New Mexico
Mathematical
Association
of Two-Year
Colleges

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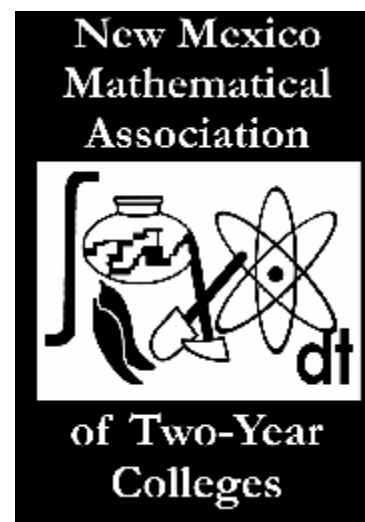
NMMATYC News

March 20, 2006

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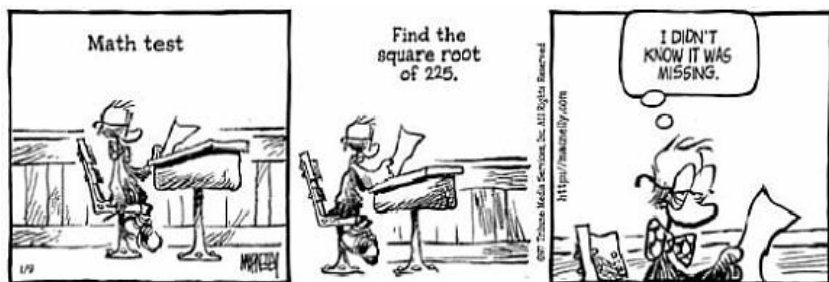
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NMMATYC News

Volume 16

Issue 2

President's Message
Ellen Schneider

Spring is one of my favorite times of the year. As a sports fan, I enjoy the excitement of March Madness and the hope that spring training brings (perhaps this is the year the Cubs win it all). Also, the weather is starting to warm up and, provided there aren't any nasty dust storms, it's a great time to get outside and enjoy the outdoors.

Spring is also an exciting and busy time for NMMATYC. The preparations for the **17th Annual NMMATYC Conference, *Mathematics: mild, medium or HOT!*,** are well underway. As you probably know, the conference will be May 18-20 at the DABCC East Mesa Campus in Las Cruces. This year's conference will include *two* pre-conference workshops, Thursday, May 18. Ted Stanford, Professor of Mathematics at NMSU, will present the morning workshop, *Angles from K to 20*. Richard Aufmann, Professor Emeritus of Mathematics at Palomar College and author of several mathematics textbooks, will present the afternoon workshop, *Approximation and Quantitative Reasoning in Developmental Math*.

The keynote speaker for the conference is Anne Dudley of Glendale Community College in Phoenix. The title of her talk is *Math & Jeopardy (or I have an answer, do you know the question?)*. I am sure we'll have a lot of fun playing Jeopardy with Anne as she reflects on 20 years of change in mathematics education.

As a reminder, the deadline to submit a proposal to present at the conference is April 21. The early registration deadline is May 1, so don't wait too long to register. (Registration and online proposal forms are available at www.nmmatyc.org.) Check the enclosed insert for more details about the conference and pre-conference activities.

President's Message Continued…

ELLEN SCHNEIDER

The theme of the conference is *Mathematics: mild, medium or HOT!* I am pleased to announce that Anne Dudley will be the keynote speaker. Anne has been an active member of both AMATYC and ArizMATYC. Anne has been an active member of both AMATYC and ArizMATYC. Those of you who have met Anne know what a dynamic personality she has. Anne is very knowledgeable about curriculum, pedagogy and the AMATYC Standards, so I know her keynote address will be very informative. I hope all of you make plans to attend the conference.

Membership Dues
As discussed at the Business Meeting in May, the Executive Board has decided to raise membership dues from $5/year to $10/year. The new rates will go into effect January 1, 2006. People who join or renew their membership by December 31 will be eligible to win one of three free NMMATYC T-shirts. Please encourage your colleagues who are not members to join. Membership dues help support many worthwhile activities and initiatives throughout the region, such as the Student Math League, the Michelle Jimenez Memorial Scholarship, the David Lovelock Teaching Excellence Award and the NMMATYC Mathematics Hall of Fame.

Southwest Regional AMATYC Conference
Keep your fingers crossed! The Southwest AMATYC Affiliates (New Mexico, Texas, Oklahoma and Arizona) have submitted a proposal to AMATYC to hold a southwest regional conference. If approved, the conference will be June 16-17, 2007 (not this June!) in San Antonio, Texas. I'll be sure to let all members know once the conference gets final approval.

