

Intersection Points

The Newsletter of the Research Council on Mathematics Learning

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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.rcml-math.org

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President's Column



Juliana Utley
RCML President

The Vibrancy of RCML

As I reflect upon the past year of RCML, it is with great admiration. I have watched a board that is active and working hard to not only keep RCML moving along but broaden its reach.

They truly do listen and are vested in keeping RCML a great organization. Here are a few examples of what is happening to keep RCML vibrant.

First, what a great conference in Florida – well done everyone; special thanks to Nancy Cerezo and Gabriel Matney. Many new faces were there and I hear a few folks arrived early or stayed late to go to Universal Studios – what fun! Eileen Faulkenberry did a great job as VP Conferences in working with Gabriel and Nancy and working to line up locations for future conferences. Looking forward to seeing everyone in Fort Worth next Spring.

Second, many RCML members are making suggestions to board members on ideas for RCML – keep them coming.

Third, the publications committee has been very active. Sheryl Maxwell will be missed greatly but I want to thank her for the time she has continued to spend to provide advice and help Gabriel to transition into his new role as VP Publications. If you have not checked out the new RCML website please do so and be sure that you have your login information for the members' only section. New website is located at www.rcml-math.org. It is a beautiful new site – awesome work Kerri Richardson. Kerri and the board welcome any suggestions you may have for the new website. A call for manuscripts for a special issue was sent out (see <http://www.rcml-math.org/investigations-special-issue>). So consider submitting your manuscript for this special issue or to the journal.

Lastly, the board has actively been talking with publishers that might be interested in taking on the publication of *Investigations in Mathematics Learning*. Please know that due diligence and many consultations will occur, constantly keeping in mind the best move for now and the future for RCML. No matter what we do RCML will continue to have control of our journal including the editorship and copyrights. We are excited about the positive response we are getting. Stay tuned more to come.

Juliana Utley



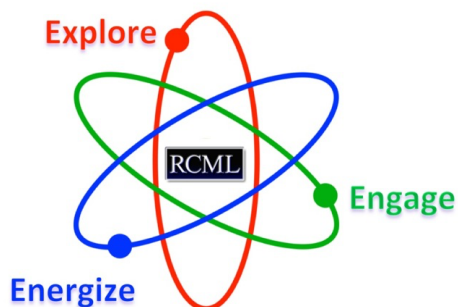
RCML Business Meeting, February 26, 2016.



President, Past-President, and Past VP- Publications, February 26, 2016.

Research Council on Mathematics Learning (RCML) 2017 Call for Proposals

Engage, Explore, and Energize Mathematics Learning



The 44th Annual Conference of the Research Council on Mathematics Learning (RCML) will be in **Fort Worth, TX** March 2-4, 2017 at the Historic Hilton Downtown Fort Worth. We are now accepting proposals!

The purpose of the conference is to share current research in mathematics education. The conference planning committee encourages proposals that are “works in progress.” This is an excellent conference for faculty and advanced graduate students to share their ideas for

Kansas Conrady,
RCML VP for Conferences,
Kansas.conrady@ou.edu

Kathy Horak Smith, Conference Chair
ksmith@tarleton.edu
Melanie Fields, Program Chair
Melanie.fields@tamuc.edu

research, and receive constructive comments on their finished studies or preliminary findings.

Speaker proposals must be submitted by September 9, 2016 to the RCML website at www.rcml-math.org

RCML publishes conference proceedings for selected papers submitted and accepted as conference presentations. You are encouraged to prepare and submit a paper for the conference proceedings. Speaking proposals and papers submitted to the *RCML Proceedings* are **peer reviewed**. Acceptance of your proposal does not guarantee acceptance of the associated publication into the proceedings. Before submitting your paper, please review the Proceedings Submission Guidelines on the RCML website. **Conference proceedings papers are due by October 28, 2016**. All authors on the proceedings paper must register for the conference.

Please consider joining us in 2017 in Fort Worth. If you have additional questions, please contact us via email at one of the addresses below.

Eileen Faulkenberry, Program Co-chair
efaulkenberry@tarleton.edu

Please Note: *All presenters are required to register for the conference by January 20, 2017. If not registered by that time, the proposal will not appear in the conference program and the paper will not appear in the conference proceedings.*

RCML Nomination Form

Elections will be held for the following leadership positions:

Secretary: Serves a two-year term. Executive Committee Member

- ◆ Records minutes for all meetings of the RCML Board
- ◆ Presents minutes from previous business meeting for approval at the Annual Business Meeting

Conference Committee Members: We will fill **two positions**; each serving a **three-year term**

- ◆ Works with VP for Conferences and Committee
- ◆ Works with the Annual Conference Committee, the Conference Chair and Program Committee Chair to support as needed
- ◆ Assists with Annual Conference activities, particularly reviewing speaker proposals and proceedings submissions

Publications Committee Members: We will fill **two positions**; each serving a **three-year term**

- ◆ Works with VP for Publications
- ◆ Works to assist in fulfilling official publication responsibilities (journal, newsletter, proceedings or other) for the organization



Your help and support is needed so that RCML continues with quality persons in the leadership ranks. Please take time to consider who you think would be good candidates for these positions. Self-nominations are welcomed and encouraged! Complete the following information form, scan it, and send the information requested to Dan Brahier, President Elect at brahier@bgsu.edu. Thank you for considering service to RCML.

