



South Carolina Council of Teachers of Mathematics

December 2018

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President's Message

Marc Drews

"The Ultimate Answer to Life, the Universe and Everything is...42!"

—Douglas Adams

The Hitchhiker's Guide to the Galaxy

From all accounts, the SCCTM's 42nd Annual Conference was a success and our nearly 850 participants left ready to spread the word in keeping with the theme of sowing a seed to change the world of mathematics. While our organization's president, Leigh Martin, thanked everyone for attending the conference, she also expressed appreciation to the many volunteers.

As I listened to the presentations, the conversations, and the discussions over the three days of our annual conference, I left ready do whatever I can to promote the good work our organization. From the opening session where Luke Dollar took us on a trip to Madagascar to Eric Milou's closing plea for all of us to begin reinventing and reimagining mathematics classrooms, and everything in between, we were inspired and challenged to change the world of mathematics.

The challenge begins here in South Carolina. Where we all ask ourselves are we really where we want to be? Are our students where we want them to be?

I was honored to share on Wednesday to close the SCLME meeting and posed some questions to get the conversation going this year and I offer them to you and your colleagues.

- What can I do personally to help change the perception of mathematics?
- What can I do professionally to help others see mathematics differently?
- What can I encourage the SCLME and SCCTM to do to scale up their advocacy efforts?
- What major issue(s) facing mathematics teachers would you want to see attention placed during the next two years?

Continued on page 4

SCCTM presidents, Marc Drews, Leigh Martin, and Morondo Lewis pose with NCTM President Robert Q. Berry III after his powerful keynote presentation at the SCCTM's 42nd annual conference in Columbia.



The 2018 Outstanding Contribution to Mathematics Education Awards



Gloria Allen and Gwen Johnson, SCCTM's 2018 Outstanding Contributions to Mathematics Education Awardees.

Ryan Higgins
Coker College
President Elect

Donald Sarazen
White Knoll Elementary
VP Elementary

Alva White
Richland School District One
VP Secondary

Brantay Cohens
Ocean Bay Middle School
Secretary

Christi Fricks
Riverside Middle School
NCTM Representative

Ed Dickey announced the names of this year's recipients of the organization's highest honor, the Outstanding Contributions to Mathematics Education, at this year's annual business meeting. This year's honorees were Gloria Allen and Gwen Johnson, longtime friends and colleagues whose careers were spent dedicated to improving mathematics and science education, especially in their roles at the Ruth Patrick Science Education Center on the campus of USC Aiken.

A gifted leader, Gloria Allen, recently retired after an exemplary career supporting the improvement of mathematics education across the state. From her early days as a high school math teacher to becoming one of the first specialists serving the CSRA Hub to becoming the Hub's Director to leading the professional learning initiatives at the Ruth Patrick Science Education Center (RPSEC), she spent 45 years promoting a love of mathematics.

After beginning her career as an environmental research biologist, Gwen Johnson decided her place was in the classroom. Gwen has been as a middle school science teacher, Aiken County's math and science specialist, and program director at the RPSEC, where she has been for over 27 years.

New SCCTM Officers Elected

Upon having the gavel passed to our new president, Marc Drews announced the results of this year's election, bringing five new members to the Board. The outgoing officers included our past president, Morondo Lewis, teacher at Eau Claire High School in Columbia; VP for elementary, Jennifer Wilson, teacher at Midway Elementary School in Anderson; VP for secondary, Sherry Young, teacher at South Florence High School in Florence; secretary, Alva White, district mathematics consultant in Richland School District One; and NCTM representative, Ryan Higgins, assistant professor at Coker College in Hartsville.

Cathy DeMers was named to the Board by Leigh Martin to follow Christy Reed as our government relations representative.

SCCTM 2019 Annual Conference

Leigh Martin announced that next year's SCCTM conference will be held in Greenville, SC at the TD Convention Center on **November 14-15, 2019**. The conference theme is "Building Your Math Superpower: Taking Action."



Presidential Awardees (PAEMST)

Sandra Ammons, Education Associate for Mathematics, explained the award details and the process for receiving the honor at this year's conference and announced the recent winners.