2005 AMATYC Conference
This year's AMATYC Conference will be November 10-13 in San Diego. It should be a great conference. As is tradition, all NMMATYC members and their guests will be invited to attend the NMMATYC dinner social Saturday night (the dinner is Dutch treat). Look for details and a sign-up sheet on the message board at the conference.

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President's Message Continued…

ELLEN SCHNEIDER

Please make sure to tell your students about the **Michelle Jimenez Memorial Scholarship**. This year's scholarship is worth $1200. I know there are plenty of qualified students in the NMMATYC region who could benefit from this scholarship, so help spread the news. The deadline to apply for the scholarship is April 7.

NMMATYC has extended the deadline for the **David Lovelock Teaching Excellence Award**. The new deadline is May 1. This is an excellent opportunity to recognize an outstanding teacher, so please consider nominating one of your colleagues (you may even self-nominate).

I would like to extend congratulations to **Gabriel Mendoza** of El Paso Community College for being the first recipient of the **NMMATYC Faculty Professional Development Award**. Gabriel was awarded $300 to attend the Texas Instruments: T³ 2006 International Conference in Denver this past February. I hope many of you will consider applying for this award next year.

Soon you will receive a ballot in the mail to **elect the new NMMATYC Executive Officers**: Secretary, Treasurer and President-elect. Please take the time to complete the ballot and return it by the due date. Thanks to the candidates who have agreed to run for these positions.

This past fall, NMMATYC lost one of its dear members, **Vicki Froehlich**. Vicki was active in both AMATYC and NMMATYC (in fact, she was one of our charter members). I extend my condolences to all who knew Vicki. She will be greatly missed.

This May, my term as NMMATYC President comes to an end. It has been an honor and a pleasure to serve as leader of this important professional organization. I hope you will continue to support NMMATYC and its initiatives. I know Gordon DeSpain is looking forward to working with you as the new NMMATYC president.

See you in Las Cruces in May!

NMMATYC New

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Writing in Mathematics Affects Students' Achievement
Dr. Sharon Yu-Shattuck

There are many factors that affect students' mathematics achievement. Writing in mathematics is one of them, and is an important one. The report of The National Commission on Writing for America's Families, Schools, and Colleges is titled, Writing: A Powerful Message from State Government (www.collegeboard.com). This report has concluded that the ability to write well has never been more important. This article also reports, *Writing: A Ticket to Work …Or a Ticket Out* (p.3).

Writing in mathematics is same important as writing in English. America Mathematics Association of Two-Year College states in the *Crossroads in Mathematics* that mathematics literacy is achieved through an understanding of the signs, symbols and vocabulary of mathematics (p.16). If students do not understand how to use the signs, symbols and vocabulary of mathematics correctly, they cannot achieve mathematics literary.

As we know, clear writing leads to clear thinking. Many times students told me "I am lost"; after I check their work I found that the reason they got lost was because they did not write properly. And, for many semesters, I always find that many students could not write mathematics correctly. I have also found that some student have already formed the bad habit in writing math.

In order to find out how writing in mathematics affect on students' achievement quantitatively, I have computed the correlation of the number of writing mistakes in math and students math achievement. Two variables are the number of writing mistakes in mathematics as x, and students' achievement as y. Students achievement was measured by students' exam scores, and the number of writing mistakes was measured by the writing mistakes on that exam.

The correlation of writing mistakes in math and students math achievement was negative 0.87 (r = - 0.87). As everyone who studied introductory statistics may know, the correlation between 0.8 and 1 is strong, which means these two variables are strongly correlated. The negative sign in front of 0.87 means, the higher number of writing mistakes in mathematics, the lower students achievement. This statistics has showed how strongly writing in mathematics relates to students math achievement.

On the other hand, how did some students get the bad habit of writing math incorrectly? As the coordinator of math discipline of Valley Verde campus of EPCC for 3 years, I had observed part-time instructors' classroom performance for six semesters, and I found that some part-time instructors did not write mathematics correctly. Among many, one popular mistake was missing equal signs in instructors' writing, such as the following example:

$$(2+i)(3-i)$$
$$6-2i+3i-i^2$$
$$6+i-(-1)$$
$$6+i+1$$
$$7+i$$

All equal signs are missing in this example. What did students learn from this? Some students have learned instructors' bad habits. I sincerely hope that math instructors provide good examples in writing mathematics for students to emulate.

How Knowledge of the History of Mathematics Positively Affects the Learning of Mathematical Concepts
by
Fariba Ansari

Abstract

A long-term goal of much current research focuses on pinpointing methods to discover and explain how educators can claim scientifically that there will be significant positive results if efforts are made to design and develop lessons that use the history of math to further the understanding of various concepts in math and other academic areas in general. To do this, many texts and research papers regarding the history of mathematics will be consulted, and biographies of famous mathematicians such Heron, Pythagoras, Euclid, Archimedes, D'Alembert, Euler, Cramer, and Newton will be used. To do this, math students in grades 9-12 will be given a Pre-Test and Post-Test, their results of that data will be analyzed, and students will be given a survey, which will be included as data. The method to be followed will be Pre-Test, Lecture, Post-Test, Survey, and Logical Analysis of the findings to see if the hypothesis is valid. A results section describing our findings will be included.

