



# Wahpe Woyaka pi ( Talking Leaf )

South Dakota Council Teachers of Mathematics Newsletter

## Presidential Ponderings

You: *Your child is having difficulty with mathematics.*  
Parent: *That doesn't surprise me. I can't do math. I was always terrible at math. I hated math. It was my worst subject...etc.*

Can you relate? I'm certain that every math teacher—at all levels -- has experienced this conversation at least once. Why is it OK to make that statement about mathematics? And why is it so pervasive? Adults who would never dream of making that kind of statement about reading feel perfectly comfortable admitting lack of math skills, and even hatred of mathematics. When parents look upon math with fear and loathing, it presents a tough sell for teachers. How can we win them over? How can we convince them to honor and encourage their children's mathematical efforts in spite of their own math aversion?

Patricia Clark Kenschaft's controversial and thought-provoking book *Math Power: How to Help Your Child Love Math, Even if You Don't* (Addison-Wesley 1997) provides some helpful suggestions. Although primarily addressed to parents, *Math Power* provides insights for teachers as well. The author turns a critical eye on mathematics teaching in America and provides realistic guidance for parents (and teachers) who desire a good mathematical education for their students.

The first few chapters of the book explore mathematical ability, and how it develops. Kenschaft writes for parents who want their children to be mathematically successful and happy and who are willing to learn math alongside their children. She believes that people were meant to enjoy mathematics and that much of today's teaching has too little to do with real mathematics. In spite of the many changes brought by adoption of the Common Core Standards for School Mathematics (CCSSM) in 2010, and increased attention to the eight Standards for Mathematical Processes (SMP), too many schools still focus too much on algorithms and worksheets, and too little on problem solving and true conceptual understanding. There is still much work to do.

It is a sad fact that many Americans have not had good experiences with mathematics. *Math Power* addresses why so many adults, including many teachers, have missed both the power and the fun of mathematical thinking. The author describes ways for adults to create an intellectual climate that will better support all children. Some chapters include: Fun and Games with Preschoolers; Primary-Grade Success; Math Topics Your School May Not Teach But You Can; What Your Child Should Know; The Fifth Grade Crisis; How Drill and Kill Cripples U.S. Math Education; What Every Parent Should Know About Testing and Grading; and Getting Along With Your Child's Teachers.

Kenschaft provides a thought-provoking look at mathematics education in America's elementary schools. Some of her indictments of math teaching methods and teacher preparation are harsh. She is especially critical of "drill and kill" and over-emphasis on standardized test preparation. Her conclusions are certain to be controversial. I have been forced to re-examine some of my beliefs and practices. But when I hear the dreaded "I was never good at math" from parents, I have some new insights. I will suggest that they read *Math Power*.

*continued*

SUMMER 2015-2016

## Wahpe Woyaka pi

### Inside this issue:

<i>Presidential Ponderings, cont</i>	2
<i>Share the Wealth</i>	2
<i>6-8 Highlights</i>	3
<i>Higher Ed Viewpoint</i>	4
<i>Presidential Awards Update</i>	5
<i>SDCTM Membership Form</i>	6
<i>SDCTM Executive Board</i>	7

### Calendar Notes:

- *SDCTM Annual Symposium*  
July 20, 2016
- *SDCTM/SDSTA Confernece*  
February 2—4, 2017
- *PAEMST Nominations*  
Due April 1, 2017
- *PAEMST Applications*  
Due May 1, 2017



## Presidential Ponderings, *continued*

The 2016 revision of South Dakota's mathematics content standards (CCSSM) is underway. Several teams will be working throughout the summer to update and improve math standards for grades K-12. The input of mathematics educators from all levels is critical for success of this project. Many of our state's educators stepped up and volunteered to undertake this challenging task. DOE received far more applications than were needed to fill the committees. Your willingness to serve is a testimony to the quality of our teaching cadre. Thank you to all who applied for positions on the revision committee. Congratulations to those who were chosen. It is certain to be demanding, yet rewarding work.

If you were not involved in this round of revisions, there will still be many opportunities to participate in the process. Groups will be needed to develop "blueprints" that map the changed standards onto grade levels and courses K-12. Public feedback will be received and considered as part of the revision process. Your input is and will continue to be important as the work moves forward. Opportunities will be posted on the SDCTM website and elsewhere as they become available. I urge you to become involved. Your professional expertise is vital to the success of the revision process.

