The University of Montana

Department of Mathematical Sciences

A Newsletter for Alumni, Faculty, Staff, and Friends — Fall 2000

Johnny W. Lott Is Elected President of National Council of Teachers of Mathematics

From NCTM Web site

Reston, VA, 14 November, 2000 -- The National Council of Teachers of Mathematics (NCTM) today announced that Johnny W. Lott, professor of mathematical sciences at the University of Montana, has been elected its next president. Lott will serve a one-year term as president-elect beginning in April 2001 before beginning a two-year term as president at the Council's annual meeting in Las Vegas in April 2002.

"This is a great professional honor, and an especially humbling one because the president is elected by colleagues teaching math at all levels," Lott said. "I look forward to building on the successes of my predecessors and capitalizing on the fine work that's being done now by NCTM. I hope to promote and capitalize on the "Principles and Standards for School Mathematics" produced earlier this year, and seek more innovative ways to provide quality mathematics education for all students."

Johnny Lott

Lott said his goals for the organization included using electronic media effectively to promote mathematics education, developing grassroots affiliate efforts to increase and maintain membership, and informing and educating the public and government officials about mathematics policy issues.

For the past two years, Lott has been the project manager of Figure This!, a program of mathematics challenges for families, which is funded in part by the National Science Foundation and the Department of Education and managed through NCTM. The program develops and publishes mathematics challenges for middle school students to work on at home with their families and maintains a Web site (www.figurethis.org). Since 1983, Lott has been professor of mathematical sciences at the University of Montana, where he has been on the faculty since 1974. He has also taught mathematics in schools in Alaska and Georgia.

Lott received a B.S. in mathematics

(Continued on page 3)

Professor Proves to be Clever Knothead

Nate Schweber
Montana Kaimin

Tying pieces of string together can't be explained mathematically.

Knot.

That was the theorem Princeton math professor John Horton Conway proved to an audience of hundreds at the University Theater Thursday night during the first Presidential Lecture of the semester.

Conway's sometimes complicated, often funny schpiel explained some advanced math ideas to a crowd made up of everyone from knot experts to folks who could only knot their shoelaces.

"The presentation was very interesting and informative," Missoula resident Gene Smith said. "I'll never look at knots the same way again. I had no idea so much went into them."

Conway said he's been fascinated by knots since he was a student in Liverpool, England.

"The reason mathematicians study

(Continued on page 5)

Notes from the Chair's Desk

The new school year began looking a great deal like past years, with 68 people teaching for our department and about 3370 students enrolled in mathematics courses. While the structure may have seemed pretty much the same, if you look closer you will see many new players.

The most obvious change for those who have known the department over the past few years is rearrangement in our office staff. Valerie Crepeau, who worked in the Math Department office for 26 years, took another job on campus. Michelle Johnsen, who has worked in the office for 7 hears, has moved up to Office Manager. We welcomed Cathy Ullrich and Linda Azure to the department in administrative assistant positions. An outsider probably would not have noticed much of a difference, but the faculty and students certainly appreciate the smooth transition of the office operations.

We also began the year with one new faculty member, two visiting professors, eight new teaching assistants and eight new adjunct instructors. Once again, we were able to gather together a talented group of teaching faculty to cover our instructional needs. Student interest in mathematics has filled almost all of our undergraduate courses to capacity. The Undergraduate Study Room is constantly buzzing with vigorous discussion.

The image of mathematics on campus received another huge boost this fall when John Horton Conway gave the first Presidential Lecture, attracting over 400 people to a mathematics talk. The department's weekly Colloquium Series routinely draws 60-70 listeners and, as usual, we have had an impressive list of speakers. International mathematics researchers have visited campus to collaborate with our faculty. Departmental seminars keep our faculty and students on the cutting edge of mathematical research. All of these efforts remind us that we are indeed fortunate to be involved in such a lively and active effort.

This fall we learned that the university is facing budget difficulties that will most certainly mean uncomfortable changes, at least in the near future. A department that serves so many students, particularly in general education and programmatic needs, is bound to be affected more than others. We are looking for ways to give students the mathematical literacy they need while keeping costs down. It will be quite a challenge, but I am optimistic that we can meet it.