Name of Nominee: _____

Name of Nominator: _____

If you are nominating someone, have they agreed to place their name in nomination?

YES NO

Office of Interest: [circle your choice]

Secretary

Conference Committee

Publication Committee

Institution: _____

Email address: _____

Phone Number: _____



The Pulse of **INVESTIGATIONS**

Gabriel Matney

We had an amazing conference in Orlando! It was a real joy to indulge in one another's research, to catch up on the lives of those in the RCML family, and to make new collegial friendships with newcomers. After the conclusion of the conference I flew to Memphis where Sheryl Maxwell mentored me in the roll of VP for RCML Publications to ensure a smooth transition. I cannot express in words the amount of admiration and appreciation I have for what Sheryl has done for our community. I am also appreciative of the responsibility RCML has entrusted to me to continue to build our publications quality and influence.

The focus for the way forward will be on expanding the reach of **INVESTIGATIONS** IN MATHEMATICS LEARNING, to more professionals. Be on the lookout in future newsletters about the details of this expansion. The Volume 8, Number 3 issue of our official RCML Journal has been mailed to all subscribers and members of RCML. With your continued membership in RCML, you will receive a steady stream of issues.

We are now seeking subscribers for the Volume 9 issues. It would be of great help for our organization if each member would check with their college and/or university to see if they are receiving the official RCML journal, **INVESTIGATIONS** IN MATHEMATICS LEARNING. If your college/university does not receive our journal then many times suggesting they subscribe to it is all it takes as the price is very reasonable. If your library has any questions about subscription please have them contact me at gmatney@bgsu.edu

The launch of our new website has opened up a convenient way for institutions to subscribe to via the web. They can facilitate the entire process online at <http://www.rcml-math.org/investigations>. An **Institutional** subscription to **INVESTIGATIONS** IN MATHEMATICS LEARNING is \$80.00 per Academic Year for an institution located in the United States and \$100.00 per Academic Year for an institution located outside the United States. The remittance is due in July of the previous Academic Year. Currently, RCML has institutional subscriptions from colleges/universities throughout the United States and even mail 35 journals to institutions in other parts of the world. If the institution would rather send a check instead of paying online through our website that can be done by sending payment to:

INVESTIGATIONS IN MATHEMATICS LEARNING
c/o Dr. Gabriel Matney, RCML VP for Publications
1801 Timber Ridge Dr.
Bowling Green, OH 43402

This information is repeated on the inside cover of each issue in case you misplace this newsletter.

Drew Polly, the Editor of our journal has been working with reviewers to get a 4-6 week turnaround time on the review process. We hope that you will consider writing a manuscript for the upcoming issues of **INVESTIGATIONS** IN MATHEMATICS LEARNING. You can contact the editor at investigationseeditor@gmail.com and submit your manuscript electronically as an attachment. The table of contents of past issues are available at <http://www.rcml-math.org/iml>, our RCML website.



***One Model, One Follow* Co-Teaching to Develop Teacher Candidates in Mathematics Education**



Bradford Griggs cbgriggs@ius.edu
 David Sullivan-Losey, delosey@ius.edu
 Alan Zollman alanzoll@ius.edu
 Indiana University Southeast

One of the strongest influences on a student teacher's (i.e., teacher candidate) development is the cooperating teacher (i.e., P-12 clinical educator) during student teaching (i.e., clinical practice) with the candidate following the model of the educator (Borko & Mayfield, 1995; Graham, 2006). Thus the importance of having high quality cooperating teachers in mathematics is crucial (National Council of Teachers of Mathematics [NCTM], 1991; 2000; 2014). However, the National Council for Accreditation of Teacher Education's study reported that the student teaching experience is arbitrary (NCATE, 2010). In fact the influence of four or five years of previous education courses at the university usually does not directly connect to the P-12 clinical educator's modus operandi thus it has minimal impact (Griggs, Sullivan-Losey & Zollman, 2016; Zollman, 2016). In Indiana University Southeast's Greater Louisville service area, our P-12 clinical educators often view having a teacher candidate in their classroom as a service to the profession. In addition, we have found that many of our most highly qualified mathematics teachers now are hesitant to take a

teacher candidate due to the influence of high-stakes mathematics tests – concerned about giving up valuable instructional time to an inexperienced student teacher (Griggs, et al., 2016; Zollman, 2016).

Co-Teaching Models Found in the Literature

Our institution, as has many universities, have moved to a co-teaching model (first developed for inclusion of students with special needs at St. Cloud College) where the cooperating teacher and teacher candidate collaboratively plan and deliver instruction from the onset (Bacharach, Heck, & Dahlberg, 2010). The cooperating teacher partners with, rather than relinquishing responsibility to, the candidate. The partnership alternates between assisting or leading the planning, teaching, and evaluation. This enhances the learning opportunities, knowledge, abilities and skills of both teachers (Bacharach, Heck, & Dahlberg, 2008).

There are the seven prototypes of co-teaching from Special Education that were adapted to the clinical practice of the student teaching experience (Cook & Friend, 1995; Friend, 2015).

- *One Teach, One Observe* – One teacher instructs while the other observes.
- *One Teach, One Assist* – One teacher instructs with the other assists.
- *Station Teaching* – The co-teaching pair divide the instruction and students into groups.
- *Parallel Teaching* – Each teacher instructs half of the students the same material.
- *Supplemental Teaching* – One teacher to work with students at grade level, while

the other teacher works with students who need more help.

