From the Editor

We who teach children mathematics are constantly faced with criticism from the public who say that we should place greater emphasis on the basics, which to them means the ability to parrot the basic facts, whether or not children understand them or can apply them to real-world situations.

However, good mathematics education must involve much more than this. According to NCTM president Glenda Lappan, we cannot be satisfied with teaching mathematical techniques alone. We have to teach children the reasoning, the understanding, the flexibility and the ability to persevere as well. Focusing on the basics until the students master them, and only then moving on to solving interesting problems yields very disappointing results. Although drill and practice have their place, the heart of a successful and enjoyable mathematics program must be on good, challenging problems that motivate students to acquire skills—skills that will in turn open doors to new insights into mathematics problems.

Such experiences are necessary to prepare our children to work in a technological and complex world that offers no easy answers. Only by so doing will children be prepared to be citizens who understand and have the ability to harness the power of science and technology.

The challenge is there for all of us to make mathematics a more enjoyable and challenging subject for our students and ourselves. ▲

—Art Jorgensen

A Special Opportunity

⌐ **Mathematics in Biology** Web site examines biological systems, including population growth and disease propagation, by using mathematics: www.bio.brandeis.edu/biomath/top.html.

⌐ **Apply Lesson Ideas: Applications of Mathematics 9 and 10**, from the Center for Applied Academics Network, is a collection of lesson plans that show how different professions use the mathematics taught in Grades 9–10: cfaa.bridges.com.

⌐ **Chance and Data in the News** offers probability and statistics discussions based on newspaper articles in the Hobart, Tasmania, Mercury: www.ni.com.au/mercury/mathguys/mercury.htm.

⌐ **The Mathematics TEKS (Texas Essential Knowledge and Skills) Toolkit**, developed by the Texas Statewide Systemic Initiative, offers sample classroom activities, professional development ideas and many other resources for Grades K–12: www.tenet.edu/teks/math. ▲

Speakers Wanted

We are still taking proposals for presenters to speak at the Jasper conference.

The room rates are great, so dream up a topic, get a few friends to share the room and come along for a great conference. Speakers will receive $100 to help with conference expenses. We have a great variety of topics but would like to offer more sessions. If you are interested, visit our Web site for a speaker form or contact Sandra Unrau at (403) 777-6390, fax 777-6393. ▲

—Sandra Unrau

Publications

☞ *Math Forum Internet News*, a free weekly electronic newsletter, features useful mathematics and math education Web sites, pointers for using the Math Forum to locate resources and a monthly supplement highlighting conversations on math discussion groups. To subscribe, send an e-mail to majordono@forum.swarthmore.edu and write "subscribe newsletter" in the body of the message. The newsletter is archived on the Math Forum site at forum.swarthmore.edu/electronic.newsletter.

☞ Houghton Mifflin Interactive's (HMI) *Teacher of the Century campaign* will recognize 55 Grades K–6 teachers from the United States and Canada who use technology to help children learn. The grand-prize-winning Teacher of the Century will receive a laptop computer, technology products from Houghton Mifflin School Division and a full line of HMI software. Parents can nominate a teacher with a form available on the HMI Web site, www.hminet.com/teachers, or inside purchased, specially marked HMI software. The form is also available from HMI software retailers. For more information, contact HMI, 120 Beacon Street, Sommerville, MA 02143; phone (617) 503-4800, fax (617) 503-4900. ▲

Curriculum Circle Summary

February 10, ATA staff officer Michael Podlosky led a one-day meeting for about 20 Grades 9–12 mathematics teachers, counsellors and administrators from rural and urban schools. The first part of the day was spent documenting the strengths, weaknesses, opportunities and threats of the senior high mathematics program in general and applied mathematics in particular. Then Alberta Education staff presented areas of concern and advice, which included the midstream mathematics course, program content, teacher inservice training, dissemination of information, synchronization of mathematics, Mathematics Preparation 10 course, bridging courses, assessment standards and other resources, public relations, evaluation and postsecondary institutions.

For more information about this meeting, contact Donna Chanasyk at donnajc@connect.ab.ca. ▲

—Donna Chanasyk

Conference Corner

▲ **MCATA Conference 2000**
October 27–28
Red Deer

It is not too early to plan for the last MCATA conference of the 20th century.

Plan to meet your colleagues at the Capri Centre in Red Deer in 2000. The pure Math 30 program will be implemented, and the Applied Math Program will be up and running. Quality sessions and good hospitality await you during this conference.

▲ **NCTM Annual Meeting**
- 77th annual meeting, San Francisco, April 22–24, 1999
- 78th annual meeting, Chicago, April 13–15, 2000 ▲

Never doubt that a small group of thoughtful people can change the world. Indeed, it's the only thing that ever has.

