

# Wahpe Woyaka pi

( Talking Leaf )

South Dakota Council Teachers of Mathematics Newsletter

## Presidential Ponderings

Welcome to Spring, finally. It is beautiful in the Black Hills, I hear it smells like spring in Sioux Falls, (OK I read it on Facebook), I think it has finally stopped snowing in Aberdeen and Sisseton, and I am trying to figure what to do the days half my students are absent at track meets. The final sign of Spring, the DTEP in my rearview mirror. Technically, as I write this, the DSTEP is next week. I am still teaching linear relationships and haven't spent a minute reviewing anything from earlier in the year. Do you think they will remember the Pythagorean Theorem, indirect measurement, similarity??? Or will they tell the teacher next year, with some conviction, "NO, we never learned that last year." They sang  $y = mx + b$  to me in the lunch room yesterday (it echoes nicely off the walls in the commons) although they really preferred to have a flash mob in the 6<sup>th</sup> and 7<sup>th</sup> grade lunches. I am not sure the lunch supervisors would have found it as fun, but maybe next year.



So, on to the Common Core Standards. Have you started integrating them into your lessons or are you still figuring how to make the transition? Do you see a day in the future when we won't be agonizing over them and they will just be what we do as a matter of course, like the current SD standards? For fun, I showed a fellow teacher the NCTM standards for Grades 5-8, in particular Mathematics as Problem Solving, Communication, Reasoning, Connections. Then I turned to the copywrite date, 1989. Or how about the Principles and Standards from 2000. The skills are moving around, but good teaching has been good teaching for a long time and NCTM has been there to offer support from the beginning. Is the concern I hear from teachers about the teaching of math or about the test?

I see from Gaye Pickner that the practice test, which some schools signed up to take, will not be available this year. The latest word on the DOE Assessment Consortiums list serve is this "The Volunteer Assessment Pilot will be more of what SBAC is calling a "practice test" and more broadly available. However, it won't be available until late May, when most South Dakota schools have let out for the summer. The good news is that the practice test is expected to be open throughout next school year." I haven't heard which schools have signed up to participate in the practice test but according to Smarter Balanced, "The Practice Test will provide:

- administrators and parents with access to items planned and designed for the new assessment;
- students with access to the tests over the summer, with the Practice Test being accessible right up to the rollout of the operational assessment

a full array of item types, including performance tasks"

If you don't get the notices from the state sign up for the Assessment Consortiums listserve at the DOE site. You can get information and sign up at <http://www.k12.sd.us/Listserv/>.

There are some other sites you might want to bookmark and add to your summer reading list. The progressions for the common core can be found at this site <http://ime.math.arizona.edu/progressions/>. I'm not sure why they are all still listed as drafts but they give a great overview of the thinking around the development of the Common Core. For example, how should learning about ratios and proportional relationships be developed in students, where does it appear in the standards, how does it connect across grade levels. Another item that should be required reading are the Achievement Level Descriptors (ALDs). The preliminary listing is available at <http://www.smarterbalanced.org/achievement-level-descriptors-and-college-readiness/>. It isn't quite as thrilling as reading Game of Thrones, but it is informative.

Finally, I read an interesting interview with Charlotte Danielson about teaching and the Common Core. In the interview she says,

*'I think the common core rests on a view of teaching as complex decision making, as opposed to something more routine or drill-based. That's a view I've always taken as well. It requires instructional strategies*

*continued*

SPRING 2013

## Wahpe Woyaka pi

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### Calendar Notes:

- *PAEMST Applications Due May 1, 2013*
- *SDCTM Summer Symposium June 20, 2013*



*“...the attention to good professional development for teachers, maybe even paid professional development, can't be a bad thing”*

## Presidential Ponderings, *continued*

on teachers' parts that enable students to explore concepts and discuss them with each other, to question and respectfully challenge classmates' assertions. So I see the common core as a fertile and rich opportunity for really important professional learning by teachers”

The underlining is mine and something I think people who have not been in the classroom don't see and often don't understand. Good teachers make that look so easy. In addition, the attention to good professional development for teachers, maybe even paid professional development, can't be a bad thing. In addition, she was asked when you walk into the classroom, what will good teaching look like? Her response includes, “of course I care about what the teacher is doing, but in some ways I care even more about what the students are doing. What's the nature of the task? Are students being invited, or even required, to think?” If you would like to access the interview here is the link.