- *Alternative/Differentiated Teaching* – The two teachers present alternative teaching strategies to teaching the same material.
- *Team Teaching* – Both teachers are actively involved in the lesson.

Our Co-Teaching Prototype: One Model, One Follow

We utilize our own eighth prototype, *One Model, One Follow*, with our middle and secondary mathematics teacher candidates (Griggs, et al., 2016; Zollman, 2016). In the first step of *One Model, One Follow* we have the teacher candidate and the classroom teacher co-plan the lesson using guiding questions such as: How does one take the state standard, the school's mathematics curricula and the resources (e.g., textbook, technology, and manipulatives) to plan a successful lesson – without spending days writing a lesson plan? The teacher candidate physically writes the lesson plan while the two discuss and co-plan. These discussions are very valuable. The aim is for the teacher candidate to talk about teaching for understanding while the classroom teacher demonstrates “Understanding by Design” (Backwards Design by McTighe & Wiggins, 2004) planning. The teacher typically focuses upon student learning outcomes while the teacher candidate tries to include the content, materials and methods from our university methods courses. The classroom teacher demonstrates the lesson in one classroom period so the teacher candidate can visualize the pacing of the lesson plan in real time. In our experiences, the teacher candidate normally wants to rush to the mathematical content and definitions, thus minimizing the mathematical process standards. In contrast however, we hope the classroom teacher introduces the lesson asking and probing (vs. telling) the topic of the day. We request, if possible, the teacher and the candidate reflect immediately after the teacher's lesson. Then in a subsequent classroom period, the teacher candidate teaches the same lesson to a different class. We have observed in *One Model, One Follow* that the teacher candidates stress the

mathematical precision of language that usually we would not see in their lessons. Both instructors build a better lesson – one that is more precise, more student-centered - by co-planning, co-discussing and co-reflecting. In *One Model, One Follow* the candidate has the opportunity to see and then practice the lesson plan that was written, including the practical use of formative assessments, Bloom's taxonomy questioning (Bloom, 1956), use of technology, and classroom management.

Summary

The benefits of co-teaching extend beyond the teacher candidate, to the P-12 student, the clinical educator, the school, the university clinical educator and the university. Unlike the traditional student teaching model, co-teaching focuses on student learning and teacher development concurrently. Co-teaching offers the knowledgeable assistance and emotional support to transform a "teacher" to an "educator." Co-teaching provides the P-12 student, instructional encouragement and affective guidance to transfigure a "pupil" to a "learner." Co-teaching imparts the involvement, preparation, leadership opportunities, modeling, and coaching to develop a "student teacher" to a "teacher candidate" (Griggs, et al., 2016; Zollman, 2016).

References

- Bacharach, N. L., Heck, T. W., & Dahlberg, K. R. (2010). Changing the face of student teaching through co-teaching. *Action in Teacher Education*, 32(1), 3-14.
- Bacharach, N. L., Heck, T. W., & Dahlberg, K. R. (2008). What makes co-teaching work? Identifying the essential elements. *The College Teaching Methods and Styles and Journal*, 4(3), 43-48.
- Bloom B. S. (Ed.) (1956) *Taxonomy of Educational Objectives, the classification of educational goals – Handbook I: Cognitive Domain* New York: McKay.
- Borko, H. & Mayfield, V. (1995). The roles of the cooperating teacher and university supervisor in learning to teach. *Teacher & Teacher Education*, 11(5), 501-518.

- Cook, L., & Friend, M. (1995). Co-Teaching: Guidelines for creating effective practices. *Focus on Exceptional Children*, 28(3), 1-17.
- Friend, M. (2015). Welcome to co-teaching 2.0. *Educational Leadership*, 73(4), 16-22.
- Graham, B. (2006). Perceptions of cooperating teachers. *Teaching and Teacher Education*, 22(8), 1118–1129.
- Griggs, B., Sullivan-Losey, D, & Zollman, A. (2016). *Student teaching and co-teaching: a win-win opportunity for middle and secondary school mathematics*. Manuscript submitted for publication.
- McTighe, J., & Wiggins, G. (2004). *Understanding by design: Professional development workbook*. Alexandria, VA: Association for Supervision & Curriculum Development.
- National Council for Accreditation of Teacher Education (NCATE). (2010). *Transforming teacher education through clinical practice: A national strategy to prepare effective teachers*. Report of the Blue Ribbon Panel on Clinical Preparation and Partnerships for Improved Student Learning. Washington, DC: Author.
- National Council of Teachers of Mathematics. (1991). *Professional teaching standards for school mathematics*. Reston, VA: Author.
- National Council of Teachers of Mathematics. (2000). *Principles and standards for school mathematics*. Reston, VA: Author.
- National Council of Teachers of Mathematics. (2014). *Principles to actions: Ensuring mathematical success for all*. Reston, VA: Author.
- Zollman, A. (2016, February 26th). Co-teaching vs. student teaching to develop teacher candidates in education. Presented at the 43rd Annual Meeting of the Research Council on Mathematics Learning. Orlando, FL.