State Winner for 2015-2016

Tami Broomall

Spartanburg 6 District Office

Finalist for 2017-2018

Erica Aiken

Mauldin Middle School
Greenville County School District

Linda Branham

Leslie M. Stover Middle School
Kershaw County School District

Patricia Smith

Bethel Elementary School
Clover School District

Teacher Grant Awardees

The SCCTM Executive Board makes grant funds available each year to support SCCTM members desiring to implement projects in mathematics-related areas. Individual grant awards may not exceed \$1,500. Grant applications may be made for most mathematics-related purposes. Application Forms must be submitted by April 15, 2019. The winning proposals were recognized at the conference.

This year's Teacher Grants will be coordinated by Dr. Ryan Higgins, our president-elect, who will seek input from each of the vice presidents. For information, members are strongly encouraged to visit scctm.org/Grants.

Dawn Bryant

J.D. Lever Elementary
Aiken County

Wanda Noblin

Cowpens Elementary
Spartanburg School District Three

Carrie Simpson

Robert Anderson Middle School
Anderson School District Five

Marsha Neal

Hardeeville-Ridgeland Middle
Jasper County School District

Angelia Stewart

USC Upstate

Kathryn Warnken

Lander University

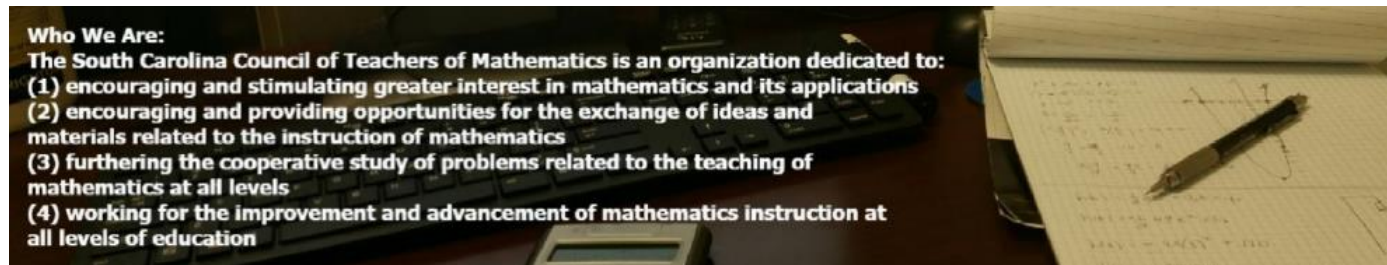
Chynna Wilson

University of South Carolina

Scholarships

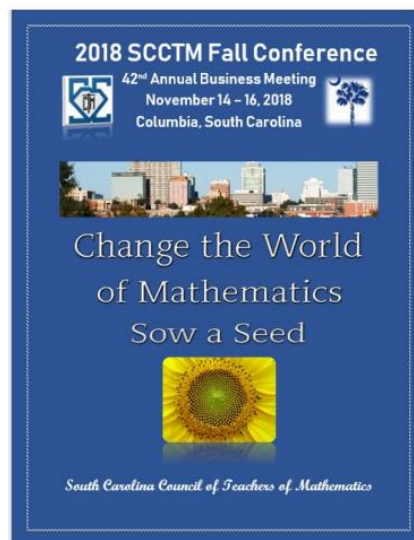
VP for Post-Secondary Bridget Coleman announced this year's Educator's Scholarship recipient at this year's conference, sharing a statement from the recipient's principal. The winner was Marsha Neal from Hardeeville-Ridgeland Middle School with Jasper County School District, who received a gift of \$1,500.

Chris Duncan announced the Pre-Service Teacher Scholarship Awards, along with excerpts from the recommendation letters for each recipient. The three awards presented this year were to Angelia Stewart from USC Upstate, Kathryn Warnken from Lander University, and Chynna Wilson from USC Columbia.



Thank you for your time and effort

Leigh Martin expressed her sincere appreciation for all who helped make this year's conference a tremendous success. All committee chairs were recognized by standing and with a round of applause.



As co-chairs of the conference, Morondo Lewis and Leigh Martin are worthy of special recognition, for their valiant efforts to ensure a well-planned and educationally-rich experience was had by all attending. They, along with our executive director, Cindy Parker, who did an exemplary job with registration, serving as our program manager, and coordinating all the scheduling and the speakers, received a well-deserved round of applause by those attending the closing session.

