30
Burgis, Kathy	S 9:30
Burke, Abby	F 1:30
Capraro, Mary Margaret	S 9:30
Capraro, Robert M.	S 9:30
Carnes, Gwen	F 1:30
Carnes, James	F 1:30
Carter, Andy	F 9:00
Carter, Tamara	S 9:30
Cassel, Darlinda	F 8:00
Cerezo, Nancy	S 10:30
Che, S. Megan	F 10:00
Cohen, Steve	F 9:00
Cook, Joan	S 9:30
Cowen, Lynn	F 8:00
Cox, Annie	F 11:10
Cox, Claudia	F 11:10
Davis, Themla	F 1:30
Davison, David	S 9:30, S 10:30
DeWindt-King, Adrian M.	F 9:00
Ding, Meixia	S 8:30, S 10:30
Dixon, Juli K.	F 11:10
Emerine, Janet	F 9:00
Enderson, Mary C.	F 9:00
Fennell, Skip	F 3:45
Flournoy, Vicki	S 10:30
Ford, Marilyn Sue	F 11:10
Fulmer, James	S 8:30
Fulton, Lori	F 1:30
Giannantonio, Missy	T 4:30
Graeber, Anna	F 8:00
Hadden, Johanna	S 9:30
Hall, J. Michael	F 1:30
Hanlon, Bill	S 9:30
Hartman, Kim	F 11:10
Hartweg, Kim	F 10:00
Hecimovic, Tony	S 10:30
Hendricks, David	F 2:30
Hernon, Cynthia	F 2:30
Hines, Ellen	F 2:30
Hoffmeister, April	S 8:30
Holland, Jason	F 2:30
Hollar, Jeannie Conrad	F 8:00
Hollums, Jessica	S 10:30
liams, Michele	S 8:30
Jordan, Pat Lamphere	F 11:10
Khoury, Helen	F 2:30
Kitchens, Anita Navarte	F 8:00
Krebs, Angela	S 9:30
Lager, Carl	S 9:30
Lamberg, Teruni	F 2:30, S 8:30
Levitt, Greg	F 10:00
Li, Xiaobao	S 8:30, S 10:30
Lin, Emily	F 1:30
MacDonald, Laura	F 1:30
Mackay, Irene F.	S 9:30
Mallam, Winifred	S 10:30
Mann, Robert	S 8:30
Manouchehri, Azita	F 9:00
Martin, Belvia	F 1:30
Matney, Gabriel	F 1:30
Matteson, Shirley	S 9:30
Maxwell, Sheryl A.	F 9:00
Menon, Rama	F 10:00
Menser, Jackie	F 11:10
Metheny, Dixie	S 9:30, S 10:30
Mikusa, Michael	F 9:00
Miller, Cynthia	F 9:00
Muraco, Holley	T 4:30
Naylor, Michael	F 2:30
Obiekwe, Jerry	F 10:00
Okazaki, Claire	S 10:30
Olson, Judith	S 10:30
Olson, Melfried	S 9:30, S 10:30
Paik, Eugene	F 8:00
Perdue, Diana	F 11:10
Perrin, John Robert	S 8:30, S 9:30
Pinchback, Carolyn	F 8:00

Pourdavood, Roland	F 8:00, F 1:30
Pugalee, David	F 11:10
Quinn, Robert J.	F 2:30, S 8:30
Oberg, Todd	S 8:30
Reeder, Stacy	S 9:30
Reyes, Oscar	F 10:00
Reynolds, Anne	F 10:00
Reys, Barbara	F 10:00
Reys, Bob	F 10:00
Robison, Sally	S 8:30
Sakshaug, Lynae	F 10:00
Shelt, Debra	F 9:00
Shih, Jeff	F 10:00, F 1:30
Soto-Johnson, Hortensia	S 8:30
Speer, William	F 10:00
Sulentic, Margaret	S 9:30
Svec, Lawrence	F 8:00
Swarthout, Mary B.	S 8:30
Tarr, James	F 10:00
Telese, James	F 2:30
Thompson, Tony	F 1:30
Tong, Fuhui	F 11:10
Usnick, Virginia	F 11:10
Utley, Julianna	F 8:00, F 1:30, S 9:30
Vander Veldt, Michelle	F 8:00
Williams, Carolyn	F 8:00
Wohlhuter, Kay A.	F 10:00
Wu, Zhonghe	F 2:30
Yanowitz, Karen	F 9:00, F 1:30
Yarema, Connie	F 2:30
You, Zhixia	F 11:10
Young, Elaine	F 11:10
Zenigami, Fay	S 10:30
Zollman, Alan	S 8:30

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