



KENTUCKY JOURNAL OF
MATHEMATICS TEACHER EDUCATION

President's Message

On behalf of the Kentucky Association of Mathematics Teacher Educators (KAMTE), I very much hope you enjoy this issue of the *Kentucky Journal of Mathematics Teacher Education*. Sharing of our experience and expertise is so important.



It's how we develop our skills and broaden our worldviews as teachers and teacher educators. As an organization, KAMTE is highly committed to such development. Toward that end, on November 3rd, we held our fall preservice teacher virtual conference where some amazing presenters engaged us in some really powerful mathematical activities across grade levels. From supporting flexible student thinking in mathematics to using Desmos effectively in high-school classrooms, there were so many great ideas being discussed, and I very much look forward to the next event. Speaking of that next event, I heartily invite you to join us on Friday, April 5th from 9am to 12pm (EST.) for another virtual conference. At present, we are working on another stellar lineup of presenters, and I have no doubt we will have a wonderful morning together and come away with plenty of ideas to refine our mathematics teaching.

Lastly, I want to extend to you a message of welcome. The work of mathematics teaching, while highly enjoyable, in my view, is also quite challenging and complex. Being a part of a vibrant community of educators is so important to me. It gives me a place to go when I have key questions, wish to vet ideas, or just need some support during a challenging time.

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Our collective love for mathematics and for mathematics teaching is a powerful common bond, and coming together as a community is a wonderful way to remain energized and feel connected as we do this work. On behalf of the KAMTE organization, I very much hope that you will join our community and travel with us on our mathematics journey. I very much look forward to hearing from you.

KAMTE Website: <https://kcm.nku.edu/KAMTE/index.php>

KAMTE Membership Form: <https://forms.office.com/r/C3jMa4bir4>

Jonathan Thomas

President, Kentucky Association of Mathematics Teacher Educators

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AMTE Announcements

The [2024 AMTE Annual Conference](#) will be held in Orlando, Florida, February 8-10, 2024. The deadline for late registration is January 24, 2024. We would love to see you at the KAMTE table at the Affiliate breakfast if you are at the conference!

AMTE has two press releases currently available. [The Role of Elementary Mathematics Specialists in the Learning and Teaching of Mathematics](#) and the [AMTE Statement on Technology](#) both inform readers about the AMTE stances on two important issues in mathematics education.

The [AMTE Connections](#) for summer is available! The Winter 2023 edition includes a piece titled "Effects of Using a 'Reverse Swear Jar' in a Mathematics Content Course for Elementary Teachers," by Daniel Clark, from Western Kentucky University. We are so proud to see a Kentucky mathematics teacher educator published in the AMTE Connections!

Review for KJMTE

KJMTE is *your* journal. Reviewing articles for potential publication is a great way to have input into the types of articles KJMTE publishes for its readers.

The journal's aim is to provide a space for the exchange of ideas to advance mathematics teacher educator practice. Peer review of articles strengthens KJMTE's ability to meet this aim.

Interested in reviewing for KJMTE? Find out more at [KJMTE.org](https://www.kjmte.org).

Questions about KJMTE? Contact the KJMTE Editorial Team at editors@kjmte.org.

Dear KJMTE Readers,

In this issue of the *Kentucky Journal for Mathematics Teacher Education* (KJMTE), we are excited to have two relevant articles that address important issues for mathematics teacher educators today. First, Catherine Pullin Lane's article, *The Case for Thinking Deeply About Simple Things* describes how preservice teachers engaged in an exploration of the concept of the difference quotient. Next, Katherine Ariemma Marin describes how characteristics of Gen Z preservice teachers influence their views of teaching and how mathematics teacher educators can support them as preservice teachers. Finally, in this issue, we introduce a new section titled "Commentary." In the Commentary section, we will feature pieces that highlight critical issues for Kentucky teacher educators and/or administrators. Pieces published in the Commentary section of the journal will be of interest to teacher educators, but may not directly address the mission of the KJMTE to contribute "to building a professional knowledge base for mathematics teacher educators that stems from, develops, and strengthens practitioner knowledge." Commentary pieces are not peer-reviewed, but the editors will determine their appropriateness and will work with authors on the editing process. Our first commentary is titled *Census of Mathematics Content and Methods Courses in Kentucky Elementary Teacher Preparation Programs*, by Daniel L. Clark.