The aim of Connection Points is to share connections between RCML experiences (e.g., annual meeting, *Intersection Points* [newsletter], and *Investigations on Mathematics Learning* [journal]) on a topic germane to readership. We seek proposals for the October 2016 and January 2017 newsletters. Individuals are encouraged to contact Jonathan Bostic (bosticj@bgsu.edu) with queries and/or potential manuscripts. All manuscripts for the newsletter are editor-reviewed.



Report on the 43rd Annual Conference of the Research Council on Mathematics Learning

Kansas Conrady, Gabriel Matney, and Nancy Cerezo

February 25 – 27, 2016

Orlando, FL

The 43rd Annual RCML Conference, *Shining a Light on Mathematics Learning*, was held at the Double Tree by Hilton Hotel in Orlando, FL on February 25 – 27, 2016. There were a total of 158 conference registrations, 111 members, 39 graduate students, and 8 guests. The conference kicked off with the poster sessions featuring 14 posters and 93 presentations over the next two days.



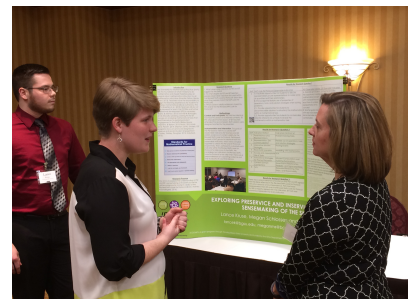
The Wilson Memorial Lecture, *Applications of a Virtual-Reality Classroom in Mathematics Education*, was presented by Dr. Mike Hynes and provided the audience an opportunity to interact with the TeachLive virtual reality classroom after hearing about the development and use of the classroom in teacher education. Dr. Alan Zollman presented this year's founders lecture, *Mentoring in the Profession: The Legacy of RCML*. The lecture, complete with the bar napkin, focused on stage seven of Erikson's psychosocial development with a reminder that not only do we all need mentors that nurture and support, but the legacy of RCML is that we are a mentoring organization.



Breakout sessions and posters shared insight across a variety of both mathematics content and pedagogy including early childhood through post-secondary and along all points in preservice through veteran teacher. Sessions included, but were not limited to, technology development and implementation, effective differentiation, mathematical discourse and conversations, and a variety of other elements related to the broader scope of the learning and teaching of mathematics. All proposals were double-blind peer reviewed with a third reviewer breaking ties. Thank you to the 81 proposal reviewers listed on page 2 of the program book available under the Conference Tab at <http://www.rcml-math.org>.

Many people and organizations come together to make the RCML Conference a success. This year, we would like to say thank you to Dr.

Keith Emmert, Megan Schlosser, and Corrinne Sullivan for their work on the program content and layout. The College of Education and Human Development at Bowling Green State University for their support in providing the program materials, especially Dawn Shinew, Dean of Education, for her support of the materials for binding and printing of the program materials. EAI Education for once again providing the official conference bags. The Education Department at Saint Leo University for the trifold poster boards and registration



resources. UCF College of Education and Human Performance for loaning the projectors used throughout the presentations.



This year’s conference would not have been possible without the tireless work of Program Chair Gabriel Matney of Bowling Green State University and Conference Chair Nancy Cerezo of Saint Leo University. Each providing countless hours of gathering resources and organizing information to make this 43rd Annual RCML Conference a wonderful success.

Please join us next year for the 44th Annual Conference to be held March 2 – 4, 2017 at the Historic Hilton Hotel in Downtown Fort Worth, Texas. Registration, hotel, and proposal information can be found at www.rcml-math.org.

RCML Conference Proceedings

The conference proceedings for the 43rd Annual Meeting of the Research Council of Mathematics Learning were edited by Keith Adolphson and co-edited by Travis Olson. Twenty of the 49 submitted manuscripts were accepted after a double-blind, peer review. A special thank you to the 48 proceedings reviewers. A list of reviewers can be found in either on page 2 of the conference program book or page ii of the conference proceedings, both can be accessed via the RCML website at rcml-math.org

Conference Highlights

Dr. Mike Hynes gave the Wilson Lecture. The title of his presentation was “Applications of a Virtual-Reality Classroom in Mathematics Education”. Pegasus Professor Emeritus Mike Hynes is the founding director of the Lockheed Martin/UCF Academy for Mathematics and Science. This endowed program continues to prepare teachers of mathematics and science from elementary and middle schools for leadership roles in the improvement of mathematics and science teaching. Since 2004, his research and development activity has been focused on the development of a simulator for education known as TeachLivE. With colleagues Charles Hughes and Lisa Dieker, Hynes received \$1.5 in funding to accelerate the development of TeachLivE. The simulator is now licensed by UCF to Mursion, Inc. for commercialization.

Abstract: Educators, particularly mathematics educators, have long been adopters of new pedagogies and teaching tools that have the potential to improve student and teacher performance in the content area of mathematics. The field of Modeling and Simulation has been an important part of training in aerospace, the military and industry; however, effective applications for education have not been available. For the past ten years a research team at the University of Central Florida has undertaken the task of developing a virtual-reality classroom, TeachLivE, and it has proven to be successful in changing teacher behaviors and show promise as a tool for students learning mathematics. The presentation will include audience interaction with TeachLivE as well as discussions of the uses of TeachLivE in mathematics education and education, in general.



RCML Business Meeting

February 26, 2016

President Juliana Utley called the general business meeting to order at 12:30 pm.

