
PCSM NEWSLETTER

Leaders in Mathematics Education

August 2008

PENNSYLVANIA COUNCIL OF SUPERVISORS OF MATHEMATICS

PRESIDENT'S MESSAGE

From the President

- Jane Wilburne

PCSM is an organization for mathematics leaders who are dedicated to promoting mathematics achievement and success for all students. Mathematics leaders include all PreK-12 mathematics teachers, mathematics coaches and supervisors, university mathematics educators, and mathematics consultants across Pennsylvania and surrounding areas who embrace the commitment to have all students appreciate and understand mathematics. They also share the passion to support and encourage best practice in the teaching and learning of mathematics and believe in promoting opportunities where all students can learn. PCSM's membership is open to any mathematics educator who shares these same passions and values and seeks to engage in discussions and programs that support the ongoing improvement of curriculum, instruction, and assessment of mathematics. Please share the attached membership

Please check the date on the mailing label of the newsletter. If the date is 2008 (08) or earlier, it is time to renew your membership. Save money by renewing for three years. If each of us signs up a new member, our membership will double!

application with colleagues and encourage them to become a part of this valuable organization.

This fall, the PCSM Annual Conference will take place in conjunction with the Pennsylvania Council of Teachers of Mathematics (PCTM) on Thursday, November 6, 2008 at the Split Rock Lodge in the Poconos. The conference is a great opportunity to meet other leaders from across the state and hear about new programs and resources available to promote high-quality instruction in mathematics. If you have never been to PCSM, the conference is free as long as you register ahead of time. The program and registration form can be found in the newsletter. Please take a minute to complete the registration and send it in. If this is your first time, I look forward to meeting you and will be sure to introduce you to other great mathematics leaders. I can guarantee you will find the day rewarding!

We are so pleased to reveal the new PCSM website at the conference. The website is long overdue to post current events, research, and conference information. Our special thanks to Janie Zimmer and Carol Buckley for their

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hard work and time to create the website that

will include lots of valuable information for all members. Keep tuned for further updates and key features!

Recently, the National Council of Supervisors of Mathematics (NCSM) released the PRIME Leadership Framework. PRIME represents Principles and Indicators for Mathematics Education Leaders. The framework is based upon four essential principles of leadership that drive an improved future for mathematics education: Equity Leadership; Teaching and Learning Leadership; Curriculum Leadership; and Assessment Leadership. There are leadership workshops and information about the framework posted on the NCSM website to explore:

www.ncsmonline.org. We are pleased to have Diane Briars, President of the National Council of Supervisors of Mathematics, to present information on the PRIME Leadership Framework at the PCSM conference in November. We look forward to having Diane to share the key leadership principles and to discuss how the PRIME framework can be used to conduct workshops and programs for professional development.

As the school year gets underway, I hope you are in good health and energized after a great summer. I look forward to seeing you in November!

Sincerely,
Jane Wilburne
jmw41@psu.edu

From the Editor

- Cathy Schloemer

I hope you have had a restful summer. Many of my news sources this summer have been rather “restful” as well, resulting in a shorter than usual newsletter this time! I am

guessing that mathematics education news will

increase after the start of the school year, however, and that the January letter will include more “news you can use.”

I also would like to apologize to those of you who watched for your electronic newsletter for May and did not receive it. We ran into a problem with the listserv and were not able to distribute the electronic newsletter as planned. I’m not sure if we can send this one electronically or not, although I am going to try. The great news is that, beginning with the January newsletter, I believe that current issues, as well as numerous back issues, of the *PCSM Newsletter* will be available on the PCSM website. This should be a great convenience for those who wish to quickly access websites mentioned in each newsletter.

Finally, please join us at Split Rock in the beautiful Poconos for our annual conference November 6, 2008. My personal opinion is that our annual conference is one of the best-kept secrets in PA mathematics education – but we are happy to share the secret and happy to have you there! We always have excellent talks, great food, and wonderful camaraderie - and all you need to do to be included is to be a member of PCSM and send in your conference registration form!

Remember, this is your newsletter. What would you like us to share? Please send correspondence to me at:

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"Rethinking High School: Supporting All Students to be College Ready in Math" by Tracy A. Huebner and Grace Calisi Corbett

Source: WestEd - 2008

URL: <http://www.wested.org/cs/we/view/rs/871>

URL (PDF): http://www.wested.org/online_pubs/GF-08-01.pdf

In mathematics classes across the country, many students

identify themselves as being in one of two camps: those who can do math and those who can't. Such labels may be assumed by the students themselves or unconsciously assigned to them by the adults in their lives based on students' math achievement. Whatever its source, the "can't" label may be a costly one.

