



eREFLECTIONS

Reflections on Reflections

Publication of the Georgia Council of Teachers of Mathematics

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Reflections on Reflections

GOOD NEWS! Your students are making remarkable progress!

The GaDOE recently compiled data which shows that students in Georgia schools have made remarkable progress in mathematics. This progress is remarkable in that it has been measured by a number of different assessment tools (see the PowerPoint in this edition of eReflections). It is remarkable in that it shows Georgia, alone among the states, as having made progress across each of the assessment tools. It is remarkable in that it is accompanied by measurable progress in both Reading and Science scores.

Of course, the progress reflected in the data did not come about overnight. In the middle of the last decade educational and public policy leaders labored to forge a common vision for improving mathematics



Dan Funsch
President

education for Georgia. The GPS emerged from that work and laid a foundation. The CCGPS is an extension and solidification that will allow Georgia students to increasingly progress as the years roll by.

GCTM, through both the individual efforts of its members and the collective activity of its programs, continues to play a vital role in our state's effort to provide an appropriate, accessible, and solid education for all our young people.

This summer GCTM will again offer Academies to help you implement the CCGPS in your classroom. Offered on convenient dates and locations, these will provide you with some of the skills you need to meet the planning, instructional and assessment needs within your classroom. Please keep an eye on our website, GCTM.org, during the coming months for the details.

I hope and pray that each of you may enjoy a peaceful and blessed Holiday season. May the break from school enable you to return refreshed and ready to help your students make even more progress in 2013.

Review of Improvement in National Assessments by States

2/6/2012 1

**Click the
image to view/
download the
PowerPoint!**



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The Great Garage Sale at GCTM

As I write this piece for the reflections, it is the Wednesday before the big Turkey Day!

On Facebook many of my friends are writing as to how thankful they are for every thing in their lives. I too have so much to be thankful. I am also thankful for GCTM and the many activities that we offer our teachers. One of these was Garage Sale held at the Georgia Math Conference. So many of us it seems have been blessed with school systems that get us all the stuff we need to help us teach! But I must remind some of you who have been so blessed, that there are still many school systems that are not able to do so.

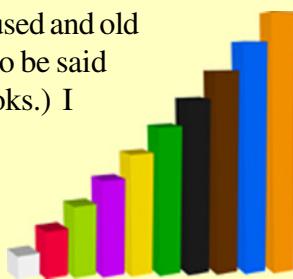
I have often heard that another man's trash is another man's treasure! I am certain of this as I saw the faces of teachers coming into the garage sale. They found treasures and were so excited. Almost everyone that came in, left with something! There was pure jubilation on the parts of several like the dear teacher who got an entire set of Casio solar powered calculators!

There were new, slightly used and old books galore! (There is a lot to be said for good old mathematics books.) I even picked up a book by Eugene Nichols, who was an outstanding mathematics educator from FSU, on teaching with [Cuisenaire rods](#).

So start saving all your old mathematic trash and let's have the Best Garage Sale Ever next year at Georgia Mathematics Conference. All you need to do is bring them to the assigned place for the Garage Sale which will be in the conference booklet.



Cathy Franklin
NCTM
Representative



Membership Matters

Welcome to all the **new members** who joined GCTM through their conference registration. Please login to the [GCTM website](#), establish a password and do a quick check and edit of your personal information. If you were registered as part of a GROUP registration, we don't always have all your data.



Susan Craig
Membership
Director

Welcome back to **renewing members** who received renewal as part of your conference registration. Please do the same review and edit for your information.

All **members**, please take a moment before you leave for the holidays, speak to the other teachers in your department or school and remind them to renew membership. If they did not attend the conference they can go to the website. Remind them they will receive information about professional learning, summer academies, elections, and opportunities to participate in GCTM and make a positive impact on mathematics teaching and learning in Georgia.

Please contact [membership](#) to offer suggestions as to how we can make GCTM membership better. Also let us know how you would like to be more involved!

May your upcoming holidays be joyful!

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Bulletin Board Ideas

By now you have established which of your students are going to give you problems over the year. You have gotten into the routine of this school year and those wonderful bulletin boards that you put up during pre-planning need to be replaced. I would like to make a few suggestions to put a spark in this busy time of the year.