Regardless of the type of publication, article or commentary, the journal will publish work which appeals to mathematics teacher educators – this includes mathematics educators, mathematicians, teacher leaders, school district mathematics experts, and others. We hope to encourage the development and sustenance of an equitable and welcoming environment for all individuals interested in mathematics education. If you are thinking about submitting an article for publication, please feel free to contact either of us to discuss your ideas. We would love to hear from you.

We hope that you enjoy reading this issue of KJMTE. We look forward to getting your submissions and reading about the incredible work you do and thinking about the ideas you propose. You can also contribute to KJMTE by reviewing manuscripts. Your reviews are vital for this journal to meet the needs of mathematics teacher educators.

Finally, we hope that you find inspiration in this and every issue of KJMTE.

Bethany Noblitt, Ph.D. and Nicholas Fortune, Ph.D.
Co-Editors, KJMTE



KAMTE Board Members

KAMTE would like to extend a warm welcome to our new board members. Dr. Jonathan Thomas, from the University of Kentucky, rejoins the KAMTE Board as our President-Elect. We are happy to have him back! KAMTE would also like to welcome our new At-Large Representatives, Dr. Michele Cudd from Morehead State University and Dr. Kate Marin from the University of Louisville. Dr. Marin also works with KAMTE social media. KAMTE is excited to have our board assembled and ready to support the mathematics teacher educators in Kentucky and beyond.

Jonathan Thomas, President



Jonathan Thomas is an Associate Professor of Mathematics Education and Chair of the Department of STEM Education at the University of Kentucky. Prior to his tenure at UK, he was a faculty member at Northern Kentucky University. Dr. Thomas is committed to a vision of STEM Education that is inclusive, engaging, and fosters a sense of relentless curiosity amongst students and teachers. He holds a B.A. in Elementary Education from the University of Kentucky, an M.Ed. in Educational Leadership and an Ed.D. in Mathematics Education, both from the University of Cincinnati. Dr. Thomas also serves as a faculty associate for the Kentucky Center for Mathematics (www.kentuckymathematics.org) and facilitates professional learning experiences for teachers across the commonwealth. Dr. Thomas has served as a mathematics intervention teacher in public, private, and charter schools in the greater Cincinnati metropolitan area. His research interests include investigating responsive mathematics teaching practices, equity concerns in the elementary mathematics classroom, non-verbal patterns of mathematical interaction, and cognitive progressions of children's mathematical construction.

Dee Crescitelli, President-Elect



Dr. Dee Crescitelli is a Director at the Kentucky Center for Mathematics and teaches as an adjunct at Georgetown College and the University of Louisville. She also serves as a Professional Learning Coach for Kentucky Adult Education. She is working to improve mathematics education from pre-K through college. Her teaching experience ranges from elementary through graduate school, adult education, and teacher preparation - threading real numeracy through all those levels.

Funda Gonulates, Past-President



Funda Gonulates is an Associate Professor of Mathematics Education at Northern Kentucky University and a faculty associate for the Kentucky Center for Mathematics. She received her Ph.D. from Michigan State University and is a former middle school mathematics teacher. She primarily teaches classes for elementary teacher candidates and elementary teachers. She worked on projects helping teachers build a classroom culture of mathematical sense-making. She is interested in creating a community of learners in a mathematics classroom and professional development settings. She works actively with Kentucky mathematics teacher leaders and aims to help them become change agents.

Jamie-Marie Miller, Secretary



Jamie-Marie Miller is an Assistant Professor in the Department of Teaching, Learning, and Educational Leadership at the Eastern Kentucky University. She received her Ph.D. from the University of Kentucky in STEM Education. Dr. Miller teaches elementary and middle/secondary mathematics methods courses, geometry for elementary teachers to undergraduates along with graduate courses in elementary mathematics education and intervention strategies for struggling learners. Her research focuses on the progression of algebraic thinking in students, math-specific literacy strategies, assessment, and visible learning practices.