Certificates of appreciation were presented to Christi Fricks and Erica Aiken for their efforts with soliciting nearly fifty door prizes for the business meeting giveaways.

Student pages were also recognized for their tremendous assistance and were welcomed to the SCCTM organization with a year's membership.

Erica Aiken & Christi Fricks
Door Prizes

Bridget Coleman
Student Pages
Educator's Scholarship Committee

Caitlin Dabkowski
Math Trail at EdVenture

Ed Dickey
Awards Committee

Marc Drews
Grant Awards Committee

Chris Duncan
Pre-Service Scholarship Committee

Bill Gilliam
Equipment IT Manager

Ryan Higgins
NCTM Materials

Lane Peeler
Commercial Exhibits

Amy Wingate
Nomination Committee Chair

President's Message
Continued from page 1

The answers to these questions will begin a discussion that needs to take place in schools across the state. As an organization, we have an opportunity to engage our communities in a long awaited dialogue to seriously address some of the lingering systemic issues facing our schools. Issues of access to high quality teaching and learning of mathematics, implementing strategies designed to close the academic achievement gap that has grown over the past few years, and placing an emphasis on authenticity—using mathematics to solve real, genuine, meaningful problems that take place in an atmosphere of community, collaboration, critical thinking and creativity. We also have a responsibility to address issues related to our students' mathematical identity and agency.

These are some of the issues that the SCCTM would like to help facilitate during the coming year. We need to assume our roles as advocates and ambassadors for what we would like played out in classrooms across the state, as described by eight mathematical teaching practices in *Principles to Actions* (see page 12).

Join us on a journey to help communities begin to see mathematics differently. As an organization, we will work to address the systemic issues of access, the achievement gap, accountability, agency, authenticity, and advocacy.

Here's to a wonderful new year.

Pearson Math Curriculums and Textbooks

High-quality mathematics instruction ensures that students become problem solvers. We believe all students can develop deep conceptual understanding and procedural fluency in mathematics. In doing so, we help our students grapple with real problems, think mathematically, and create solutions.



enVisionmath2.0 is a comprehensive K-8 mathematics curriculum with superior focus, coherence, and rigor. Ensure success at every level with problem-based learning, embedded visual learning, and personalization to empower every teacher and student.



Why **enVisionmath2.0**?

- **Proven Instructional Design**
enVisionmath2.0 emphasizes conceptual understanding. Problem-based learning facilitates productive struggle strengthening students' ability to think mathematically.
- **Personalized and Adaptive**
With a wide variety of differentiation resources and strategies to choose from and innovative features like Adaptive Practice powered by Knewton, **enVisionmath2.0** makes math relevant to all students.
- **Unmatched Authorship Team**
The **enVisionmath2.0** authors, trusted in their respective fields, are renowned in mathematics education.
- **One Powerful, Integrated System**
Access all content, resources, assessments, and student data on Pearson Realize. This powerful learning management system gives you instant access to everything you need and want, in a single place.
- **With You Every Step of the Way**
Our professional development resources serve teachers and administrators alike. From face-to-face training to 24/7 virtual and on-demand support, we deliver the resources you need to get the most out of **enVisionmath2.0**.

Mark your calendar: Saturday, May 18, 2019



From engineers to artists to scientists to crafters, this annual community event is a gathering of fascinating and curious people who enjoy learning and who love sharing what they can do.



Book your school visit today
visit edventure.org

SCCTM Ambassadors

SCCTM President Leigh Martin announced the names of our SCCTM Ambassadors at our Annual Conference (right). They will help promote our organization in their schools, district, and region. Members interested in volunteering for SCCTM and promoting the work of the organization to other mathematics educators were encouraged to contact Eugene Bellamy, VP for Middle, at ebellamjr@gmail.com and request the application.

The qualifications for being selected as an ambassador include having a passion for teaching, a love for mathematics, and a willingness to serve as an advocate for mathematics educators in our state by representing SCCTM in their district or school setting and sharing all things wonderful about our organization.

Thanks to the leadership of Eugene Bellamy, Jr., who shared the idea of SCCTM Ambassadors, we have fifteen additional ambassadors (listed below) who were added to the cadre after the conference, each ready to help spread the word, encouraging and stimulating greater interest in the teaching and learning of mathematics.