As I write this column, summer is flying by. I love the long twilight evenings and the summer smells. Most of all I love having the luxury of time-- time to read and reflect, time to pursue a hobby, and time for professional growth. But I also look forward to fall's cool evenings, the fragrance of burning leaves, and the new challenges another school term always brings. I hope your summer break provides a well-deserved time of rest and renewal and that you will be refreshed and ready for another exciting school year!

Yours til pi repeats,  
Cindy Kroon  
SDCTM President

## Share the Wealth

I like to include activities and lesson ideas in each newsletter. I know that we have some of the world's best math teachers teaching in the state...and some of the most generous. However, I've come to realize that we are also some of the most modest. You never think what you are doing is "good enough" to include in the newsletter. Let me assure you that it is! If it works for your students, I know that at least one other teacher would find it helpful as well. I challenge you each to submit at least one activity...no matter how small or how large. You can include pictures of your students (and you if you'd like). Past submissions have sometimes included a student worksheet, others have not. It can be as simple or as complex as you are comfortable with. Sometimes, a simple idea (no handouts, pictures etc) can be like a gold mine to the teacher that is looking for just the right thing.

Send submissions to: [smcquade2@sfcss.org](mailto:smcquade2@sfcss.org)

*"Your input is and will continue to be important...I urge you to become involved. Your professional expertise is vital..."*





## 6-8 Highlights

Happy Summer Everyone! If you are anything like me, summertime is my period of relaxation and spending time with family and friends. However, at the back of my mind, I am always thinking about school. What can I do differently this year that will make an impact on my students?

A couple of years ago, my district was introduced to the Power Teaching Framework by the Success For All Foundation. One piece of this framework that I really like is the “Get the Goof.” Get the Goof is a form of a Bell-ringer or Warm-up, but with a twist. Instead of having a naked number problem or story problem on the board for the students to do when they walk in, it is already done for them... incorrectly!

The routine is set from the beginning of the year that the students are to work on “Get the Goof” when they walk in the room. The students are charged with finding the goof made by a fictitious student, finding the correct answer, and being able to explain how to do it correctly. My students are in teams and they are encouraged to do this together. Therefore, students are able to work on their communication and analyzing skills. Many times, the mistake is a precision mistake, so it helps drive the fact that showing your work and taking your time is important. I love the fact that they realize this on their own instead of having me preach it to them!

When I create these “Get the Goofs,” I think of what I want my students to get out of it. Sometimes, it is a review of common mistakes I saw on a homework or quiz. Other times, I use it as a lead-in to whatever our topic is for the day. Sometimes, I use it to review a concept that just needs lots of repetition. The possibilities are endless.

When I create the “Get the Goof” I have a story problem or naked number problem typed out on the board. Then in my handwriting I show the work to solve it with some error within the work. Other times I have a story problem with two different approaches to solving and they have to pick out the correct one.

The Success For All Foundation has them in this format:

Alberto found the value of  $4.2[-6.3 - (-2.9)]$ . He said it was 14.28. What is wrong with his work?

I have also been known to show things from the internet. During the big Powerball last year, this was floating around on Facebook. I decided it would be a fun “Get the Goof.”

In the end, the main purpose is for students to openly discuss math mistakes in an environment free of judgement because no one needs to take ownership of the mistake. The students need to be able to identify the mistake, understand how to rectify it, and correctly find the answer. If you are interested in learning more about the Success For All Foundation or the Power Teaching Framework check out their website: <http://www.successforall.org>

I hope you enjoy the rest of your summer!!!

Crystal L. McMachen  
SDCTM Middle School Liaison



*“...students are able to work on their communication and analyzing skills.”*

Powerball 1.3 Billion  
 $\div$  U.S. Pop 300 Million  
 Everyone receives 4.33 mil  
 @Livesosa  
 Poverty Solved!!  
 - Philippe Andolini



## Higher Ed Viewpoint

As we are well into summer mode and many campuses have had several days of registering students that will be coming into the fall, I would like to take this opportunity to remind you all that the math placement process has changed. In the past it was based largely on ACT math subscores alone, but after doing a review of the BOR campuses we are happy to say that our placement is now based on data from our students within our system and we hope to continue to review and update it as needed. Our goal is that this will help with success rates on our campuses. The new placement policy is a weighted average of the HS CUM GPA and the Math ACT Subscore. This new number is being called the Math Index (MI) and it is given by  $MI = 250 * GPA + 17 * \text{Math ACT}$ . The various course placements based on this MI score can be seen at the link provided at [https://www.sdbor.edu/administrative-offices/academics/academic-affairs-guidelines/Documents/English\\_Math\\_Placement\\_Guidelines.pdf](https://www.sdbor.edu/administrative-offices/academics/academic-affairs-guidelines/Documents/English_Math_Placement_Guidelines.pdf)

Also, it would be greatly appreciated if you could forward this information to your guidance officers as well as a plea to also include Smarter Balance (SB) Math subscores on transcripts. Remember that students can also skip the remedial courses if they score high enough on the SB math portion. Those scores are also provided on the link above. It is my understanding that many campuses are not getting these scores reported to them and we can't help out students without this information.