This *Rethinking High School* report, the fifth in a series focusing on secondary reform and redesign, profiles three high schools supported by the Bill & Melinda Gates Foundation that have successfully implemented mathematics programs that prepare all students for college: Interlake High School in Bellevue, WA; Granby High School in Norfolk, VA; and Fenway High School in Boston, MA.

The program elements identified by research and explored in this report are the following:

- Offering high-level math courses and supports
- Continually improving teachers' skills and math content knowledge
- Using student information to drive instruction

According to this report, access to and enrollment in challenging courses had a greater impact than any other factor, including income level and parents' level of education.

Visit http://www.wested.org/online_pubs/GF-08-01.pdf to read this free report.

(Source: COMET 9(17) 8 June 08)

Upcoming Conferences and Events:

PCSM Annual Conference

November 6, 2008

Split Rock Resort, Poconos

(Registration form in this newsletter)

PCTM 57th Annual Conference

November 5-7, 2008

Split Rock Resort, Poconos

For more information visit: www.pctm.org.

NCTM Annual Conference

Equity: All Means All
Washington, D.C.

April 22-25, 2009

www.nctm.org/meetings/

NCTM Regional Conferences

October 12-17, 2008

Cleveland, Ohio

www.nctm.org/meetings/

The Mathematics Education into the 21st Century Project and the University of Applied Sciences in Dresden 10th International Conference

"Models in Developing Mathematics Education"

September 11-17, 2009

Dresden, Saxony, Germany

http://math.unipa.it/~grim/21_project/21_project_Dresden_2009.pdf

For all further conference details and updates, please email Alan Rogerson:

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ELECTRONIC RESOURCES

New and Improved Affiliate Grants

Are you looking for grant money? On the basis of recommendations of the Affiliate Services Committee (ASC), the Mathematics Education Trust (MET) approved two new Affiliate grants and increased the amount of the Kenneth B. Cummins Grant.

- New! Student Affiliate Grant (up to \$1,500)
 - New! Associate Affiliate Grant (up to \$2,000)
 - Increased support for a Partner Affiliate! Kenneth B. Cummins Grant (up to \$3,000)
- Grant guidelines, an application form, and the grant scoring rubric can be accessed from

Forms and Downloads for Affiliates.
http://www.nctm.org/about/content.aspx?id=9318&ekmense1=c580fa7b_8_144_9318_4

Algebasics

<http://www.algebasics.com/>

Watch free Flash tutorials about algebra, organized under the following topics:

- Section 1: Basics of Algebra
- Section 2: Equations
- Section 3: Ratio & Proportion
- Section 4: Inequalities
- Section 5: Absolute Value
- Section 6: Exponents
- Section 7: Polynomials
- Section 8: Factoring
- Section 9: Rational Expressions
- Section 10: Rational Equations
- Section 11: Linear Equations
- Section 12: Functions
- Section 13: Systems of Linear Equations
- Section 14: Radicals
- Section 15: Quadratics
- Section 16: Applications

(Source: Math Forum Internet News No. 13.23
(6 Jun 08))

Invitation for Participation in Research

<http://www.llri.org/html/Recruitment/InvitationResearch.htm>

The LessonLab Research Institute seeks math teachers of grades five through seven to participate in a federally funded research study.

In exchange for permission to videotape one of your lessons and a few hours of your time

online, you'll get a \$250 Amazon.com gift certificate and a copy of your lesson.

What you'll do:

- complete a background survey
- respond to a set of video clips of math lessons on fractions
- complete a survey on mathematics teaching
- allow LessonLab to videotape one fraction lesson
- administer a short pre- and post-test on fractions to your students

In exchange for allowing LessonLab to videotape one fraction lesson on either ratios/proportions or variables/expressions/equations, math teachers of grades 5-7 can also earn a \$200 Amazon.com gift certificate.

What you'll do:

- allow LessonLab to videotape one fraction lesson on either ratios/proportions or variables/expression/equations

For more detailed information, contact Frank Sotelo. His email address and phone number are listed on the website.

