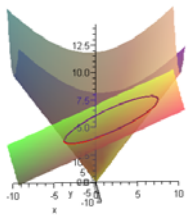
RCML



Intersection Points

The Newsletter of the Research Council on Mathematics Learning

January 2009 Volume 33, No.3

The Research Council on Mathematics Learning seeks to stimulate, generate, coordinate, and disseminate research efforts designed to understand and/or influence factors that affect mathematics learning.

Visit us on the Web at: www.unlv.edu/RCML

PRESIDENT'S COLUMN

Embarking on a New Era

By Pat Jordan

As I was working on this column, I had a brief glimmer of what former President Bush's last few days in office might have been like. Although I have enjoyed my tenure as President of *RCML*, I look forward to handing the reins over to the capable hands of Anne Reynolds. I am reminded of an admonition I received several semesters ago as I faced teaching a section of the Primary Mathematics methods course: Don't make anyone cry and to end the semester with just as many students as I had at the beginning. I think I met those standards – actually, I gained a "student" when one of the women enrolled in the class had her baby before the semester ended. Hopefully, I leave the office of President of *RCML* in much the same way without having made any of you cry or being directly responsible for a decline in membership.

This past year has brought many exciting changes to our organization, and I want to take this opportunity to publicly thank Sheryl Maxwell and Jean Schmittau for their unwavering efforts, many sleepless nights, long conversations, the multitude of

hours spent in researching alternative possibilities, the time working diligently with lawyers and employees of the former publishing agent, and their tireless energy spent in establishing a new journal that will prove to be an outstanding contribution to the mathematics education profession. Without their hard work and determination that the journal would continue, we would be facing many difficult decisions at the March meeting. On behalf of the organization, I say "thank you, thank you, thank you," and suggest the journal may always be known to those involved as the *Phoenix*, for it has surely risen from the ashes of the mismanagement of the former publisher. I would also like to thank the Executive Committee, Alan Zollman, and Bill Speer (the memory of the organization) for their wise counsel and assistance in making these changes happen.

As I think about the many issues facing us in mathematics education, I think back to December when preliminary reports from the latest administrations of the National Assessment Educational of Progress in mathematics and reading were presented. The fourth graders seem to have improved a bit from the last iteration, but the eighth graders have made little progress. In the international arena, our students still fall in the lower third of the rankings. With twenty years of the *Standards* surrounding us, almost thirty since *The Agenda for Action* was published, there still seems to be a disconnect between our expectations for students profound understanding of mathematics at the K-16 levels and their actual levels of performance.

Here are a few ideas for you to ponder. Have we actually changed the way algebra is taught in our middle schools/junior highs, high schools, and colleges? Have we made any strides forward in changing the mathematics curriculum to meet the needs of all learners? Have we experienced a rise in the number of minority and other under represented groups of students in the fields mathematics, science, engineering, technology, teaching at the university level? What are we doing in the general education or entry-level mathematics courses in higher education to entice students who were good math students in high school to consider mathematics teaching as a profession? Is there a significant difference between the scores on state assessments and *End-of-Course* exams

Have we made any strides forward in changing the mathematics curriculum to meet the needs of all learners?

of K-12 students who have National Board Certified teachers and those who don't? Is there a difference in the test scores of those students who are taught by traditionally certified mathematics teachers and those who are in the classrooms through non-traditional paths? Does the type of curriculum or instructional design effectively raise students' scores? Are the students who enter college today as well prepared as those students who entered college before the *NCLB* testing requirements? How do we encourage and enhance the mathematics learning of low-achieving secondary students? How do we attract and retain teachers from diverse backgrounds into mathematics education? How do we attract and retain teachers from diverse populations into master's- and doctoral-level mathematics education programs? From where will the next generation of mathematics education and mathematics professors be drawn?

Over the past two years, perhaps I have started you thinking about the future of mathematics learning and have encouraged and spurred you on to do great things, to share your ideas, to re-assess your own research, and to make an even greater impact on the students you teach and, in turn, on their future students.

RCML Election Results – Fall, 2008

V-P for Publications

- Sheryl A. Maxwell – University of Memphis

Secretary

- Juliana Utley – Oklahoma State University

Conference Committee (we elected two members)

- Kerri Richardson – UNC Greensboro
- Elaine Young – Texas A&M University at Corpus Christi

INVESTIGATIONS

IN MATHEMATICS LEARNING

The PULSE of INVESTIGATIONS

Sheryl A. Maxwell, VP of RCML Publications

What does The University of Tasmania, Hong Kong Institute of Education, Universita Studi di Milano, and YOU have in common? Have you got an idea? Give up? . . . If so, read on!

Each of you has received Volume 1, Issue 1 and Issue 2 of the newly named and Official Journal of RCML – **INVESTIGATIONS IN MATHEMATICS LEARNING.** We are confident that the excellence in quality remains under the leadership of the editor, Dr. Jean Schmittau. We are even making the next issue contain more articles. Soon you will be receiving Volume 1, Issue 2—the winter issue; later in the spring you will receive Volume 1, Issue 3—the spring issue. Thus, we hope you recognize RCML's intentional move from creating volumes organized about the calendar year to journals designated as issues during the Academic Year. With your membership in RCML, you will continue to receive a steady stream of issues of **INVESTIGATIONS IN MATHEMATICS LEARNING.** Each Academic Year you will receive three issues of the numbered volume—Fall, Winter, and Spring if you have paid for your subscription through your membership dues.