As you all go about summer plans of spending some much needed time with family, resting, relaxing, professional development and etc., I wish you all a safe and happy summer.

Best wishes,

*Dan Van Peverden*

SDCTM Liaison to Higher Education  
Professor and Dept. Chair  
The University of South Dakota



*“Our goal is that this [the changes in the math placement process] will help with success rates on our campuses.”*



## Share the Classroom Treasures

“Sharing” the treasures has been quite popular at the SDCTM/SDSTA Conference. Don't forget to start a box of classroom treasures for the 2017 conference.

*PLEASE - No Textbooks or broken/non-working equipment. Although it may feel like yours, make sure it is. If it's marked “School Property,” please leave it in school.*





## Presidential Awards Update

Congratulations to the following elementary mathematics state-level finalists for the 2016 Presidential Award for Excellence in Mathematics and Science Teaching:

Crystall Becker	Canistota School	Grades 4,5, and 6
Lisa Kissner	Huron Middle School	6th-8th Sheltered Mathematics
Lindsey Tellinghuisen	Willow Lake	4th Grade
Andrea Thedorff	Black Hawk Elementar	3rd Grade

As state-level finalists, they are automatically candidates for the National Presidential Award. The teacher selected as South Dakota's Presidential Awardee will be notified officially by the White House. Every year up to 108 National Awardees each receive a \$10,000 award, a paid trip for two to Washington, DC to attend a week-long series of networking opportunities and recognition events, and a special citation signed by the President of the United States.

SDCTM will celebrate the achievements of each of the state-level finalists on Friday, February 3, 2017 in Huron, SD during the evening Banquet at the SDCTM/SDSTA Joint Conference. Each finalist will receive a paid two day conference registration, a paid one year's membership to SDCTM, and 3 CEU's toward certificate renewal.

Beginning this fall, SDCTM will be looking for outstanding 7th-12th grade mathematics and science teachers for the 2017 Presidential Awards for Excellence in Mathematics and Science Teaching. Do you know a GREAT 7th-12th grade mathematics or science teacher? Nominate him or her to receive the Presidential Award! Nominations for the 2017 cycle will open shortly after the 2016-2017 school year begins.

For more information, including nomination and application forms as they become available, please visit [www.sdctm.org](http://www.sdctm.org) and click on the Presidential Awards link.

Allen Hogie  
SD PAEMST Mathematics Coordinator



*“Congratulations Crystall, Lisa, Lindsey & Andrea!”*





*Rewarding & Inspiring*  
**Great Teaching**  
Since 1983



Print a copy of this form. Mail with check payable to SDCTM to:

**Jay Berglund**  
**204 S. Exene Strert**  
**Gettysburg, SD 57442**

Name \_\_\_\_\_

School Name \_\_\_\_\_

Subjects or Grades Taught \_\_\_\_\_

Addresses

Home \_\_\_\_\_  
\_\_\_\_\_

School \_\_\_\_\_  
\_\_\_\_\_

Mailing Address: \_\_\_\_\_ Home \_\_\_\_\_ School

Home Phone \_\_\_\_\_

School Phone \_\_\_\_\_

Fax Number \_\_\_\_\_

E-mail \_\_\_\_\_

Membership categories (Check only one)

- \_\_\_\_\_ Elementary School \$5.00
- \_\_\_\_\_ Middle School / Junior High \$20.00
- \_\_\_\_\_ High School \$20.00
- \_\_\_\_\_ Post Secondary \$20.00
- \_\_\_\_\_ Retired \$5.00
- \_\_\_\_\_ Student \$5.00
- \_\_\_\_\_ Other \$20.00

*We now offer the option to use PayPal to pay your dues for a minimal processing fee of \$1.00. The processing fee will cover the processing fees incurred by SDCTM and fees charged for having checks cut by PayPal.*

*Instructions can be found online at:*  
*<http://www.sdctm.org/joinsdctm.htm>*



SDCTM Newsletter  
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