JanReqa Baines
Guinyard Butler Middle School
Barnwell 45

Savannah Catoe
Pine Tree Hill Elementary
Kershaw County

Stephanie L. Cotton
Pate Elementary
Darlington County Schools

Mary Crayne
Kershaw County

Katrina Hazelwood
Alcorn Middle
Richland School District One

Carlos Jenkins
Holly Hill Elementary
Orangeburg Consolidated Three

Tyra Johnson
Ellore Elementary
Orangeburg Consolidated Three

Angela McCord
Marlboro County School District

Marsha Neal
Hardeeville-Ridgeland MS
Jasper County

Melody Powell
Stone Academy
School District of Greenville County

Lisa Daniels
Joseph Keels Elementary
Richland School District Two

Rachael Smilowitz
Charleston County District Office
Charleston County School District

Patricia Smith
Bethel Elementary
Clover School District

Amanda Snipe
FES Academic Support
Dorchester School District Two

Cheryl Witherspoon
Fairfield Central High
Fairfield County School District

Machell Sprauve
Wilson High School
Florence School District One

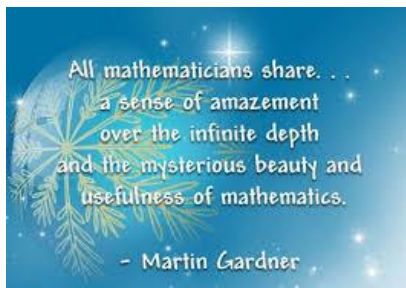
Jennifer Thorsten
Berkeley County School District

Ashley S. Thurman
Sheridan Elementary
Orangeburg Consolidated Five

Anne Tidwell
CSMS
Lexington School District One

Jennifer Wilson
Aiken High
Aiken School District

How will you change the world by sowing a seed?



Congratulations to Christi Fricks for being elected as our organization's NCTM Representative. She served on the Executive Board of SCCTM from 2010 to 2016 as Middle School Vice President, President-Elect, President, and Past President. She enjoys sharing her love of math with others as she presents at conferences on the local, state, and national levels. With over 21 years of classroom experience, Christi has a passion for teaching math and relishes the challenges of middle school. She lives in Pendleton, South Carolina with her husband, Scott and son, Garrett.

Founded in 1920, the National Council of Teachers of Mathematics (NCTM) is the world's largest mathematics education organization, with 60,000 members and more than 230 Affiliates throughout the United States and Canada. NCTM currently has a \$59/ year introductory membership offer. This offer will last for two years.

A copy of the application may be downloaded by clicking the following link: [NCTM application](#)

For information about membership, please visit: [Join NCTM](#)



Christi with former NCTM President Dr. Lee Stiff at the 2016 SCCTM Conference.

Mixed Media Contest Winners

Jennifer Wilson, VP for Elementary announced the winners of the annual mixed media contest winners. The basis of the contest and process was explained as well as the prize winners. The winners, their category, and school are listed to the right. Artwork will be displayed at the conference and EdVenture Museum. Winners will receive \$50.

The SCCTM Art Competition is open to all K-12 students across the state, whose teacher is an active member of SCCTM. Please see the entry rules document for further details on submissions and judging by visiting our website at: <http://scctm.org/news-announcements>.

Grayson Lamb (K-2)
Cowpens Elementary

Kaden Childers (3-5)
Cowpens Elementary

Mallory Richardson (grade 8)
Pacolet Middle School

Raine Mariano (grade 8)
Honorable Mention

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mathematics and art

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At the play in the
fields of an icosohedron

Curtis Palmer, Designer
Edmonton, Alberta, Canada
2017 Gallery



Sponsored by Big Ideas Learning, Dr. Laurie Boswell shared the findings of John Hattie in her presentation entitled *Using Learning Intentions and Success Criteria to Improve Teacher Clarity*.

A recipient of the Presidential Award for Excellence in Mathematics Teaching and a Tandy Technology Scholar, Laurie has taught mathematics to students at all levels, elementary through college. In addition, Laurie has served on the National Council of Teachers of Mathematics (NCTM) Board of Directors and as a Regional Director for the National Council of Supervisors of Mathematics (NCSM). Laurie has co-authored numerous math programs and has become a popular national speaker.