Approval of Minutes: Sarah Pratt presented the minutes from the RCML 2015 conference business meeting, which was also distributed in the 2016 conference program. Melfried Olson moved to approve the minutes, seconded by Keith Adolphson. No discussion. Motion carried.

Member Coordinator's Report – Sarah Pratt:

As of December 31, 2015, there were 182 members, up from 154 in 2014. As of today there are 133 members for 2016.

Treasurer's Report – Kerri Richardson

Kerri shared a beginning balance of \$47,200.76 and an ending balance of \$51,380.03 revealing a small net for the past year.. Alan Zollman moved to accept the treasurer's report, seconded by Melfried Olson. No discussion. Motion carried.

Election Results – Mary Swarthout:

Conference Committee

- Ryan Fox (2016-2019)
- Cynthia Orona (2016-2019)

Publications Committee - Elected

- Keith Adolphson (2016-2019)
- Sarah Ives (2016-2019)

Publications Committee - Appointed

- Rachel Bachman (2016-2018)
- Tyrette Carter (2016-2018)

VP Conferences: Kansas Conrady (2016-2018)

Treasurer: Kerri Richardson (2016-2018)

President-Elect: Daniel Brahier (2016-2017)

Recognition of first-time attendees

Recognition of second-year attendees

Recognition of the youngest attendee

Recognition of the most conferences attended

President-Elect Call for Nominations - Mary Swarthout on behalf of Daniel Brahier:

Nominations are being sought for Secretary, Conference Committee (2), and Publications Committee (2).

Onsite nomination forms can be given to Jonathan Bostic or Gabriel Matney; you may also email your nominations to Brahier@bgsu.edu

VP of Conferences – Eileen Faulkenberry:

There were 148 attendees, 92 presentations, and 14 posters. This is the second year for poster sessions. This is the first year for 2 panel presentations in a session, so please provide feedback regarding this and any

other aspects of the conference. Eileen thanked the program chair, Gabriel Matney, and conference chair, Nancy Cerezo. She also thanked the reviewers of the proposals, conference committee members, and conference moderators. Gabriel Matney thanked his two master's students who assisted in the program. Juliana Utley acknowledged the list of reviewers for the conference proposals and proceedings are listed in the conference program. Next year, the 2017 Annual Conference will be held in Fort Worth, March 2-4, 2017 at the Historic Hilton in downtown Fort Worth.

VP of Publications – Sheryl Maxwell:

Sheryl introduced RCML's new *Investigations* editor, Drew Polly. She also introduced Jonathan Bostic, the new newsletter editor. She mentioned that the next issue of the newsletter would be delivered in May instead of April as has been in previous years. Sheryl recognized Summer Bateiha and her work as the past newsletter editor. She then reported that the newest issue of Volume 8 Issue 3 would soon be published and distributed. 85% of our member dues go to the supporting publication of the journal. Gabriel will become the VP of Publications as of March 1, 2016. Sheryl served as the VP of Publications for 9 years.

Conference Proceedings – Keith Adolphson:

He reported that there were 20 manuscripts accepted, with a 40.8% acceptance rate. He thanked all of the reviewers for volunteering and providing such thorough reviews. He also thanked Travis Olson, assistant editor, and Nicholas Kaleolani Wong, editorial assistant. He requested that any suggestions can be sent to him or Travis Olson. Past-President Juliana Utley announced that Keith recommended Travis Olson to the Board to serve as 2017 Proceedings Editor. Travis has agreed to serve.

Memorial Scholarships – Sheryl Maxwell & Juliana Utley:

Acknowledgement of the Memorial Scholarship Committee: Sheryl Maxwell, Bill Speer, Alan Zollman, and Kerri Richardson. The 2016 Awardees, in honor of Marjorie A. Speer, is Sarah Pratt - University of North Texas, and in honor of Dr. Robert Ashlock, Rachel Bachman - Weber State University. The 2017 Award will be in honor of Dr. James W. Heddens

Recognition of RCML Service – Juliana Utley:

Keith Adolphson - 2016 Proceedings Editor
Nancy Cerezo – 2016 Conference Chair
Gabriel Matney – 2016 Program Chair
Travis Olson - Conference Proceedings Co-Editor, 2014 – 2015
Summer Bateiha- Newsletter Editor, 2012-2015
Travis Olson – Conference Committee, 2013-2016
Kansas Conrady – Conference Committee, 2013-2016
Eileen Faulkenberry – VP Conferences 2014-2016
Kerri Richardson – Treasurer 2014-2016
Mary B. Swarthout – Past-President 2015-2016
Sheryl A. Maxwell – VP Publications 2007-2016

Sheryl Maxwell was honored with an award for her service as VP Publications and for your service to RCML. She received a standing ovation from the membership. Juliana Utley reported that the constitution and bylaws need updating, but they require that the executive committee have them 60 days before being

discussed at a board meeting. Then they should go out to the membership prior to the annual business meeting so that during the annual business meeting any suggested changes can be approved.

Juliana Utley updated the status of the journal being moved to on-line format. Gabriel Matney, Drew Polly and Juliana Utley have contacted publishers and are in the process of determining if any will be compatible with RCML's mission and organization. Alan Zollman asked for Drew Polly to provide an update of the status of the journal. Since August he has received 40 manuscripts. He has honored all submissions that were approved by Vicki Schell, and they will appear in this or the next volume of the journal. Currently there is a 30% acceptance rate. Aim is for about 3 months to receive a decision.