As always, I invite your correspondence. I appreciate your comments, your memories, and information about your achievements. Friends, colleagues, and students often feel they are just passing through on a journey to somewhere else, but I hope you always feel welcome to stop in and visit again.

James Hirstein

Faculty:
James Hirstein, *Chair*
David Patterson, *Assoc. Chair*

Bill Ballard, *Emeritus, Associative Algebra*
Rick Billstein, *Mathematics Education*
Mary Jean Brod, *Secondary Mathematics*
William Derrick, *Applied Mathematics*
Rudy Gideon, *Statistics*
Jon Graham, *Statistics*
Gloria C. Hewitt, *Emeritus, Algebra*
James Hirstein, *Mathematics Education*
Leonid Kalachev, *Applied Mathematics*
Mark Kayll, *Operations Research*
Libby Krussel, *Mathematics Education*
Don Loftsgaarden, *Emeritus, Statistics*
Johnny Lott, *Mathematics Education*
Jenny McNulty, *Operations Research*
George McRae, *Operations Research*
David Patterson, *Statistics*
Greg St. George, *Functional Analysis*
Brian Steele, *Statistics*
Scott Stevens, *Numerical Analysis*
Karel Stroethoff, *Complex/Functional Analysis*
Thomas Tonev, *Complex/Functional Analysis*
Nikolaus Vonessen, *Algebra*
George Votruba, *Emeritus, Functional Analysis*
Mark Wilson, *Algebra*
Keith Yale, *Emeritus, Complex/Functional Analysis*

To contact the Department:

Dept. of Mathematical Sciences
The University of Montana
Missoula, MT 59812-0864
Phone: 406/243-5311
Web site: *http://www.umt.edu/math*

Please send address changes to
Michelle Johnsen, Secretary,
at the above address or e-mail
michelj@selway.umt.edu

Scott Stevens New Professor

by Dave Patterson

The Math Department is pleased to announce the hiring of one new tenure-track faculty member for this fall, Assistant Professor Scott Stevens. Scott received his Ph. D. from the University of Vermont

Scott wearing linen after Memorial Day

in 1999 in applied mathematics. His dissertation dealt with intercranial pressure dynamics in the human brain which involved solving a stiff system of differential equations using numerical techniques. Scott also served as a research assistant professor at Vermont for a half-year before coming to Missoula. He is originally from Pittsburgh and received his undergraduate degree in economics and statistics from Indiana University of Pennsylvania. Scott has already become involved in a project with the International Heart Institute of Missoula, working with Drs. Carlos Duran (head of the Institute) and Wolfgang Goetz on three-dimensional imaging of the left ventricle and mitral and aortic valves.

Scott and his wife Nicole have a 2-year old son Nicolas and a Labrador retriever named Edward. They're looking forward to skiing and other outdoor activities in Montana.

Summer 2001 Mathematics Education Graduate Courses at The University of Montana

The Mathematics Education faculty will continue to offer courses in the redesigned Master of Arts program for teachers. Teachers may complete a Master's program in two summers and one academic year. (Note: Summers only is still an option). Students in the program will be strongly considered for academic year Teaching Assistantships and are encouraged to apply.

Last summer, 11 teachers and prospective teachers from middle school through high school took our courses. We welcome teachers of all levels who are interested in improving their teaching of mathematics. This summer ('01), the Department will offer three 3-credit graduate Master's level courses on a Monday - Friday schedule, taught by Dr. Libby Krussel and other visiting faculty.

MATH 504 Anatomy of Curves June 11 - June 30
This is a new course, designed specifically for middle school teachers. We will investigate many different functions and curves, from graphical, algebraic and numerical points of view. We will use Geometer's Sketchpad to aid in the investigations.

MATH 520 Algebra for Teachers July 9 - July 27
Topics may include algebraic number fields, linear algebra topics and modern applications of algebra, such as modular arithmetic, check digit schemes on bank accounts, drivers' licenses, ISBN numbers, and cryptography.

MATH 510 Problem Solving for Teachers June 11-30 & July 9-27 (6 week course, with a break over the week of the 4th of July) This course includes strategies for problem solving, and problem posing in a variety of situations. Examples will include modeling and applications at a level appropriate for the students.