—Margaret Mead

April Is Math Education Month

How about taking some time this month to highlight the importance of having students be enthusiastic about mathematics?

Things you might do include the following:

▸ Have a math fair.
▸ Have a math field trip—get math out of the classroom.
▸ Host a parents' night or afternoon, where parents come to school and do mathematics with their children.
▸ Decorate the classroom with a math emphasis.
▸ Bring in speakers from business and industry to talk about the role of mathematics.

These are only a few ideas. I am sure that you can think of many more. If you do or if you become aware of a special math-related activity in your school, please send me a brief summary for inclusion in the next newsletter. Material should be in my hands by May 10.

Have a great math month. ▲

—Art Jorgensen

Attention, Calgary Elementary Math Teachers

You can still get to spring workshop, "Making Connections" (affiliated with the Calgary Science Network).

The Calgary public and separate school districts are organizing a math/science symposium. Sessions will be on science or math or integrated math science. Some sessions have a focus on technology. For more information, contact Sandra Unrau at (403) 777-6390, fax 777-6393, e-mail sunrau@cbe.ab.ca. ▲

Membership Director's Report

I would like to remind you that if your membership is coming up for renewal, you should renew it as soon as possible.

The October, November and December 1998 winners for renewing membership are as follows:

1st prize One MCATA conference registration for the Jasper conference, October 21–23, 1999: *Joan Edwards*, Edmonton

2nd prize One-year membership in MCATA: *Michael Kischuk*, Lamont

3rd prize $25 NCTM gift certificate to be redeemed through MCATA: *Bruce Kutcher*, Blairmore ▲

—Daryl M. J. Chichak

A cloudy day is no match for a sunny disposition.
— *William Arthur Ward*

Only in 1999, You Say

Work this out as you read—and have your students work it out as you read it aloud. Don't read the results until you have worked it out! Follow these six steps and this will amaze you. . . .

1. Pick the number of days a week that you would like go out (or eat pizza or have a special treat).
2. Multiply this number by 2.
3. Add 5.
4. Multiply it by 50.
5. If you have already had your birthday this year, add 1749. If you haven't, add 1748.
6. Last step: Subtract the four-digit year that you were born.

Results

You should now have a three-digit number:

- The first digit of this was your original number (that is, the number of times you want to go out each week).
- The next two digits are your age! (It really works.)

This is the only year (1999) this will ever work, so spread the math fun around by sharing this with your students or a friend or two. ▲

—Anonymous, from the Internet

If you truly want to understand something try to change it.   — *Kurt Lewis*

Attend the MCATA Math Symposium in May

Preparations are under way for the next MCATA/Alberta Education-sponsored Math Symposium to be held in late May in Edmonton. Watch for information to be sent to schools and school board offices. If you have any questions, call Betty Morris at (780) 441-6104. ▲

—Betty Morris

MCATA Annual Conference
October 21–23, 1999
Jasper Park Lodge

Mathematics in Harmony with the New Millennium

Join your colleagues in October and celebrate mathematics education in Alberta. The conference program includes sessions on the following topics:

- Geometry Manipulatives
- Problem Solving
- Applied Math
- Pure Math
- Mathematics Literature Connection
- Polar and Parametric on the Graphing Calculator
- Statistics and Probability
- Secondary Pure and Applied Mathematics
- Mental Math Strategies
- The Internet

- Semantic Maps for the Math Classroom
- Magic Squares
- Effective Use of TLE Math
- Networking the French Math Teachers
- Graphing in the Junior High with the TI-73
- Your Finances on the TI-83
- Achievement Testing
- Algebra Tiles
- Diploma Exams
- Technology Outcomes and Mathematics
- Math and Collaborative Projects

Prospective speakers are asked to contact Sandra Unrau for speaker forms and expense information at (403) 777-6390, fax (403) 777-6393, e-mail sunrau@cbe.ab.ca. (See also the Speakers Wanted article on page 1.)

Displayers can contact Betty Morris for information at (780) 441-6104, fax (780) 425-2272, e-mail wdmorris@telusplanet.net.

You can also access conference information on the Council's Web site at http://www.mathteachers.ab.ca.

Jasper Park Lodge room rates have been confirmed. When booking, ask for the Alberta Teachers' Association Math Council rates: Tuesday night, October 19, $89; Wednesday night, October 20 $89; Thursday night, October 21, $109; Friday night, October 22, $109; Saturday night, October 23, $89; and Sunday night, October 24, $89. Jasper Park Lodge is accepting bookings now.

Registration forms will arrive at your school with the June ATA school mailing. ▲

—Elaine Manzer