Jonathan Bostic gave an update on the newsletter and invited the membership to submit to the newsletter. Juliana Utley acknowledged the many years of service that Ryan Speer gave as the webmaster for RCML. Kerri Richardson showed the membership the new web site. The URL is www.rcml-math.org. She shared that she preserved the content from the former site. In addition the member login section will be live in the next two months. Members will receive an email to set up a user name and password to access the member only portion. Juliana Utley recognized Ginny Usnick and her work to scan and make PDF copies of the old monographs. Kathy Smith requested that the members take extra maps and magnets to share with colleagues.

Juliana Utley asked that if there is any new business. No new business was brought forward. Juliana encourage members to let a board member know if they had suggestions that RCML can do to continue to improve the work of the organization.

Bob Drake motioned to adjourn, seconded by Keith Adolphson. No discussion. Voted in favor. Meeting adjourned at 1:23 pm.

Membership report

Greetings from your RCML Membership Coordinator. In 2016, we currently have **172** members. Thank you! All members will receive the next volume of *Investigations in Mathematics Learning*, starting in September 2016. Thank you! The new method for membership is now through the newly redesigned RCML web site (thank you, Kerri Richardson!), and this seems to be working very well. Please visit <http://www.rcml-math.org/> to view the site. We hope that you will contact a member of the RCML Board if you have any input regarding this process. If you wish to view the status of your membership or update your contact information, please login to the web site and access your member page. If you have any questions, you may email Dr. Sarah Pratt: rcmlmembercoordinator@gmail.com. Thank you for being a part of RCML!

Membership for 2016

Membership dues are currently set at \$40 for full members, \$34 for students, and \$55 for international members. Payment is due on **January 1st** for the calendar year **2016**. Included with membership is one year's subscription to *Investigations in Mathematics Learning*, with issues being distributed in fall, winter and spring. The RCML membership form can be found at this web page: <http://www.rcml-math.org/> Payment is accepted through this form using PayPal. *One does not have to have a PayPal account to use the secure PayPal system.* If, however, anyone joining or renewing wishes to pay using a check, the check should be

made payable to **RCML** and mailed to the RCML Treasurer, Dr. Kerri Richardson, UNCG-TEHE Dept., PO Box 26170 SOEB, Greensboro, NC, 27402.

Please consider recruiting your colleagues to become members. You may direct them to the RCML web page to sign up online: <http://www.rcml-math.org/>

Signal and Noise

Jonathan D. Bostic



Starting with this volume, RCML will highlight two of its members in a new section called Signal and Noise. The purpose of this feature is to get to know scholars more deeply and build relationships that span the tests of time, distance, and background. “Signal and Noise” is a reference to statistical data. Each datum in a data set provides valuable information. It is up to the statistician to recognize the presence of other information (i.e., noise) and to detect the unique structure (i.e., signal) found within a data set. Noise is not a negative aspect but rather a natural and welcome feature of the complex world in which we live. With that in mind, readers are invited to learn more about a senior RCML member as well as an early career RCML member. Jonathan Bostic interviewed

members at the 2016 annual meeting of RCML in Orlando, FL and members agreed to share their story in the newsletter. For the inaugural edition of Signal and Noise, Dr. Virginia “Ginny” Usnick (University of Nevada – Las Vegas) is our featured senior member and Mr. Douglas “Doug” Whitaker (University of Florida) is our featured early career member.

Interview with Ginny

Ginny is a professor emeritus from the University of Nevada – Las Vegas.

Jonathan: Hi Ginny. How long have you been an RCML member?

Ginny: This must be 31 or 32 years now. I joined when I was in my doctoral program that would’ve been ‘83 or ‘84.

Jonathan: What positions have you held?

Ginny: I was treasurer, conference committee member then vice-chair of conferences. I made sure when I left that particular position that we had the next 5 set up. I have also served as president.

Jonathan: Why did you decide to become a member and why did you continue to come back and maintain your membership?

Ginny: Well I started attending RCML, or RCDPM at that time, because the chair of my graduate work was Jon Engelhard who was one of the founding fathers. All of his doctoral students were just expected to join and attend meetings. He co-presented with us, put us on as co-presenters - but we did most of the



presenting at the conferences and things. So for a couple of years it was because of Jon. But, after that it was because the people here have the tendency to ask that question that you haven't really formulated about your research that sent you back to rethink what you were doing and eventually get your work published because they helped you.

Jonathan: That seems so valuable.

Ginny: Yes, very valuable. In fact, I was at a session this morning [at the 43rd Annual Meeting of RCML]: two brand new speakers. They've never spoken here before. There were only three of us in the audience but I told them we have a habit of breaking into your presentations to ask questions. Afterwards, the lady presenting came up to me and said, "You asked me a couple of questions that I am going to go back and relook at the data and see if I can answer those".

Jonathan: That is wonderful.

Ginny: That's one of the things I really like about this group.

Jonathan: Thank you. What advice would you give to a new member or someone who is maybe in their second or third or fourth year of being an RCML member?

Ginny: Make sure that you check out some of the older seasoned speakers. They aren't going to be around forever and sometimes they'll say something that will trigger an idea in your mind. Also, find somebody here who has interests that you have so that maybe you'll do some co-publishing, but maybe it will just be somebody that you can start email conversations with. Those are just some things to think about when you come here.