Platinum Sponsors



Gold Sponsors



The MathMate



The MathMate, the official journal of the South Carolina Council of Teachers of Mathematics, is published online twice each year – January and May. The council's journal features articles about innovative mathematical classroom practices, important and timely educational issues, pedagogical methods, theoretical findings, significant mathematical ideas, and hands-on classroom activities and disseminates this information to students, educators and administrators.

Submissions for The MathMate should be no more than 15 pages in length not including the cover page, abstract, references, tables, and figures. Submissions of more than 15 pages will be reviewed at the discretion of the editorial board. Submissions should conform to the style specified in the Publications Manual of the American Psychological Association (6th ed.).

All submissions are to be emailed to scmathmate@gmail.com as attachments with a completed Submission Coversheet as page 1 and the article starting on page 2. The coversheet can be found at <http://scctm.org/The-MathMate>.

Chris Duncan
Lander University
Editor

Jennifer Thorsten
Berkeley County Schools
Associate Editor

Submitted files must be saved as MSWord, RTF, or PDF files. Pictures and diagrams must be saved as separate files and appropriately labeled according to APA style. Copyright information will be sent once an article is reviewed but authors should not submit the same article to another publication while it is in review for The MathMate.

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S²TEM Centers SC is an innovation partnership managed by South Carolina's Coalition for Mathematics & Science at Clemson University. Its purpose is to serve South Carolina by growing the Science, Technology, Engineering and Mathematics (STEM) possibilities and capabilities of learners and leaders.

Robert Q Berry III

NCTM President



NCTM President Berry leads a group in the electric slide before sharing a powerful and uplifting presentation.

“Truly wonderful and getting better” is his popular response to the question “How are you doing?” that NCTM President Robert Berry often uses to start conversations with students, teachers, or anyone in the world of education.

Then, he follows up with “What makes you or your work truly wonderful?” and “What are you doing to get better?” His ability to challenge and inspire was evident in his presentation at the SCCTM Annual Conference last month.

“Yes, we do math for a reason. But there’s also something beautiful about mathematics,” says Dr. Robert Berry, a professor in the University of Virginia’s Curry School of Education. “Math is embedded into music, into art, into things that we find aesthetically beautiful. How do we help students develop the appreciation and the understanding of that?”

That is his mission and what drives him to action. SCCTM members were mesmerized by his passionate plea to mathematics teachers to make connections between equitable instructional practices and identity, agency, and positionality.

Berry has collaborated with teachers, leaders, parents, and community members across the United States, having been a teacher at nearly all levels. These experiences have afforded him a perspective on the issues facing mathematics teaching and learning across diverse contexts.

He is considered by his colleagues as a teacher who is always learning and improving his professional practice, bringing a strong sense of equity and fairness, rooted in his understanding of the mathematical experiences of students of color and the belief that all students deserve access to learning environments and resources that support their engagement with mathematics. It is important to him that he brings an ability to establish rapport and trust with people from diverse backgrounds by working to understand their perspectives, histories, and lived experiences. He understands the importance of building partnerships and how to draw on each partner’s strengths to achieve a common goal.

SCCTM was proud to have the opportunity for Dr. Berry to share his passion with us at our 42nd annual conference.

2018 Conference Attendees may click the link to check out this year’s [Conference Handouts](#)
(This is a work in progress)

SCCTM is in need of volunteers willing to share their time and talents in order to help the organization grow by continuing to “Sow a Seed.”

Please click on the link in order to volunteer with SCCTM. [Volunteer with SCCTM](#)

Please use this link to submit
your presentation proposal for the
2019 SCCTM Annual Conference
to be held on
November 14-15, 2019
in Greenville, South Carolina

[Submit Your 2019 Speaker Proposal](#)

Results of the SC Ready Mathematics

Statewide Percentages of Students Meeting the Standards by Ethnic Categories, 2016–2018

Grade	All Students				White				African-American			
	2016	2017	2018	Gain	2016	2017	2018	Gain	2016	2017	2018	Gain
3	78	78	78	+0	87	87	88	+1	66	65	65	-1
4	77	76	75	-2	86	86	85	-1	63	61	60	-3
5	77	72	73	-4	86	83	83	-3	63	56	58	-5
6	74	74	71	-3	84	84	82	-2	57	51	54	-3
7	73	69	67	-6	84	81	80	-4	56	49	48	-8
8	71	68	68	-3	81	80	79	-1	55	50	50	-5