Sue Peters, Treasurer



Susan Peters is an Associate Professor in the Department of Middle and Secondary Education at the University of Louisville, where she teaches mathematics methods courses and graduate courses in mathematics education. Her research focuses on statistics education and mathematics teacher knowledge, particularly teacher knowledge and education in statistics. When she's not working with teachers, she enjoys relaxing walks in nature.

Michele Cudd, At-Large Representative



Michele Cudd is an Assistant Professor in the Department of Early Childhood, Elementary and Special Education at Morehead State University, where she teaches future elementary, middle, and high school teachers. She is interested in supporting novice teachers to develop more student-centered discourse practices. In her free time, she often is hiking on trails with her dog.

Kate Marin, At-Large Representative



Kate Ariemma Marin is an Assistant Professor of Math Education at the University of Louisville. She has taught elementary and middle school and served as a math coordinator in schools across Massachusetts. Prior to the University of Louisville, she was a faculty member at Stonehill College. She teaches mathematics education courses and supports the development of pre-service and in-service teachers. Her research interest is in teachers' development of Mathematical Knowledge for Teaching and generational differences in teachers. She is committed to supporting teachers and promoting the knowledge that they bring to the profession.

KAMTE Membership

Membership to the Kentucky Association of Mathematics Teacher Educators (KAMTE) is always open for any faculty member that works with preparing pre-service and in-service teachers at any level. To join, contact Treasurer Sue Peters at s.peters@louisville.edu.

Upcoming Conferences

February 7-9, 2024	NCTM Regional Conference	Seattle, WA
February 8-10, 2024	Annual AMTE Conference	Orlando, FL
March 4-5, 2024	KCM Conference	Lexington, KY
Sept. 25-28, 2024	NCTM Annual Conference	Chicago, IL

Call for Manuscripts

The editors of KJMTE are soliciting manuscripts for publication in the next issue of *the Kentucky Journal of Mathematics Teacher Education* that builds on the theme of the first issue: “The Next Generation of Mathematics Teachers.”

Specifically, we ask authors to consider the following: What are the next generation of mathematics teachers? What are their needs? What role do mathematics teacher educators have in meeting those needs? How can mathematics teacher educators best prepare the next generation of mathematics teachers for their work?

The journal’s aim is to provide a space for the exchange of ideas to advance mathematics teacher educator practice. The journal welcomes manuscripts that support this aim. Of particular interest are manuscripts that address an issue in mathematics teacher education and the methods/intervention/tools that were used to investigate the issue along with the means by which results were determined and the impacts on practice. Manuscripts should fall into one of the following categories:

Manuscripts that describe effective ways of influencing teachers’ knowledge, practice, or beliefs. This might include a description of activities, tasks, or materials that are used by a teacher educator to influence teachers in some way. These manuscripts would include a rationale for the intervention, a careful description of the intervention, discussion of the impact of the intervention, and how it might be used by others.

Manuscripts that describe the use of broadly applicable tools and frameworks in mathematics teacher education. This might include a classroom observation protocol, a task analysis framework, assessment tasks, or a framework for a teacher education program. These manuscripts would include a careful description of the tool or framework, what it is designed to capture, its use, and a discussion of the outcomes. The manuscript should include an explanation of how to interpret the results of the data captured by the tool. The tool should be made available for other professionals to use, modify, enhance, and study.

Additionally, KJMTE also publishes commentaries. Commentaries differ from manuscripts described above in that their goal is to highlight critical issues for Kentucky teacher educators and/or administrators. These are more likely to be drawing attention to a call to action and less about the practices of educating future teachers as described above. Importantly, commentaries are not peer-reviewed, they will be edited by the editors in consultation with authors. Authors are also encouraged to respond to commentaries that appear in KJMTE in their own commentary.

If you are interested in writing a manuscript for an issue of KJMTE, please visit the [KJMTE Current Call for Manuscripts](#) for the Author Toolkit where you can find formatting guidelines and information for preparing and submitting a manuscript to KJMTE.