

---

---

# PCSM NEWSLETTER

---

---

Leaders in Mathematics Education

Spring 2000

---

---

## PENNSYLVANIA COUNCIL OF SUPERVISORS OF MATHEMATICS

### PRESIDENT'S MESSAGE

*From the President*

- Bernie Schroeder

Greetings from your president - a man not accustomed to writing long messages (or even short ones) in a newsletter. That said, allow me to give you a short message in a "good news, bad news" format.

The first piece of good news is that we had a very successful conference in Harrisburg this past March. Kathleen Morris and Laura Grier from AAAS/Project 2061 gave us the scoop on their Middle Grade Mathematics Texts Report. They also teased us by hinting at the results of their study on Algebra Texts. (For more details on the two textbook studies visit the Web site <[www.project2061.org](http://www.project2061.org)>). John Martin followed with a quick overview of PA's Textbook Review and Evaluation Instrument. Frank Marburger, the Mathematics Education Advisor for PA, then described the current mathematics-education initiatives at PDE. The conference concluded with Frank Reardon explaining the ramifications of raising the Mathematics Praxis Test passing score from 127 to 136, among other things. All in all, it was a very informative conference.

**Please return your "PCSM Survey" to Wayne Boggs. It is important to receive your input on this issue. Thank you!**

The second piece of good news is that our bank balance as of 3/20/00 is \$12,739.12.

Now, for the bad news. Our membership numbers are inching downward. **PLEASE RECRUIT YOUR COLLEAGUES.** A selling point should be that the \$10 membership fee is less than the sum of the values of the breakfast and lunch that Frank Sottile lines up for us each March (thanks Frank, keep up the good work - forever) --- and then there is free admission to the conference - to boot. It does not take a rocket scientist (or even a mathematician) to know this is a great deal.

Have a good summer and fall, and we'll see you all next March in Pittsburgh, if not before.

Bernie Schroeder  
(717) 872-3009  
[bschroed@marauder.millersv.edu](mailto:bschroed@marauder.millersv.edu)

### In this Issue:

- President's & Past-Presidents's Messages
- Message from PA Math Ed Advisor
- PCSM Annual Meeting Minutes
- PCSM Executive Committee Minutes
- NCTM 2000 Delegate Assembly Report
- Technology Tidbits - Low Tech/High Tech Lesson for Integrating Statistics into Algebra I
- Upcoming Events
- Electronic Resources

...and more

*From the Editor***- Arlene Dowshen**

I, too, encourage all of you to bring new members into our organization. One does not have to be a mathematics supervisor to belong to PCSM. Mathematics education leaders at all levels in Pennsylvania, elementary, middle school, secondary and college, should be members of PCSM. If you feel that changing the name of our organization will make a difference, let us know by returning the survey sent to you by Wayne Boggs. (If you have misplaced your survey, you can contact Wayne at [wboggs@ptdprolog.net](mailto:wboggs@ptdprolog.net).)

I hope that all of you have received a copy of NCTM's Principles and Standards for School Mathematics. The new standards should be at the top of everyone's summer professional reading list. The summer provides time for us to rejuvenate and refresh ourselves. Enjoy!

Any correspondence can be sent to:

Arlene L. Dowshen  
Widener University  
One University Place  
Chester, PA 19013  
(610) 499-1245  
[dowshen@maths.widener.edu](mailto:dowshen@maths.widener.edu)

### **NCTM Representative Report NCTM Conference 2000, Chicago, IL**

The delegates for the Delegate Assembly were not the only educators arriving in Chicago early for the conference. The standing-room-only crowd at the Opening Session showed great interest for NCTM's Principles and Standards for School Mathematics. An Overview and CD-Rom were given to each person in attendance. Visit the web sight <[www.nctm.org](http://www.nctm.org)> for additional information.

Our Regional Caucus, held on Wednesday, April 12th, was chaired by Jim Bohan. A special thank you was extended to Jim for his time and efforts as the NCTM Regional Services Committee person.

The following resolutions were submitted and passed or referred to a committee:

Be it resolved that the Delegate Assembly recommend to the NCTM Board of Directors that NCTM and its Affiliates use their leadership and influence to address mathematical content and teaching/learning issues for adults enrolled in adult mathematics education (basic skills, literacy, numeracy, and high school equivalence,

high school diploma and college developmental level) programs by actively seeking to include teachers of adult students at their conferences and in their publications, and by adding "adult numeracy" as an additional category in conferences and publications. (passed) [Adult Numeracy Network]

Be it resolved that NCTM not implement the Affiliate Sales Program as proposed; but that the program be reviewed and revised with input from the Affiliate Groups. (passed) [Mo-Kan Council of Teachers of Mathematics]

Be it resolved that the Board of Directors return to the policy of one free speaker registration per regular session at NCTM Annual and Regional Conferences. (passed) [California Mathematics Council]

Be it resolved that the Board of Directors direct the Conference Services Committee and the Executive Director to revamp/restructure/improve the mail-out system for the national conference program booklet for all delegates. (referred to NCTM Headquarters Office) [British Columbia Association of Mathematics Teachers]

Be it resolved that NCTM make available for immediate purchase a video tape of the full (4/12/2000) press conference introducing the Principle and Standards for School Mathematics. (referred to NCTM Headquarters Office) [Wisconsin Mathematics Council, Inc]