[http://www.edweek.org/tm/articles/2013/03/13/ccio\\_danielson\\_teaching.html?tkn=RWNFyV%2BOaQDSWvWR4%2BiuGSS0A%2BpKgRHZl5np&cmp=clp-edweek](http://www.edweek.org/tm/articles/2013/03/13/ccio_danielson_teaching.html?tkn=RWNFyV%2BOaQDSWvWR4%2BiuGSS0A%2BpKgRHZl5np&cmp=clp-edweek)

That's all from the President's kitchen counter. It's too nice to spend another minute inside. Enjoy the last few weeks of school. Finish up with a bang and remember the best thing about teaching, (no not June, July and August) whatever you did this year, you get another chance to do it better next year!!

Ellie Cooch  
SDCTM President

<http://ime.math.arizona.edu/progressions/>

The Practice Test will provide:

administrators and parents with access to items planned and designed for the new assessment; students with access to the tests over the summer, with the Practice Test being accessible right up to the rollout of the operational assessment

- a full array of item types, including performance tasks;

versions supporting several accommodations:

- Text-to-speech

- Item-level pop-up Spanish glossaries for construct-irrelevant terms (mathematics only)

- Braille

- American Sign Language (ASL)

<http://ime.math.arizona.edu/progressions/>

<http://ime.math.arizona.edu/progressions/>



## Geometry in an Ice Storm!



Cindy Kroon

In a plane, if two lines are perpendicular to the same line, then they are parallel.

## Share the Wealth

I like to include activities in each newsletter (there are three in this issue). 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)





## Distinguished Service to Mathematics

The “Distinguished Service to Mathematics” award is presented each year to an individual that exemplifies the purposes of SDCTM to an outstanding degree. The 2013 recipient of this award was Bob Schuh. Bob retired last year from after teaching at McIntosh High School for over 25 years. While teaching at McIntosh, Bob was a National Science Foundation Grant Writer, Vice President of SDCTM, Presidential Award Finalist, and served on committees to write and revise the South Dakota high school math standards and Dakota STEP review. He has presented at the SDCTM and TIE conferences multiple times and presented at the Texas Instruments International Conference in Dallas, Texas. Bob wasn’t content with just improving himself as a math teacher, but wanted to help others become better math teachers as well. His dedication to mathematics education has been evident over the years.

Several of his former students have become teachers and school administrators. One of his former students is now teaching the math classes in McIntosh and his daughter, Lori is an elementary teacher and an executive board member of SDCTM. His distinguished service to mathematics can be summed up by quoting some of his former students: “I just want to say how big of an impact Mr. Schuh had on my life. On a professional level, the fact that he made a subject that could be as complicated and daunting as math and science seem fun and accessible definitely helped to influence me greatly into choosing the career path that I did, and for that I owe him a debt of gratitude.” Another student said “I realized the knowledge I need for work can be learned anywhere, taught by most anyone but the life skills I needed that go along with it.. well, that would have to be taught by a very unique individual with a very special gift of patience and understanding and that someone is Bob Schuh, my mentor and now, my friend.”

In recognition of his many contributions to the field of mathematics education and his service to SDCTM, Bob was presented a plaque during the banquet at the annual conference in Huron. Congratulations Bob!

*“I realized the knowledge I need for work can be learned anywhere, taught by most anyone but the life skills I needed that go along with it.. well, that would have to be taught by a very unique individual with a very special gift of patience and understanding and that someone is Bob Schuh, my mentor and now, my friend.”*





## Friend of Mathematics

The “Friend of Mathematics” award is presented each year to a business or institution that supports SDCTM and mathematics education in South Dakota. The 2013 award was presented at the annual conference to Montrose High School. Montrose High School and their administration has been very supportive of SDCTM for many years. They have allowed our organization to use the high school for various meetings each year. They very willingly allow use of their copy machine and other office equipment without charge to SDCTM. A plaque was presented to Cindy Kroon, representing Montrose High School, during the banquet at the conference. Congratulations to Montrose High School and thank you for your support!