Meeting the Standards, by Student Cohort, 2016–2018

Cohort	Students	2016	2017	2018	Gain
2016 grade 3 to 2018 grade 5	All	78	76	73	-5
	White	87	86	83	-4
	African-American	66	61	58	-8
2016 grade 4 to 2018 grade 6	All	77	72	71	-6
	White	86	86	82	-4
	African-American	63	56	54	-9
2016 grade 5 to 2018 grade 7	All	77	74	67	-10
	White	86	84	80	-6
	African-American	63	51	48	-15
2016 grade 6 to 2018 grade 8	All	74	69	68	-6
	White	84	81	79	-5
	African-American	57	49	50	-7

Some reading,
reflection,
and reaction



[SCDE Press Release \(Nov 29, 2018\)](#)

[Article from The State newspaper \(Dec 1, 2018\)](#)

[Article from the Berkeley Independent \(updated Dec 3, 2018\)](#)



The links to the right are the five articles in a series written by a team of writers from the Lowcountry on South Carolina schools.

[First of the series](#)

[Second of the series](#)

[Third of the series](#)

[Fourth of the series](#)

[Fifth of the series](#)

Let's place an emphasis on "WHY" we teach mathematics

Recently, Paul Bowers, one of the writers for the Minimally Adequate series that was featured in Charleston's Post and Courier, reached out to SCCTM's president Marc Drews about the changes in the rigor of our state standards over the years and he responded with the following.

As a long-time mathematics educator, I have had the chance to work during the Basic Skills emphasis in the 80s, SC Frameworks in the 90s, and the standards movement throughout the 2000s. I can't help but believe the issue isn't as much when the content is taught but more the how and the why. The problems we are facing are systemic in nature and result from the collision of several factors facing our schools; including, to name just a few:

- The obsession on testing, that has done little to inform us of anything substantial since the release of the *Nation at Risk Report* thirty-five years ago;
- The multitude of issues facing our rural communities in terms of equity and access of resources and support; The decline in the numbers of prospective teachers and the exodus of too many existing ones; and
- The deterioration of the sense of purpose experienced by many children and their families and the general lack of confidence in their school systems.

The love of mathematics begins early and always through play and conversations with caring adults. Puzzles, patterns, and playful interaction with their world help establish children's sense of numeracy. Frequent and simple interactions with our youngest learners, including counting, sorting, identifying shapes, and estimating, go a long way in establishing a foundation that helps build problem solvers, children who can reason, and people who are empowered to make decisions.

Mathematics is not about a timed test to see how fast a third grader can write the facts. Learning mathematics is more than knowing formulas and solving equations, understanding attributes of geometric figures, and being able to determine the likelihood that something might happen. Mathematics is not number crunching, it's all about play--from toys and puzzles to brain teasers and board games--as noted mathematician Francis Su says about the subject, "it's recreational exercise for the mind."

Math teachers are charged with inspiring the joy of learning, to nurture imagination and creativity, and to stimulate the sense of wonder and curiosity. What better way to make all that happen than through mathematics content? Where else can we explore the wonder of infinity? Or the frequency both pi and phi are found in nature? And there's Pascal's triangle, the Fibonacci sequence, the Mandelbrot set, ...

Dr. Su reminds us that mathematics allows all of us to experience structure through randomness, the elegance of connections, and even the importance of fairness and justice. Because of our mathematical thinking, we enrich our ability to make sound decisions and enhance our sense of reason.

But, unfortunately, the teaching and learning of mathematics has become focused on the results of an end-of-year standardized tests with teachers marching through a set of standards in what can be easily perceived as the "Stepford Educators". That is what needs to change.

Our students learn to think mathematically when they acquired the ability to count, sort, identify patterns, and represent things with symbols. We continue to help build on that foundation through conversations and not picking up a pencil nor using that pencil to darken bubbles on an answer sheet. Throughout our students' journeys learning mathematics, the focus must be to prepare them to think, to reason, to develop their spatial sense, to communicate, to anticipate, to estimate, to predict, to interpolate, to analyze, to plan, to interpret information, to use tools appropriately, to make decisions, to solve problems using various strategies.

These are the life skills our students should be learning in math class as a result of what is placed in the curriculum.