Be it resolved that NCTM provide each Affiliate Group one (1) free video tape of the full 4/12/2000 Press Conference introducing the Principles and Standards for School Mathematics. (referred to NCTM Headquarters Office) [East Central Council of Teachers of Mathematics in Illinois]

Be it resolved that the Board charge the nominating committee to make the inclusion of qualified K-12 teachers on the ballot for elections to the NCTM Board a higher priority. (referred to NCTM Board of Directors) [Association of Teachers of Mathematics of Philadelphia and Vicinity]

Be it resolved that Delegate Assembly recommend that the Board explore ways to make serving on the NCTM Board more accessible to K-12 classroom teachers. (referred to NCTM Board of Directors) [Association of Mathematics Teachers of New York State]

PCSM received an Outreach Kit for the Principles and Standards for School Mathematics which includes a 15 minute video with interviews and classroom visits, an overview booklet, a CD ROM with a Quicktime Video, and blackline masters for audience presentations. Contact me if you are interested in using the kit or contact NCTM to order one for \$25.

Carolyn Marchand  
PCSM Representative to NCTM  
[marchand@penn.com](mailto:marchand@penn.com)

**PCSM EXECUTIVE COMMITTEE MINUTES  
(Summary) - March 23, 2000**

Members present: G. Battisto, W. Boggs, A. Dowshen, H. Field, M. Foley, K. Hebert, C. Marchand, D. Marchand, B. Schroeder, F. Sottile, F. Stewart.

President Gen Battisto called the meeting to order at 1:35 PM.

Previous board minutes were approved. New dues effective immediately will be: \$10.00 per year or \$25.00 for three years. Gen Battisto will submit the annual report to NCSM.

The Board discussed two types of memberships that PCSM could have with NCTM. A decision was made to go with Partner's Affiliate at a cost of \$100 per year. The Board agreed unanimously to pay \$250 toward expenses for the NCTM delegate to the 2000 NCTM conference in Chicago. Carolyn Marchand will be the delegate. Glenda Lappan, president of NCTM, has invited affiliate group representatives to a reception. Carolyn will represent PCSM.

The Board discussed changing the name of PCSM to something that does not imply that a member must be a supervisor. As a result of the discussion a non-binding ballot for change or no change will be sent to the membership along with the membership directory. The Board hopes to get more mathematics leaders involved in PCSM.

Hank Field is handling the mailing and advertisement for the PCSM sponsored Leadership Sessions to be included in the upcoming NCTM - Philadelphia Regional conference.

The meeting was adjourned at 2:16 PM.

Respectively submitted,

Wayne Boggs  
Acting Secretary

**NCTM Eastern Regional Conference  
"Teaching and Learning: The Ever  
Changing Continuum"  
October 12-14, 2000  
Philadelphia, PA**

NOTE: Although NCTM's 78<sup>th</sup> annual Meeting is over, the ideas and resources are still flowing. See <<http://www.nctm.org/meetings/2000/chicago/index.htm>> for highlights of major sessions, Webcasts, candid photos, ways to order audio cassette recordings from the major sessions, and additional information.

**NCTM SPEAKS OUT**

NCTM has updated its Web site to include an "NCTM Speaks Out" feature at:  
<<http://www.nctm.org/speaksout/index.html>>

Included is Setting the Record Straight about Changes in Mathematics Education:  
"Commonsense facts about the changes in mathematics education can be found in this series of fact sheets developed in the interest of common sense, moving forward and helping all children learn mathematics. The fact sheets are in PDF format and require Adobe Acrobat Reader 4.0 for viewing."

Commonsense Facts about the NCTM Standards:  
<<http://www.nctm.org/speaksout/1standards.pdf>>

Commonsense Facts about School Mathematics:  
<<http://www.nctm.org/speaksout/2Schoolmath.pdf>>

Commonsense Facts to Clear the Air:  
<<http://www.nctm.org/speaksout/3cleartheair.pdf>>

Also included in the "NCTM Speaks Out" site is testimony by NCTM Executive Director John Thorpe which was submitted to Congress - "The Federal Role in K-12 Mathematics Reform" and "Mathematics and Science Proficiency Partnership Act."

**Visual Exploration: Geometer's Sketchpad (GSP), "Least Squares Exploration"**

You can download a PC or MAC demo version of GSP that does everything but save and print. The URL for the Least Squares Exploration is [http://www.keypress.com/sketchpat/statistics/least\\_sq.html](http://www.keypress.com/sketchpat/statistics/least_sq.html). The demo version of GSP can be found at

<http://www.keypress.com/sketchpad/>. This is an excellent exploration. It gives students a very intuitive sense of Least Squares Regression. "From each data point the square of the residual from the point to the line has been constructed. The sum of these squares results in a larger square whose area can be minimized by dragging the line. This then becomes a criteria of best fit; i.e. the

least squares best fit of a line through the points is that line which minimizes the sum of the squares of the residuals."

Students can drag on the slope and y-intercept until they arrive at the equation of the line that yields the least total area (sum of the squared residuals).

**Extensions:**

The mean center of the U.S. population is calculated by minimizing the sum of the squared residuals. <http://www.clev.frb.org/research/jul97et/charts/popemp1a.htm>. Information on statistics resources and interesting data sets that students might want to use for further explorations can be found at <http://forum.swarthmore.edu/ruth/stat.html>.