For more information about the Master of Arts program, or about these courses, please contact Jim Hirstein at 406/243-2661, e-mail hirstein@selway.umt.edu, or Libby Krussel at 406/243-4818, e-mail krussel@selway.umt.edu..

(Lott – *Continued from page 1)*
from Union University, an M.A.T. in mathematics education from Emory University, and a Ph.D. from Georgia State University.

The National Council of Teachers of Mathematics was founded in 1920 and is a nonprofit, nonpartisan education association with more than 100,000 members and 250 Affiliates located throughout the United States and Canada. NCTM facilitates ongoing dialogue and constructive discussion among all stakeholders about what is best for our nation's students. Council is dedicated to improving mathematics teaching and learning from pre-kindergarten through high school and providing a high-quality mathematics education for every child. The Council's "Principles and Standards" provides guidelines for excellence in mathematics education and issues a call for all students to engage in more-challenging mathematics.

Profile of Bill Myers

by Rudy Gideon

Bill Myers was interviewed on 30 November 2000 at his home on Cloverdale Drive in Missoula. Bill's full name is William M. Myers and as many of you know is left handed and was very good at using it to write quickly on blackboards. Bill was born in Dayton, Ohio on 23 April 1925 and his regular years at The University of Montana were from 1952 to 1987. He had a six-year post retirement contract and took advantage of that from 1987 until 1992.

Bill remembers his earliest interests in mathematics. In the 5th grade his teacher was Gertrude Gerlaugh and she helped promote his interest. As a 10-year-old Bill was sitting in class trying to figure out what number multiplied by itself gave 10; he was using trial and error getting close. His 5th grade teacher then showed him how to extract square roots. At this time Bill also obtained an advanced mathematics book from his parents and was trying to do one variable story problems. Bill's parents were both graduates of the University of Cincinnati and so promoted Bill's interests.

Bill was in a two-year school in 8th and 9th grades and then attended Fairview High School in Dayton. He had a Geometry teacher, Evelyn Lytle, who was very enthusiastic and she inspired Bill. This class was the theorem, proof, statement, and reason, logical step method that used to be taught.

Bill started college in 1942 at Denison University in Grandville Ohio. Bill had his first beer sometime during his undergraduate years. He graduated in January of 1946. Bill lived in a rooming house that charged $6 a week and when the landlady came to increase the rent to $7 she apologized. Bill was mathematics major, and after graduation he attended one year at Michigan State University. He made $80 a month as a teaching assistant and had only $66 take home pay. His parents augmented his salary by sending him $20 a month.

Because most of his relatives and friends were still in Ohio, Bill transferred over to Ohio State University in Columbus, Ohio in the winter of 1947. His pay was now $135 a month and he was able to save money. The veterans were returning from World War II and Bill taught high school geometry to them as one or two of his two classroom responsibilities. He worked on his Masters degree (June 1948) and took Algebra and Analysis courses. He liked the students and faculty at Ohio State.

Bill & Vera Myers Today

In the fall of 1948 he was in a discussion with some students on series of continuous functions and when the limit function was continuous. A woman entered into the conservation giving the answer. Bill was very impressed with that woman and decided he should date her. That first date was the movie "A Night at the Opera" with the Marx Brothers. Bill says that the luckiest and smartest thing he ever did was meet Vera and they were married in June of 1951 in Cincinnati where Vera's parents lived. Vera finished her Masters by 1950 and passed the comprehensive examinations for the Ph.D. Bill finished his Ph.D. in 1952. He had an instructorship in 51-52 for $2700 and Vera was paid $1000 as a teaching assistant, so they felt they were doing well financially. At the time Bill did his advanced work, there was a Hungarian mathematician in the department who was into Surface Area Research. So that was the area of Bill's research. His major professor was Paul Reichelderfer.

Bill and Vera came to Missoula and The University of Montana in the fall of 1952. A former UM mathematics faculty member Harold Chatland was a visiting professor at Ohio State in 51-52 and also a new graduate of Ohio State, George Marsaglia had finished one year earlier and had taken a position at UM. These two people told Bill about UM. In addition, Bill had taught summer school at Ohio State in 1951 and afterwards he and two others drove to Boulder, Colorado for a summer mathematics meeting. It was Bill's first view of the Rockies. Driving straight through, alternating drivers, they made the trip to Boulder; remember there were no interstate highways at that time. Between the trip and the information from his two contacts, Bill decided Missoula would be a good place to live.