Jonathan: Good to know. Ginny, what excites you about RCML for the upcoming year?

Ginny: I have family that lives in Fort Worth so I'll be able to get to see my family. I am excited about exploring this new website; that's going to be fun. Getting to work on some of the old research monographs. I've been cleaning out files and getting rid of stuff and I came across a box that had these old RCDPM monographs [proceedings]. That's kind of exciting to get that kind of stuff so it is available to newer generations. I don't think very many of us have those old publications, so this will be a way to hopefully introduce the new generation to some earlier literature. That's one of the things I've noticed, not just about the RCML presenters, but things that I read in journal articles too. The historical perspective has been lost. The newer generation of scholars doesn't go back and check to see if anybody did this kind of stuff 30, 40, 50, or 100 years ago. There have been a couple of things mentioned at this conference and I'm thinking "I've read about that when I was in my doctoral program". A couple of years ago I was in a session with Sheryl Maxwell and the presenter was giving their stuff. She and I looked at each other and said "Didn't we do this 25 years ago?" So for some reason or other, I think somebody is telling the younger generation that if it is over ten years old then don't read it because it's not worth it. Some of that stuff is foundational to what needs to be going on today.

Jonathan: I think that's really good advice for new members in thinking about the historical perspective and many people comment that it's the pendulum swings one way and then it swings the other, or that education repeats itself and that way we don't if we read what has been done. I think that is going to be a great effort adding these new RCDPM (Research Council for Diagnostic and Prescriptive Mathematics) monographs there that we can start to reexamine historical literature better.

Ginny: Readers can say this is what they decided at that time. How can I extend it, not how can I redo it, but how can I look at this with a fresh light and take it a little farther?

Jonathan: That is great advice, thank you. So one last questions, so RCML historically has meetings in warm weather climate. We have a bylaw that we are expected to hold meetings, or RCML does, in the Sunbelt. So if you could tell Kansas Conrady some place to hold an RCML meeting, where would you tell the conference coordinator to hold a meeting in the upcoming future?

Ginny: We haven't been back to Arizona in quite a long time. It's been 10 years or so since we've been there. Of course Southern California too.

Jonathan: Would you please describe a memorable moment at RCML? Please tell us what made it memorable as well.

Ginny: I had finished up my doctoral dissertation stuff and Jon Engelhardt and I were presenting it. At the end of my presentation, one of our older members (George Bright) asked me a question that absolutely devastated me about why would the teachers who participated in my program ever want to work with me again. It was my very first national presentation and it was my research. I thought it was pretty good. And he just seemed to stab me right in the back. I go back to Tempe a couple of weeks later then over to the University of Houston for an interview. Later at NCTM, the chair of the committee at Houston saw me in the registration area and said I can't tell you officially, but we want to offer you the job. And I was ecstatic because this was the job that I really, truly wanted. I'm sitting in my apartment one evening working on cleaning some things up on the dissertation stuff and my phone rings and it is George Bright, and he said "I understand that you just accepted a job at the University of Houston". I said "I did". He said "I did too. It will be really great working with you." And for the next 5 years, I worked with him.

Jonathan: That sounds like a memorable moment for sure. Ginny, I appreciate you taking time to sit down and talk with me. Is there anything else you want to share with the membership, with RCML membership?

Ginny: I think that the older members of the organization do a pretty good job of encouraging younger people to attend. Once they [younger people] are here – they sense folks helping them move their careers forward.

[End of Interview]

Interview with Douglas

Douglas will graduate August 2016 from the University of Florida with a Ph.D. in Curriculum and Instruction with an emphasis in mathematics education and will join the faculty of University of Wisconsin-Stout.

Jonathan: So, how long have you been a member in the RCML?

Doug: This is my second year.

Jonathan: So two years ago, why did you decide to become an RCML member?

Doug: I decided to become an RCML member because I was going to the annual meeting and ...that's how that happened. The reason I wanted to come to the meeting is my advisor Tim Jacobbe had recommended it to me having never gone, but having heard good things about it, suggested that I go, and he was right.

Jonathan: So why have you maintained it for two years?

Doug: When I was at Las Vegas for my first meeting it was, I was very impressed! Let me back up, there were two sessions that I went to that struck me. I'll talk about one of them to make my point. There were two people, one was a grad student and one was a faculty member, presented in the 50-minute session time. They presented 20 to 30 minutes worth of something and then said, this is in-progress research; what feedback or advice or questions do you have for me at this point? And I've seen people do that at other conferences and it is sort of this silent room and everyone sort of claps then walks out. But at RCML, in both cases, an actual discussion happened and for the remainder of the time. Good feedback was given and I was shocked that you could get *real* engaging feedback from a conference. And so I went back to (University of) Florida and I said, "Hey everyone, it is in Orlando next year! It's two hours away; everyone should go, every single person in the program should go, and even if you don't have anything that is done. Attendees will give you feedback during sessions." I have not been disappointed because this past meeting has been the exact same way.

Jonathan: It sounds like that was really the piece that intrigued you for coming back and getting feedback and growing as a math and stats teacher/educator and stats educator in a lot of ways. Is that right?