(Source: Math Forum Internet News No. 13.24
(13 Jun 08))

The Glossary of Mathematical Mistakes

<http://members.cox.net/mathmistakes/>

Paul Cox describes his website as "dedicated to the listing of mathematical mistakes made over and over by advertisers, the media, reporters, politicians, activists, and in general many non-math people."

View:

- The Archive

- Reader's Response
- Puzzles and Problems
- Sources and Links

(Source: Math Forum Internet News No. 13.24
(13 Jun 08))

ExploreLearning

<http://www.explorelarning.com/>

ExploreLearning offers a catalog of over 400 modular, interactive simulations in math and science for teachers and students in grades 6-12. The simulations, called Gizmos, are designed as supplemental curriculum materials that support state and national curriculum standards.

Access the featured Gizmos, including

- Treasure Hunter (Decimals on the Number Line)
- Gravity Pitch
- Building Pangaea
- Germination
- Free Fall Tower

In the fall ExploreLearning is expanding their library to include coverage of mathematics for grades 3-5. Preview:

- Fraction Artist
- No Alien Left Behind (Division with Remainders)

A free 30-day trial is available.

(Source: Math Forum Internet News No. 13.25
(20 Jun 08))

Find Answers to Your Mathematical Questions

<http://www.nctm.org/resources/content.aspx?id=8116>

(Recommended by Dr. John Uccellini)

Japanese National Mathematics Curriculum

The English translation of the new 2008 Japanese National Mathematics Curriculum is now available at

<http://www.globaledresources.com/>.

The Final Report of the National Mathematics Advisory Panel recommends that "the mathematics curriculum in Grades Pre K-8 should be streamlined and should emphasize a well-defined set of the most critical topics..." and that "publishers should make every effort to produce much shorter and more focused mathematics textbooks."

One reason that Japanese textbooks are more focused and coherent is that they must follow the *Course of Study* established by the Ministry of Education, Culture and Sports, which is revised every 10 years. This highly anticipated most recent revision, published in March of 2008, is widely considered by Japanese educators to be the best one yet. In this 33-page document that can be downloaded at the GER website for \$8.00, you will learn about the latest curricular trends in Japanese mathematics education (grades 1-9), including:

- Mathematical objectives for each grade
- Content to be taught in each grade with a focus on problem solving and mathematical activities, as well as remarks concerning the content
- Time allocation for mathematics teaching in elementary school (grades 1-6) and lower secondary school (grades 7-9)

- Important points that educators should consider when constructing lesson plans, including ideas for project-based learning
- This brand new, downloadable (pdf) English translation of the 2008 Japanese mathematics curriculum by Global Education Resources is a valuable resource for classroom teachers, lesson study practitioners, mathematics education researchers, curriculum developers, and mathematics teacher educators.

(Source: Jerry Becker, 7/15/08)

Weekend Projects - Picnic Geometry

http://blog.makezine.com/archive/2006/08/make...projects_3.html

This video shows how to build an icosahedron out of paper plates, cups, or plastic sheeting -- and pack some geometry into your next picnic!

(Source: Math Forum Internet News No. 13.29 (18 Jul 08))



New Affiliate Rebate Program

Effective June 1, 2008, the Affiliate Rebate Program was revised to centralize the collection of NCTM dues payments and redirect the efforts of NCTM Affiliates toward promotion of the program, rather than administrative and financial management. NCTM now encourages Affiliates to promote the availability of the online application and renewal form for NCTM membership and to discontinue the collection of NCTM dues payments.

How It Works:

- Any individual who joins or renews membership online will be given the option to select an Affiliate to receive the rebate.
- You may select one Affiliate on the form for the rebate. The list shows only those Affiliates in the individual's state, as well as multistate and at-large Affiliates.
- Affiliates will not be required to verify an individual's membership status in the Affiliate for this program. Rebates will be provided to Affiliates from any individual who selects them on the online application or renewal.
- Rebate amounts:
 - \$3 for renewing full individual members and e-members
 - \$5 for new full individual members and e-members
- Existing business rules will apply to lapsed members who return to NCTM. Currently, an individual is considered "new" after one year of not being a member of NCTM.
- Multiyear rebates will correspond to multiyear memberships (i.e. a 3-year membership renewal will result in a \$9 Affiliate rebate).
- Rebates will be provided for Full Individual members and E-members memberships only.
- Rebates will be submitted to Affiliates on a quarterly basis. NCTM will discontinue rebates for any dues collected directly by NCTM Affiliates.

We look forward to working with Affiliates on this new Rebate Program. (From NCTM)