- Find a moment to talk with those students who "don't" demand your attention. You can do that at lunch, in the passing periods, or at the lockers. Tell them something positive that you have noticed, or ask them a question to start them talking.
- Replace bulletin boards with concepts that students should have mastered so far this year. At the end of class have them pair up and pick a concept (Ticket out the door). You can prepare this in advance by typing on a word document and then cutting them apart. You need to make it so 3 pairs are working on the



Karen Lawrence
Northwest
Region Co-
Representative

same concept. Have students present at the beginning of the next class and vote on the one pair that did the nicest job and put theirs up. Then keep referring to them. The quality of work will increase proportionally to the recognition you give.

- Typically the worst behaving students around Christmas are the ones that are going to have the worst Christmas due to family dynamics, finances, and family members state of health. A concerned phone call to a parent, a private talk with the student, or talking with a peer can add great insight.
- Spend reward time having students create homemade games for younger children or for the family. Kongi, a game from Korea using 5 round stones, acorns without the hat, or fish tank stones, is a great family game. Origami is another inexpensive yet fun way to create gifts. Mancala is an easy game to create using egg cartons. If they are making it and taking it, who is learning? A giving heart is a happy heart.



**The Program Committee met Saturday, Dec 1st to begin work on the 2013 Georgia Mathematics Conference which will be held on Oct 16-18, 2013 at Rock Eagle.
Plan now to attend!**



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Rock Eagle Photo Gallery



Rock Eagle Photo Gallery



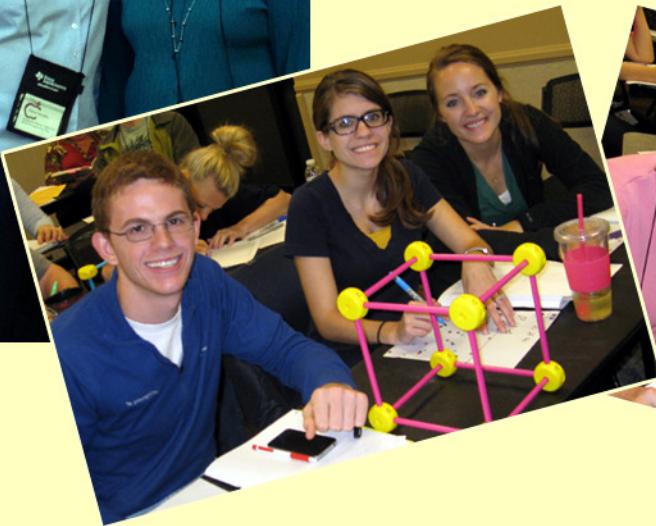
Photographer credits: Melanie Helms, Cathy Franklin, Beth Geeslin, Dottie Whitlow, Dan Funsch, Debbie Poss, Karen Lawrence, ChuChu Wu, Angelique Smith, Larry Lesser, Julie Greene, Derrick Brown, Nickey Ice, and Leighanne Etheridge (winner of the FIRST PHOTO prize!)

Photos are always welcome! Send them to [Cheryl Hughes](#), editor, with information about the images!



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Rock Eagle Photo Gallery



Rock Eagle Photo Gallery





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GCTM 2012 Award Winners



Teacher of Promise Award
Jamie Kennedy



Middle School Teacher of Excellence Award
Janice Moore



Secondary Teacher of Excellence Award
Peter Anderson



Friend of Mathematics Award
Alisha Morgan



John Neff Award
Michelle Mikes



Dwight Love Award
Tom Fulton



Gladys M. Thomason Award
Debbie Poss

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"Mathmusician" Educates and Entertains Attendees

Mathmusician Larry Lesser of UT-El Paso made an enjoyable return to Rock Eagle (since his three years at AASU over a decade ago), giving a math-and-music keynote blending teaching, humor and sing-along that culminated in an encore and standing ovation.

His website has many resources and lyrics to the dozen songs he sang that night...and then some! As a bonus, here are a couple of fun math lyrics that have not been published before:

"Tesselation!"

may be sung to the tune of the #1 hit "Celebration" by Kool and the Gang

Yahoo! This is your tesselation!
Yahoo! This is your tesselation!