Doug: That is exactly right. I feel comfortable submitting an idea to RCML and knowing that I can get support from the RCML community to strengthen that idea to go somewhere.

Jonathan: Is there something about RCML that excites you for the upcoming year?

Doug: Well, annual meeting for sure. We got that new website coming and I am hoping that that is going to be great. Some updates of bringing the journal and the website into a contemporary web format - I think that is going to make RCML more relevant and it is going to make it much more accessible.



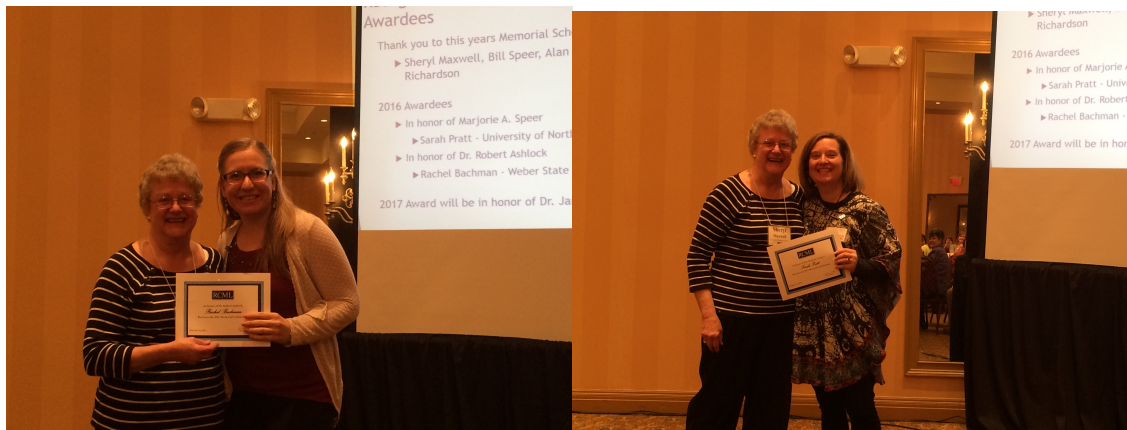
Jonathan: Last question: RCML historically has meetings in warm weather climates believe it or not, it is written in the bylaws that we have to have it in a Sunbelt climate. If you could talk to the conference coordinator (Kansas Conrady) right now and tell her in the next five years where we should have an RCML meeting, what would you say?

Doug: I'm going to say that instead of a single location, if we got the sunshine, why not have a session that is at a pool? Everyone in swimsuits, everyone in the pool, just a nice - get your tan while we are at the conference. Have one set of sessions and a check box when you submit your proposal that it is a pool eligible session. I could give my talk from the pool, have floating manipulatives, or something.

Jonathan: That is an awesome idea! Is there anything else you would like to share with the membership about RCML and how it has influenced you?

Doug: I think that this is a great conference for graduate students. This is the first conference I've went to that felt like it welcomed and supported graduate students instead of just sort of saying oh you're here, your not really doing work yet.

[End of Interview]



Sheryl Maxwell presented two Memorial Scholarships at the Annual Meeting. Congratulations Rachel Bachman and Sarah Pratt!

A Message from Former VP Publications, Dr. Sheryl Maxwell



Dear RCML Friends and Colleagues,

My most sincere thanks to each of you for the surprise presentation of the exquisite acrylic award given to me at the recent annual Research Council on Mathematics Learning Conference in February 2016. I was truly moved by the applause, your standing ovation, as well as the kind words spoken publically revealing how I served RCML as the Vice President for Publications. Rarely do I lack words to respond; this was one of those moments. With your help, we moved gratefully to ownership of the RCML journal, *Focus on Learning Problems in Mathematics*, to *Investigations in Mathematics Learning*, always maintaining a healthy financial balance. As RCML progresses into the future, I am confident that the Executive Board and Editor, Drew Polly, will continue to sustain the quality of the journal as well as increase its visibility in the mathematics education community.

I proudly have the uniquely designed award in the den of our new apartment dwelling in a Memphis Senior Retirement **Community** where I can focus on its significance daily. Thanks again for your support of chosen missions of RCML and your continued dedication to the organization.

Sincerely,

Sheryl A. Maxwell

Sheryl A. Maxwell

RCML 2016 Officers

President, 2015-2017

Juliana Utley
Oklahoma State University
Stillwater, OK 74078
juliana.utley@okstate.edu

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Bowling Green State University
Bowling Green, OH 43403
brahier@bgsu.edu

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Kansas Conrady
University of Oklahoma
Norman, OK 73069
Kansas.conrady@ou.edu

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Gabriel Matney
Bowling Green State University
Bowling Green, OH 43403
gmatney@bgsu.edu

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University of North Texas
Denton, TX 76203
Sarah.pratt@unt.edu

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Kerri Richardson
University of North Carolina-Greensboro
Greensboro, NC 27402
kerri_richardson@uncg.edu

Membership Chair (Appointed)

Sarah Pratt
University of North Texas
Denton, TX 76203
Sarah.pratt@unt.edu

***Investigations in Mathematics Learning* Editor**

Drew Polly
University of North Carolina Charlotte
Charlotte, NC 28223
drew.polly@uncc.edu

Intersection Points Editor (Appointed)

Jonathan D. Bostic
Bowling Green State University
Bowling Green, OH 43403
bosticj@bgsu.edu

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