*“Congratulations to Montrose High School and thank you for your support!”*

## Free Conference Registration ....

The winner of the drawing for free conference registration for the 2014 conference goes to Barb Glanzer of Aberdeen. Congrats Barb! See you in Huron!

## Volume Question...

What is the volume of a cylinder with a radius of  $z$  of a height of  $a$ ?

See page 5 for the answer....



## Higher Ed Viewpoint

### Why Math?

As we come to the close of a semester and you may have some days that are broken up or abbreviated schedules due to various other activities, I would like to present you with an activity that you may want to try in your classrooms. The Honors Program on our campus is hosting an event called “Life Boat”. They invited faculty from various disciplines to join in a game where we are stranded on an island and there is only one spot left in the life boat. Each faculty member is to make a compelling argument for why they (ie. their discipline) should be allowed on the boat. Students will then vote for the faculty member that gave the most compelling argument for their discipline. It occurred to me that we should be conveying this message to our students in our classroom every day, “Why studying mathematics is important.” We spend so much time worrying about the curriculum and standardized exams that I fear our students lose the forest through the trees. Maybe if we spent more time explaining why this subject of ours really matters, they will be more diligent in learning it. I truly hope I can give our beloved discipline the merit it deserves as I participate in our event on campus.

As a colleague of mine said the other day, “Yep, they are starting to smell the barn.” This is an expression among horse people that after you have been out riding and are on your way back to the barn, the horses will really want to go faster to get to the barn and their natural surroundings. I wish you all the best of luck in reigning in our young people as they “smell the barn” of summer approaching. Best wishes in your summer adventures.

Regards,

Dan Van Peurseem  
Higher Ed Liaison for SDCTM  
Associate Professor and Dept. Chair  
The University of South Dakota  
Department of Mathematical Sciences

## Some input, please...

Have you attended a conference and heard a wonderful speaker that you would like to hear again? Is there someone you think would be a great addition to our speaker list for the annual meeting? Are they more than a good speaker but also someone who has lessons to share - classroom ideas, mathematical thinking... Drop an email to Ellie Cooch at [ecooch@spearfish.k12.sd.us](mailto:ecooch@spearfish.k12.sd.us) with your suggestions and indicate the grade band and topic.



## Cosmic Connections 2013

This summer we are offering Cosmic Connections 2013. This workshop focuses on the use of astronomy to teach math and physical science concepts. We have aligned our workshop with the Crosscutting Concepts in the NGSS and the Standards of Mathematical Practice (Common Core Math). This workshop is available to both middle and high school physical science and math teachers. We encourage math and science teachers from the same school district to attend. The workshop will be held on the campus of SDSU July 7-12. Room and board will be provided as well as a stipend of \$90/day. Participants have the opportunity to earn two hours of graduate credit during the summer and another hour during the 2013-14 school year.

If you are interested in applying, fill out the application at <http://CosmicConnections2013Application.questionpro.com>

*Judy Vondruska*

Astronomy/Physics Lecturer  
South Dakota State University  
Department of Physics  
College of Arts & Sciences  
DEH 263  
Box 2222  
Brookings, SD 57007  
605-688-5859

*“We encourage math and science teachers from the same school district to attend.”*

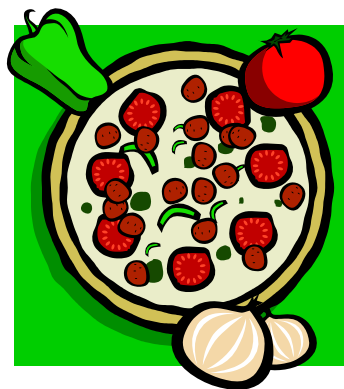
## Volume Question...

Pizza!

pi \* z \* z \* a

Have a great day.

William Gripentrog  
[william.gripentrog@k12.sd.us](mailto:william.gripentrog@k12.sd.us)



# Basic Probability & Statistics for the Common Core

**Thursday,  
June 20, 2013**

**Cost: \$50.00**

**Registration:**

**8:00 am**

**Session 8:30-4:00**

**Lunch will be  
provided**

**DWU graduate  
credit will be  
available for  
additional \$70.00.  
Enroll and pay for  
the credit when  
you arrive on  
campus June 20th.**

South Dakota Council of Teachers of Mathematics announces a Summer Symposium for Thursday June 20, 2013. The symposium will be held in the new Center for Health Sciences Building, Room 203 on the campus of Dakota Wesleyan University in Mitchell, South Dakota.