Te-se-late the plane, come on! Tesselate.
Te-se-late, good tiles, come on! It's a tesselation!
There's a tilin' goin' on this hall,
A tesselation goin' wall to wall-
No overlaps and no gaps, too.
Let's all sing a "cover" tune - come on now:

Te-se-la-tion - Let's all tessellate by nibble-and-slide
Te-se-la-tion - with M.C. Escher, we'll have a good time.

The tiles all come together, giving us visual pleasure
Like one we know - the honeycomb - come on!
Yahoo! It's a tesselation! Yahoo!

Te-se-late the plane, come on! Tesselate.
Te-se-late, good tiles, come on! It's a tesselation!

(We'll make a good tile tonight, then tessellate, it's all right)2x

(Make a) tile..... with 3 sides Tessellate -- it's all right
Tes..... a la tion
(Make a) tile..... with 4 sides Tessellate -- it's all right
Tes..... a la tion

Te-se-late the plane, come on! Tesselate.
Te-se-late, good tiles, come on! It's a tessellation!
lyric (c) 2004 Lawrence Mark Lesser



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"Mathmusician" Educates and Entertains Attendees cont.



Mathmusician Larry Lesser (of UTEP) reunites with former AASU colleague Jane Barnard before his Rock Eagle keynote."

"Stayin' with 5"

sing to the tune of "Stayin' Alive," a Grammy-winning #1 hit for the Bee Gees in 1977

Well, you can tell by the way I use my chalk that I teach math and I love to talk
With my class usin' rhyme about a number that is prime!
Now it's all right, it's okay -- use 5 senses every day.
We can try to understand the Roman "V" on my hand...

CHORUS: Whether it's a wonder -- this Fibonacci number--
I'm stayin' with 5, stayin' with 5.
Symmetry flows in an apple or a rose: stayin' with 5, stayin' with 5.
Ah, ha, ha, ha, stayin' with 5, stayin' with 5.
Ah, ha, ha, ha, stayin' with 5.....

Platonic solids - there are 5, like the vowels - not countin' y.
Starfish arms, Olympic rings, playin' hoops on a team:
You know it's all right, it's okay Muslims pray 5 times a day.
We can try to understand patterns in a pentagram... (Repeat Chorus)

bridge: Gonna celebrate Cinco de Mayo: we're gonna take....five!
5 is everywhere, somebody give me, somebody give me a high 5!

lyric (c) 2007 Lawrence Mark Lesser

Follow the Leader

Sharing resources is the way to look creative even if we're not! This publication is committed to pointing us in the direction to find new ideas and materials to use in our classrooms.

One way to expand our cache of classroom activities is to read blogs. Here are some suggestions!

<http://www.teachingblogaddict.com/2011/04/kindergarten-blogs.html>

Kindergarten

<http://kindergartendoodles.blogspot.com/2012/05/building-number-sense.html>

Elementary

<http://guidedmath.wordpress.com/category/elementary-math/>

Middle School

<http://www.bigideasmath.com/blog/>

High School

<http://mathematics-diary.blogspot.com/2010/06/high-school-math.html>

<http://teachhighschoolmath.blogspot.com/>

Another treasure chest of ideas can be found on Pinterest.
Follow these people for some cool ideas:

- Diane Goetschius and her "Math for Kindergarten" board
- Roberto Sconocchini and his "Mathematics Resources" board
- Trish Bennett and her "Math Stuffs" board
- Kim Spence and her "Geometry Ideas" and "Algebra Ideas"



Are you on PINTEREST? We would love to follow you! [Email Cheryl Hughes](#) with your name to have a GEORGIA-teacher list in the next issue of eREFLECTIONS.



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It is Never too Early to Teach Math by Dr. Chuchu Wu

Who says a toddler cannot understand math? Wrong! Toddlers can know which Cheerio is big and which Cheerio is small, because they always want to eat the big ones—the bigger the better. Toddlers can also differentiate what is tall and what is short, what is heavy and what is light. Beginning at 18 months old, babies are already learning about measurement through tactile and visual (concrete) exploration in the real world. Some toddlers even knew basic concepts of quantity of 1 and 2—one lollipop for me and one lollipop for mommy. Toddlers may not understand the ordinal number concept, in which the last number represents the quantity of objects, but they are exploring the number sense by rote counting and simple one-to-one correspondence.