Please check to see if you have renewed your membership to the RCML organization for $28.00 per year for 2009. Your membership is tied to you receiving **INVESTIGATIONS** in a timely manner. During the past months, Dr. Roland Pourdavood who has served as the membership chairman for the past 6 years has requested to step down. Consequently, please send your membership information and check for $28.000 directly to the Treasurer, Dr. Mary Swarthout who will process the information and check and let me know of your renewal. When you pay for membership, this will entitle you to receive **INVESTIGATIONS** for the Academic Year 2009-2010 that starts in Fall 2009. If you have paid for your membership in 2008, you will receive the three issues of Volume 1. Only by renewing your membership in 2009 can you receive the three issues of Volume 2. Additionally, you will be able to attend the 2009 Conference at Berry College in March at a reduced rate.

To renew your membership to The Research Council on Mathematics Learning, mail the information found at http://www.unlv.edu/RCML and a $28.00 check to:

The Research Council on Mathematics Learning
c/o Dr. Mary Swarthout
Sam Houston State University,
Math and Statistics Dept., P.O. Box 2206
Huntsville, TX 77341-2206

We are updating our records that indicate the MANY libraries throughout the world that have subscribed to receive **INVESTIGATIONS IN MATHEMATICS LEARNING.** We are thrilled that so many institutions are recognizing its quality and its significance in the mathematics educational arena. The efforts in publishing our own journal are proceeding well. Please make certain that your library is receiving their copy of this outstanding journal and have paid for their subscription for 2009. The subscription payment is due by June 2009.

Connection Points

For this month's Connection Points we will get to know some of our members with a matching game. Match the pictures below to one of the sets of data on the right.

Person A –I love skydiving and airplane physics. I worked for American Airlines for 10 years before moving to the quiet mountains of Montana. Both of my sons are in mathematical professions; Walmart executive accountant and Boeing aerospace designer.

Person B – Three important things that have influenced who I am: 1)I was in the Peace Corps and taught mathematics and science in Cameroon. 2) I received my Ph.D. from the University of Oklahoma and the program challenged me to completely rethink mathematics and offered a supportive environment for my critical theory tendencies. 3) My three children who have helped me see the world through their eyes.

Person C— At this stage of my life I am definitely "Grandma" to four energetic grandsons ages 6 and below and travel to Colorado Springs and San Francisco often to play with them. Of course, I am always secretly evaluating their spatial and numeric skills to identify the next great mathematician. I love spending time tending my roses that need a great deal of tender loving care in the hot desert climate. Sudoku puzzles keep me entertained on cross country trips and help me relax in the evening.

Person D— I believe that ALL students can learn mathematics and it is up to us to help them develop the confidence and skills to excel. When I retire I would like to attend culinary arts school – maybe in Paris – and ride my motorcycle as often as possible. I've never met a strange and hope I always make those around me feel comfortable and appreciated.

RCML 2009 Conference
36th Annual Meeting
Berry College

Rome, Georgia
March 5-7, 2009

Email Conference Registration Questions to cmoldava@highlands.edu

This years conference will feature Jim Wilson as its keynote speaker. Jim Wilson received his Ph. D. in 1967 in mathematics education from Stanford University. He worked with the School Mathematics Study Group from 1964 – 1968. In 1969, he began a long tenure as department head and graduate coordinator for mathematics education at the University of Georgia.

Among other topics, Dr. Wilson is interested in visualization, evaluation and assessment. He has served as major professor for over 50 doctoral students.

Dr. Wilson has placed extensive resources for mathematics education on the Internet. Some of his websites receive over 35,000 hits per week.

Dr. Wilson served as a visiting faculty member at seven institutions over the course of his career. He gave special lectures in several countries, including China, Japan, Thailand, and Sweden.

As a consultant, Dr. Wilson has served not only numerous counties in Georgia and numerous states in the United States, but also

the Educational Testing Services and the National Assessment of Educational Progress.

Dr. Wilson has been a reviewer or editor for many journals, including *American Educational Research Journal*, *International Journal of Science and Mathematics Education,* and *Journal for Research in Mathematics Education*. He also has been a reviewer for many publishing companies and has served on the author team for three textbook series. The American Educational Research Association special interest group for research in mathematics education was founded by Dr. Wilson.

In 2001, the National Council of Teachers of Mathematics awarded the Lifetime Achievement Award to Dr. Wilson. Georgians are proud of the accomplishments of Dr. Jim Wilson and are pleased that he accepted the invitation to be the keynote speaker for RCML at Berry College on March 6, 2009.

For program information please visit: http://www.unlv.edu/RCML/conference2009

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<u>Connection Points Answers</u>

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