Bill corresponded with Harold and was offered $4200 in his first year at UM. Vera had not finished her degree and came and was hired as an instructor for $2700. When Bill started, there were just four faculty and one adjunct, Vera. The other faculty were Harold, Ted Ostrom, and George. There were also 2 or 3 teaching assistants. Longtime mathematics department members, Bill Ballard and Howard Reinhardt came in 1957. At that time, all the faculty were 25 to 40 years old and all good people interested in mathe-

matics.

In 1957 there were 9 people in the department and the next year only 5. MacFarland was the University of Montana President and Chatland had become Dean of the Arts and Sciences and later became Academic Vice-President. Ted Ostrom was chair of the department. The UM faculty revolted against MacFarland's caustic personality and asked the Board of Regents to accept MacFarland's resignation, which had been submitted because the Board had told MacFarland to fire 10-20 people. He refused and instead submitted his resignation. Ted and Harold had supported MacFarland and when he left the situation was unpleasant enough so that both Ted and George with a few others left.

In 1962 another long time faculty, Gloria Hewitt was hired. From 1962 to 1969 Bill was Chairman of the department. During his tenure as Chair, the Ph.D. program was introduced. Vera taught from 1952 to 1957 and then quit to raise their three sons. She later returned and had a total of about 15 years in the department. After leaving as Chair in 1969 Bill and Vera and their three children (ages 6, 10, and 12) spent the summer in a Volkswagen pop-up van touring Western Europe. Bill recalls that in his early years, faculty were expected to teach summer school every other year. In 1960 a summer institute for high school teachers was started that ran until 1975. Bill directed the institute at the beginning and later alternated with Bill Ballard as director so as to give one of them summers off. Howard Reinhardt and Bill Myers ran an Academic Year Institute for six years. The courses Bill taught most were Advanced Calculus, Functions of a Real Variable, Complex Variables, and Topology. Just to the west of the mathematics building is a little building that used to house a planetarium. Early in his Montana career Bill taught astronomy courses in this building.

The summer of 1969 started Bill and Vera off in world travels. Over the course of the next 30 years, they traveled 9 times to Europe, 4 times to Asia, 3 times to South America, twice to Africa, and once to Australia and New Zealand. Many of these trips lasted one to three months. Bill and Vera climbed Mt. Rainier in the early 60's and later all three of their children did the climb. Bill and his son, Bill, climbed Mt. Adams, Mt. Hood, Mt. Baker, Mt. Whitney, and the Three Sisters in the Cascade Range. In the Rockies, they scaled the Grand Teton and in Europe, Mt. Blanc, and the Matterhorn.

Bill was a jogger from 1975 to 1992, completing two marathons, one in Seattle and one in Kalispell. Since I jogged with him for many years out of "the old men's gym", I can attest to his accuracy in his recording of the miles he jogged. He ran just over 20,000 miles. He ruptured a disk in his back on an outing in the Andes Mountains of Peru and had to give up jogging. He has been a cross-country skier from 1985 to the present and, with Vera, he has also managed over 21,000 miles on the snow.

Bill and Vera have two sons, Bill and Chuck who live in Boulder, Colorado and one son Bob who lives in Palo Alto, California. All the sons are married and they have a total of four grandchildren. Their son Bill is receiving a Ph.D. in Computer Science this December at the University of Colorado.

Bill believes in both physical and mental activity and so has also kept busy on a computer doing numerical analysis and writing his own computer games in the BASIC language. In his many years at UM he says he always enjoyed teaching mathematics.

---

*(*Conway – *Continued from page 1)*

(knots) is because it's a very difficult problem and we like to sharpen our tools," Conway said. "If we can solve one difficult problem, we can solve another."

Conway added that the study of knots has little practical use, but it's a wonderful way for mathematicians to exercise their brains.

"In mathematics, it's often very hard to prove something that's obvious because it is obvious," Conway told the crowd. "It takes an exceptional amount of mathematics to tell if two knots are the same."

UM math professor Nikolaus Vonessen said he was impressed by the way Conway communicated the tangle of math equations that make up a knot.