Basic probability and statistics topics will be appropriate for teachers in grades K-12. Participants will perform simple data collection activities: arm span, hand span, height, gender, age category, east or west river, and maybe a few others. We will spend the rest of the day doing a statistical analysis of our data. The analysis will be using measures of central tendency, graphics, confidence intervals and appropriate tests. Some probability topics will also be addressed.

Registration cost for the symposium will be \$50. Dr. Rocky Von Eye will be offering DWU graduate credit for an additional \$70. (You will complete an after-symposium assignment for the credit.) Enroll and pay for the graduate credit when you arrive on campus June 20th. Questions about the credit may be directed to Rocky at [rovoneye@dwu.edu](mailto:rovoneye@dwu.edu).

To register for the symposium, complete the registration form below. Send registration form and \$50 (check payable to SDCTM) to:

**Steve Caron 907 South Sixteenth Street Aberdeen, SD 57401.**

Questions about registration may be directed to [steve.caron@k12.sd.us](mailto:steve.caron@k12.sd.us)

Don't delay! Registration is limited to a maximum of 25 participants (first come basis) for the session. A minimum of 15 participants is required. Check [www.sdctm.org](http://www.sdctm.org) for symposium information and updates.

**Registration deadline: May 30, 2013**

Activities applicable for students in grades K-12

SDCTM is an Affiliate of the National Council of Teachers of Mathematics.

Bring a flash / thumb drive to save your work!

Name \_\_\_\_\_

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

Home/Summer Address \_\_\_\_\_

Home phone \_\_\_\_\_

School \_\_\_\_\_

School phone \_\_\_\_\_

DWU Graduate credit is available.

**Bring a flash drive to save your work!**

**Note: DWU is offering a SmartPen Shortcourse on Wednesday June 19, 2013. Enrollment is limited to 6 participants: cost \$50.00. Email Rocky Von Eye at [rovoneye@dwu.edu](mailto:rovoneye@dwu.edu) for more information and separate registration.**





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

**Diana McCann**  
**31133 Bon Homme Road**  
**Tabor, SD 57063**

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



SDCTM Newsletter  
C/o Sheila McQuade  
OGHS  
3201 S. Kiwanis Ave  
Sioux Falls, SD 57105

## 2013-2015 SDCTM Executive Board Members

SDCTM President  
Ellie Cooch  
Spearfish Middle School  
ecooch@spearfish.k12.sd.us

Elementary Liaison  
Lori Stverak  
Robert Frost Elementary, Sioux Falls  
lori.stverak@k12.sd.us

SDCTM Past President  
Jay Berglund  
Gettysburg High School  
(605) 765-2436  
jay.berglund@k12.sd.us

Middle School Liaison  
Becky Umenthum  
Rapid City Public Schools  
becky.umenthum@k12.sd.us

President-Elect  
Cindy Kroon  
Montrose High School  
(605) 363-5025  
Cindy.kroon@k12.sd.us

Secondary Liaison  
Bill Gripentrog  
Watertown High School  
(605) 882-6316 ext. 721  
william.gripentrog@k12.sd.us

Vice-President  
Steve Caron  
Aberdeen Central High School  
(605) 725-8208  
steve.caron@k12.sd.us

Post-secondary Liaison  
Dan VanPeurse  
USD  
dan.vanpeurse@usd.edu

Secretary  
Samra Trask  
Wall School District  
(605) 279-2156  
samra.trask@k12.sd.us

NCTM Representative  
Allen Hogie  
Brandon Valley High School  
(605) 582 - 3211  
allen.hogie@k12.sd.us

Treasurer  
Diana McCann  
(605) 589 - 3320  
diana@thecoganhouse.com

Webmaster  
Cindy Kroon  
Montrose High School  
(605) 363 - 5025  
webmaster@sdctm.org

Conference Coordinator  
Jean Gomer  
(605) 629-1101  
jeanann@itctel.com

Newsletter Editor  
Sheila McQuade  
Sioux Falls O<sup>+</sup>Gorman High School  
(605) 336 - 3644  
smcquade2@sfcss.org



[www.sdctm.org](http://www.sdctm.org)