What we need today, to alter the tide and truly address the issues of a "sea of mediocrity" shared in the 1983 *A Nation at Risk Report*, is a stronger sense of advocating that mathematics is the most important tool for science, computing, and engineering and a part of all technological discoveries that have enriched our lives. Families need to better understand this to help children be able to enter classrooms--as well as libraries and museums, etc. -- with a greater passion for why they are there in the first place.

Over the past three decades or so, our state has invested heavily in testing programs, along with the support for frequent curriculum revision efforts and teacher training. As we look at our return on investment, we need to roll up our sleeves and address some serious issues. It is my hope that communities begin having these critical conversations, and in doing so I trust they will be mindful that what is taught is important and how it is taught is just as important, but what is most important are the many reasons why we are teaching mathematics.



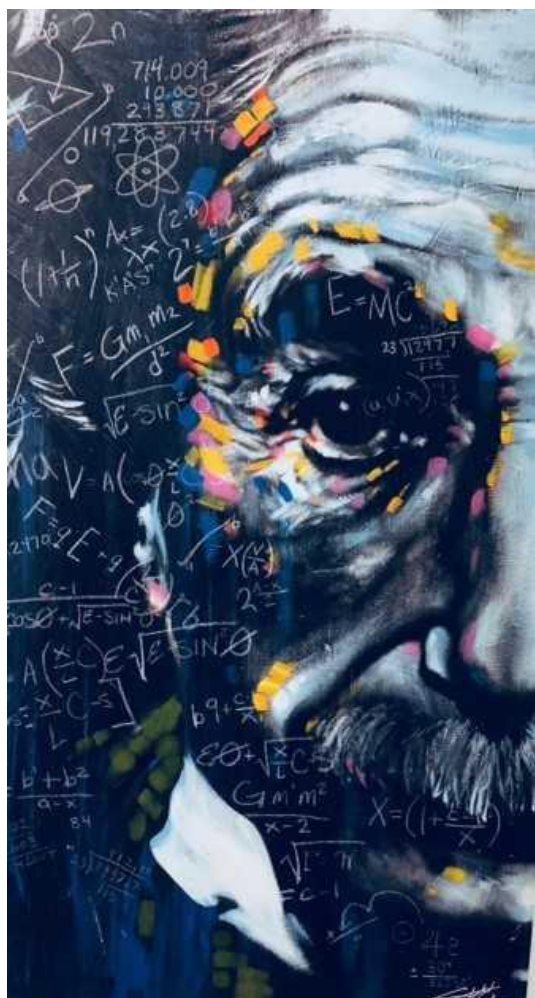
NCTM's publication, *Principles to Actions* ENSURING MATHEMATICAL SUCCESS FOR ALL, lists the following critical reasons why we teach mathematics. In summary, our responsibility is to help students as follows:

- become more reflective in their thinking;
- observe patterns, to notice, to wonder;
- critique information and ask questions; and
- increase engagement and motivation to want to learn more.

In an excellent mathematics program, educators hold themselves and their colleagues accountable for the mathematical success of every student and for their personal and collective professional growth toward effective teaching and learning of mathematics.(p. 99)

Mathematics Teaching Practices
Establish mathematics goals to focus learning. Effective teaching of mathematics establishes clear goals for the mathematics that students are learning, situates goals within learning progressions, and uses the goals to guide instructional decisions.
Implement tasks that promote reasoning and problem solving. Effective teaching of mathematics engages students in solving and discussing tasks that promote mathematical reasoning and problem solving and allow multiple entry points and varied solution strategies.
Use and connect mathematical representations. Effective teaching of mathematics engages students in making connections among mathematical representations to deepen understanding of mathematics concepts and procedures and as tools for problem solving.
Facilitate meaningful mathematical discourse. Effective teaching of mathematics facilitates discourse among students to build shared understanding of mathematical ideas by analyzing and comparing student approaches and arguments.
Pose purposeful questions. Effective teaching of mathematics uses purposeful questions to assess and advance students' reasoning and sense making about important mathematical ideas and relationships.
Build procedural fluency from conceptual understanding. Effective teaching of mathematics builds fluency with procedures on a foundation of conceptual understanding so that students, over time, become skillful in using procedures flexibly as they solve contextual and mathematical problems.
Support productive struggle in learning mathematics. Effective teaching of mathematics consistently provides students, individually and collectively, with opportunities and supports to engage in productive struggle as they grapple with mathematical ideas and relationships.
Elicit and use evidence of student thinking. Effective teaching of mathematics uses evidence of student thinking to assess progress toward mathematical understanding and to adjust instruction continually in ways that support and extend learning.