Whenever I asked my 2-year-old, "How many trains are there?", he would answer me proudly "1, 2, 3, 4, 5, 6, 7, 8, 9, 10." Although there are only two trains, he always tells me all the numbers he knows. I thought that was very good. The point I am trying to make here is: It is never too early to talk about mathematical concepts! "Mathematicize" everything in early childhood education.

This is my second time attending GCTM. I thoroughly enjoyed the conference both times because I learned something from each session. Not only did I like the innovative teaching strategies that in-service

teachers were sharing but also I was thrilled to learn about those research-based best practices of mathematics teaching strategies. These sessions really opened my eyes to view mathematics teaching and learning differently.

This year I was particularly impressed with Greg Tang's presentation—developing young children's number sense through various forms of strategies, especially in visual and mental representations. He empowers teachers and children. Math can be fun and our brains have a lot of potential to process the math problems mentally if we start early. Another impressive session was presented by Math Forum about "the notice and wonder" using inquiry approach to

intrigue mathematical thinking and questioning.

I felt charged after attending the conference! Thank you for a wonderful conference! Of course, the door prize drawing was also a highlight of each evening. Who says Math teachers are boring and serious? Not at all, they are "SMART" yet crazy fun people!

Dr. Chuchu Wu currently serves as an Associate Professor of Early Childhood Education in School of Education at Georgia Southwestern State University. She teaches Math Methods, Assessment, and Integrated Curriculum for Early Childhood Education Majors.

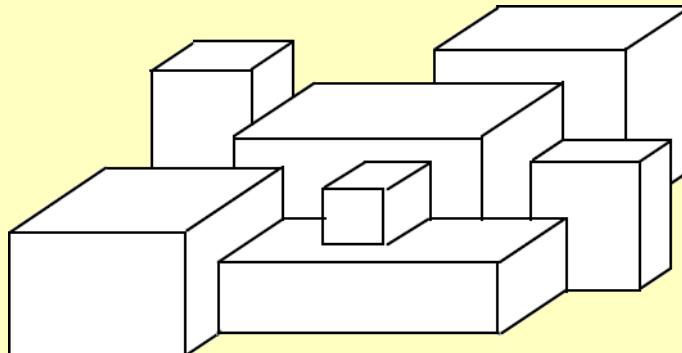


SAVE THIS DATE! PLAN NOW!

NCTM 2013
Annual Meeting & Exposition
APRIL 17-20 • DENVER
www.nctm.org/denver

NATIONAL COUNCIL OF TEACHERS OF MATHEMATICS

A Christmas Present Puzzle by Leanne Luttrell



Tonya has seven Christmas presents wrapped. Each one is wrapped in different paper and is for a different person: Bill, Donna, Julie, Kristy, Mark, Shane, and Tim. Soon she realized that none of the gifts had tags! Use the clues to correctly color the presents and determine who should receive each gift.

- The only colors were green, red, gold, white, and blue. Gold, white, and blue were each used on exactly two presents, but green and red were each on exactly three presents.
- The solid red present was to the immediate right of the gift with a white background, which was to the immediate right of a solid colored present.
- The solid colored presents were red, green, and gold.
- The only present with three colors had a white background. The other two colors did not include blue.
- The smallest present was a solid color.
- The two presents with gold in the paper were not touching, but they were beside each other.
- The present that was red with gold stars was not in the back.
- The present in the back did not contain green.
- The background for the white snowflakes was not green.
- The gift for Donna had blue ornaments on a green background.
- The gift for Shane was next to the present that was white with green holly leaves and red holly berries, and it was behind Donna's present.
- Tonya knew Bill would like the stars on his present!
- Julie's present had red on it.
- Kristy's present was in front of Julie's.
- Mark's present was not a solid color.

[Here's a link to the worksheet.](#)

[Here is a Christmas puzzle incorporating a Venn Diagram.](#)