"He could explain some fairly advanced stuff in a way that was very elementary and very down to earth," Vonessen said.

UM math professor Keith Yale said though he didn't learn any new math, he thought Conway was an excellent teacher.

"He has a dynamic way of presenting things, and that's the most important part," Yale said.

For much of his presentation, Conway demonstrated knot tying with a shoelace he unlaced from an audience member in the first row.

"My problem is to contemplate just what on earth is going on," Conway said, tying knots in the patron's lace.

Conway used the lace and colored ropes to demonstrate his twists and turns. He also called on several audience volunteers and humorously solicited audience participation.

"What country am I in?" Conway mused in a deadpan tone. "I'm in America. I don't know if anyone can do arithmetic here anymore."

When the audience uniformly shouted the answer to the equation he posed, 2+3, Conway quipped, "Now I'll go back to England and tell my colleagues it's all a lie."

With the flair of a magician and the formulas of an algebra teacher, Conway had four audience members demonstrate how to tangle two parallel ropes then untangle them using nothing but arithmetic.

"It's not magic at all," Conway told the crowd. "It's a mathematical formula."

Conway added, "Some tangles can now be understood when in the past we would have thought a horrible mess of string bits was just a horrible mess of string bits."

"It's pretty amazing how it all works out," Northwestern University math major Morgan Bugbee said. "(Conway) set down a formal way to understand knots. It's something I never would have thought of before."

Reflections on ICME 9

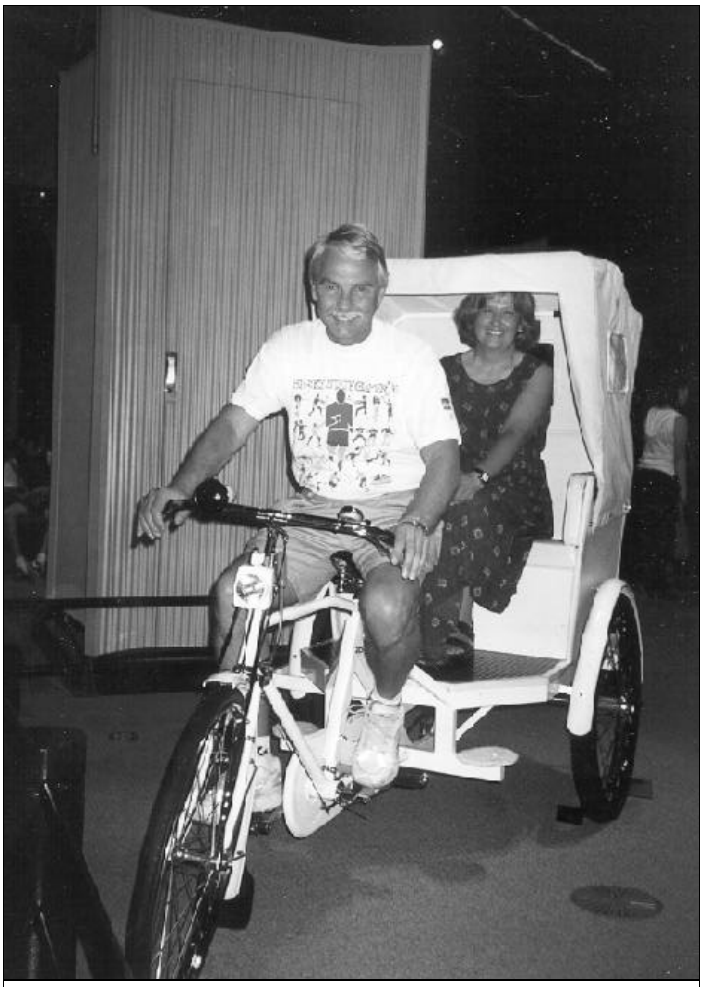
by Rick W. Billstein

I attended the 9th International Congress on Mathematical Education (ICME 9) held in Tokyo, Japan, which opened on July 31, 2000 with a series of welcome messages including ones from United States President Clinton and Japan Prime Minister Mori. Prime Minister Mori noted that, "Mathematics and science education not only serve to develop future scientists, but they also make important contributions to our daily life, economic activity, and for the nation's decision making. " Later he said that, "However, some concerns have been expressed about the tendency of Japanese children to move away from mathematics and science, and I know that this problem and possible response measures are being examined at the Science Council of Japan as well."