From the *Principles to Actions Executive Summary*
https://www.nctm.org/uploadedFiles/Standards_and_Positions/PtAExecutiveSummary.pdf



The Einstein poster in Ryan Higgins's workroom

Ryan Higgins to serve as SCCTM President-elect

It doesn't take long after walking into Ryan Higgins' workspace that one is immediately hit with the fact that she really loves mathematics. The giant poster of Albert Einstein captures the attention of visitors as they examine the beauty and wonder found in the piece of art.

Dr. Higgins is an associate professor of education in the Wiggins School of Education at Coker College in Hartsville. She has been at Coker for over five years teaching mathematics methods courses, science methods courses, and mathematics for elementary teachers.

She earned her Ph.D. in Curriculum and Instruction at the University of Louisville in Kentucky in 2013. Ryan has been a member of NCTM since 2010 and has presented at the annual conference several times. Those presentations included topics such as teaching middle school geometry in the outdoors, teacher use of student data, and use of Socratic method in the mathematics classroom. In 2014, she and an undergraduate student earned a MET grant from NCTM to complete work on fourth graders' understanding of the fraction unit. The early stages of the research were presented at the SCCTM annual conference in Myrtle Beach.

Additionally, Ryan has presented at the annual conferences of the Indiana Council of Teachers of Mathematics and Kentucky Council of Teachers of Mathematics. She and her husband, Chris (also a math teacher) live in Hartsville with their two daughters.

Mathematics is for human flourishing

*You cannot separate the true practice of mathematics
from what it means to be human.
If you want to teach mathematics well
you have to connect it to the things they long for...
play, truth, beauty, justice, freedom, community and love.*

—Dr. Francis Su
Harvey Mudd College

To read his feature article, please visit:
mathyawp.wordpress.com/

SCCTM Officers 2018–2019



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Edventure
Columbia, SC
Richland County



President-Elect
Ryan Higgins
Coker College
Hartsville, SC
Darlington County



Past President
Leigh Martin
Clemson University
Clemson
Pickens County, SC



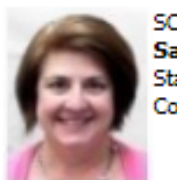
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Brantay Cohens
Ocean Bay Middle School
Horry County



NCTM Representative
Christi Fricks
Riverside Middle School
Anderson District 4



SC Department of Education Representative
Sandra Ammons
State Department of Education
Columbia, SC



Vice President for Elementary
Donald Sarazen
White Knoll Elementary School
Lexington District One
Lexington County



Vice President for Middle
Eugene Bellamy, Jr.
Hardeeville-Ridgeland Middle School
Hardeeville, SC
Jasper County



Vice President for Secondary
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Richland County



Vice President for Post Secondary
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Aiken, SC
Aiken County



Vice President at Large
Alisa Hobgood
West Florence High School
Florence, SC
Florence County



Government Relations
Cathy DeMers
Charleston County Schools
Charleston, SC

Treasurer's Report

Gina Dunn

The fiscal year for the organization runs from July 1, 2017 to June 30, 2018. Income for the fiscal year was \$136,866.00 and expenses were \$103,823.79.

SCCTM Managers



Executive Director
Program, Membership, & Registration Manager
Cindy Parker
Alice Drive Middle School
Sumter School District, retired
Sumter, SC



IT Manager
Bill Gillam
Richland School District Two - retired
ECPI University - Current
Columbia, SC



Commercial Exhibits Manager
Lane Peeler
State Department of Education - retired



Ann Senn
Executive Director Emeritus
Ann Senn
JF Bailey & Associates, Inc
Columbia, SC



MathMate Editor
Chris Duncan
Lander University
Greenwood, SC
Greenwood County



White House Releases New STEM Education Strategy

Charting a Course for Success: America's Strategy for STEM Education

The White House unveiled their five-year STEM Education strategic plan based on their vision "for a future where all Americans will have lifelong access to high-quality STEM education and the United States will be the global leader in STEM literacy, innovation, and employment. For more, click the link above.

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