Japan is making changes in mathematics education and it was interesting to discover a version of the "math wars" alive in Japan, especially when Japanese students have done so well on international comparisons. Yoshishige Sugiyama, the President of the Japan Society of Mathematics Education (JSME) which is an organization similar to NCTM, expressed concern about the changes especially concerning the reduction in time spent on mathematics. Professor Hiroshi Fujita, Chair of the Program Committee, reported that in 2002 the mathematics curricula in Japan would be reduced by about 30%.

After the opening sessions, an International Round Table (IRT) was held. This was an impressive videoconference involving leaders from Japan, Singapore, and the United States interacting with a panel at ICME 9. Akito Arima (Japan), Heng Tin Wee (Singapore), and Bruce Alperts (USA) agreed that the most important component in the learning process is the teacher and that if education is to improve it must be through the teaching and learning of teachers. Along this same line, Hyman Bass, President of the International Commission on Mathematical Instruction (ICMI) commented on the importance of strengthening the role of teacher preparation. Wee told of a shift that started in 1980 in Singapore and involved what he called "streaming". In this system students learn at their own pace and are taught according to their abilities. He reported good results with this technique. Wee's remarks made the American participants think about their views on tracking.

The IRT participants discussed the "digital divide", that is, the access to technology among schools is not equal. Because of the "digital divide", the curriculum in one country might be quite different than that in another.



Jane & Rick Billstein in Tokyo

I was involved in the Mathematics Education in Junior Secondary School Working Group. On the first day, Ferdinando Argarello from Italy stressed that the transition from junior secondary school to senior secondary school was one of the greatest problems in most countries. He said that the transition problem must be addressed in four contexts: mathematical, cognitive, cultural, and political. He noted that the availability of technology as well on the degree of its use on national examinations could often be a factor in determining a country's curriculum.

Argarello pointed out that all countries have the problem of balancing the mathematics that is taught with the interest of the students at this level, especially when students have negative attitudes towards the subject. Argarello quoted the NCTM Standards several times and agreed with the standards in that he felt that mathematics should be taught through real life applications and it should stress problem solving and communication. Argarello also described the "math wars" in the United States as a battle between those stressing the old methods versus those stressing a more constructivist approach. When I asked Argarello how he was aware of what was happening in mathematics education in the United States, he replied

that he follows our adventures by reading the emails forwarded by Jerry Becker.

On the second day of the Working Group, I presented a Plenary Session in which I shared the philosophy of the NCTM Standards along with what it meant to develop a standards-based curriculum in the United States. I discussed teaching mathematics in context, assessment, technology, computation, communication, connections, the big ideas in middle-school mathematics and provided examples of how we teach these concepts. The participants were interested in how we use context to teach reasoning and at the same time do not sacrifice computational skills. The members of this working group spent the third day in groups discussing the previous presentations and bringing up new concerns.

I chose to join the Teaching and Learning of Algebra Topic Study Group. The format for each of the two days was a variety of short talks by invited presenters from the United States, Brazil, Japan, Italy, Slovenia, and Mexico. Several messages became apparent. One message is that students can do algebra and they can do it at an early age. For this reason, algebra needs to be introduced early in activities such as looking for and describing patterns. The group from Brazil emphasized that arithmetic should come first but algebra should follow quickly. One presenter pointed out that if we made the same demands of children learning language as we do for learning mathematics, they would never learn to speak. When children learn language they experiment with incorrect structure and imprecise vocabulary as they discover what works. Denise Thompson (USA) said that one potential problem to teaching algebra early arises not with the students but with the teachers. She reported that in a 1994 study by Weiss, Matti, and Smith, they found that although 58% of elementary teachers rated themselves as very well qualified to teach patterns and relationships, only 17% rated themselves as very qualified to teach algebra. This message was the same as the one heard early in the conference, namely that the teacher is the most important component in the learning of mathematics.

One of the most interesting parts of the conference was listening to representatives from countries that performed well on TIMMS talk about their philosophies. For example, the speaker from Singapore discussed how each school and each student is unique and that they can't demand uniform results. Schools need to use the best strategy possible for their particular students. The Japanese were very concerned that their students did not like mathematics and also that their students were good in computation but weak in reasoning and communication. There was also concern for Japanese students that were suffering from "examination hell". A common message at the conference was that mathematics should be taught with a balance of context and content. Each country also agreed that teachers are the heart and soul of education and as such deserve better training, better working conditions, and better salaries. Most participants also expressed concern with the appropriate use of technology.

A Chinese speaker discussed the topic of "Can Practice Make Perfect". He reported that the answer is both yes and no. The answer is yes since the Asian countries do a lot of practice and they do very well on national exams. The shortcoming is that too much practice results in students that are bored and that do not develop deeper concept understanding. The presenter explained that perfect in mathematics should mean understanding and computational practice is a necessary step to achieve understanding. He also suggested that routine practice provides a starting point for concept formation and that mathematical concepts are a product of coherent activities. An interesting discussion concerned whether US students have the discipline to take drill and practice to mastery. In China, national exams and the chances of getting a job motivate students. It was felt that since American students do not feel this same kind of pressure, the students, the mathematical content, and the teaching methods are different as well. The presenter also discussed "Can Practice Make Stupid". His answer was yes if students stay at the practice stage too long and understanding is delayed. What is needed is a balance between manipulation and understanding. If there is too much practice it was felt that students become less creative. China is starting a move away from an exam-oriented education towards an emphasis on reasoning. The idea is to keep good tradition but also develop thinking. This is good advice for all and especially for me as I think about curriculum development.

McKenzie Clements (University of Brunei Darussalam) discussed mathematics education in Asian countries. He described the role of jukus (cram schools) as important in the success of Japanese students on exams. He commented that the present US trend to translate materials from Japan or Singapore seems to be based on an inadequate understanding of forces influencing mathematics performance in Asia. Culture is important and what is efficient in one country may not work in another. Clements also remarked that "It would be ironic if the West moved to adopt Asian patterns of education at precisely the same time as nations like Singapore, China, and Japan were consciously modifying them."

I left Japan with the idea that in the USA we must consider what is best for our students based on our culture and do the best job we can to develop materials to fill our needs. I became even more thankful to NCTM for providing the guidance for this step.

πμε/MAA Math Club Corner

The time has come once again to bid a semester and a year together farewell as we decorate and hurriedly shop and write address cards. No meteorite crashed into the Earth and destroyed the entire planet's population, nor did the infamous Y2K bug end civilization as we know it.

Front Row: Paul, Sheryl, Dave
Back: Carl, Cathy, Milka, Libby, Mary Jean

So what did happen this past year? This fall, the math club has kept itself occupied by what we have come to call "the sticker project." As you may know by now, FigureThis! accidentally put the incorrect web site address on their brochures. We agreed to fix these (for a fee) by putting stickers (over 230,000 of them!) with the correct address on the brochures. The plans are to use the money we make to attend the joint math meetings in New Orleans during winter break. Our deepest gratitude goes to all of you who helped in this endeavor!

We began the semester by viewing some interesting videos: "Journey Through Genius", "Not Knot", and "Mathematically Motivated Designs, a talk by Howard Eves." We were fortunate the next week to follow with a talk "Howard Eves, the Mathematician" by Visiting Professor Dick Paul. Visiting Professor Evan Wantland shared with the club "What got me hooked on Math?" Dr. Hashim Saber kept us thoroughly entertained with his collection of various mathematical "magic" tricks. We ended the academic semester with two student presentations from Carl Beatty and Paul Jomini.

The final meeting was the usual pizza gathering with everyone who helped with the sticker project invited to join us. When we return for the Spring Semester, we hope to show off some photos taken in New Orleans.

πμε / MAA Math Club

President: ..... Sheryl Schopfer
Vice President:..... John Spritzer
Secretary / Treasurer:..... Carl Beatty
Advisors: ..... Mary Jean Brod & Libby Krussel

other active members include:

Paul Jomini — Dave Landes
Cathy DeGrandepre — Bev Plumb
Milka Gronlund

The University of Montana
Department of Mathematical Sciences (MMAI01)
Mathematics Building
Missoula, MT 59812-0864

NON-PROFIT ORG.
U.S. POSTAGE
PAID
MISSOULA, MT 59812
PERMIT NO. 100