Introduction

Numerous studies by researchers and mathematicians such as James Rollins (1997), Cecilia McBride (1997), Fulvia Furinghetti (1997), John Fauvel (1991), Frank Swetz (1986), Richard Jardine (1997), Patricia Wilson (200), Jennifer Chauvot (2000), Gerald Marshall (1997), Beverly Rich (1997), and James Bidwell have suggested that teaching the history of math along with the specific lesson at hand positively affects the learning process of mathematics students.

History has an important role in the mathematics classrooms of today (Rich & Marshall (1997). In the past several years the interest in teaching the history of math in math classrooms has expanded greatly. The National Science Foundation has strongly supported studying the history of math and using it in the classroom and in 1995 it founded the Mathematical Association of America Institute on the History of Mathematics and Its Use in Teaching. Incorporating the history of math in the class makes it possible for both students and teachers to communicate with each other about math in meaningful and easy-to-understand ways.

The concept of mathematics was created by humans themselves, and learning the history contributes to a wider domain of thinking.

> In classrooms, we often treat mathematics as if we were learning on an island. We travel to the island once a day for mathematics and delve into a study that is pure, clean, and logically solid and has clear lines and no dirty corners. Students think that mathematics is closed, dead, emotionless, all discovered…. By including [the history of mathematics], we can rescue students from the island of mathematics and relocate them on the mainland of life that contains mathematics that is open, alive, full of emotion, and always interesting.
>
> Bidwell (1993, p. 461)

The focus of this study is to give a Pre-test to demonstrate to us the extent of the students' prior knowledge, then give a lecture including the history of math with the lesson, then administer the Test to see how much they learned, and finally give them a Survey to see how they feel learning history along with the lesson affected their learning process. Our hypothesis is that by teaching students the history of mathematics and making them aware of the background of the subject, students will perform better in class, have better results on their tests, and they will remember the lesson longer. It is the instructor's role to provide an effective learning environment and make the student comfortable in the math classroom, and it is believed that by providing a full background of the lesson, students will understand and accept new material more easily.

Swetz (1995) believes that history can provide the "why, where, and how of many concepts that are studied" in math. Likewise, Bell (1992) stresses his belief that universities should develop a course for teachers focusing specifically on the history of mathematics so they will be prepared to teach it and use that information in their classrooms. Sawyer (1997) points out that in order to fully comprehend the subject of mathematics, it should be studied in the context of the time and place where it was originally developed. . A reform in the teaching and learning of mathematics was called for by the NCTM's Curriculum and Evaluation Standards for School Mathematics (1989) and *Principles and Standards for School Mathematics* (2000). Van Maanen (1997) said that a study of historical materials can be instrumental in getting students and educators more interested and enthusiastic about communicating about mathematics.

The incorporation of the history of mathematics in the classroom can be handled in different ways. For example, the teacher can simply present the material him or herself, or the material can be handled as a project that the students do themselves. That way the student will be the researcher and will make presentations themselves to the classroom.

It is believed that if the teacher demonstrates that he or she has a deep understanding of the subject being taught, and can combine that knowledge with the types of classroom activities that will help students to understand the subject for themselves, students will learn in the most successful way possible.

Furthermore, it has long been believed that the meaning of mathematics is merely computation, or problem solving. However, current educators argue that mathematics is much more than just adding and subtraction and arriving at the correct answer. The important thing to know is the basic concepts of the concept and the theories behind problem solving. "A growing body of research provides convincing evidence that what teachers know and believe about mathematics is closely linked to their instructional decisions and actions (Brown, 1985; National Council of Teachers of Mathematics, 1989; Wilson, 1990a; Brophy, 1990; Thompson, 1992)" (National Research Council, p. 164.) With this in mind, we have developed this small-scale study. Although the result of this study may be relatively insignificant, at least we can attempt to provide some useful information about how the history of math will encourage and engage students in our own classrooms. The enthusiasm of the instructors is also an important factor in development skills in students, and it is our belief that the addition of a background lesson will provide that enthusiasm in the teacher as well as the students.

Another study done by Dr. David Dennis resulted in his article "Project-Based Mathematical Investigation for Prospective K-8 Teachers: Students Produce Original Approaches to the Generation of Pythagorean Triples." For this study, he developed an initial research project in which he had 36 university students participate in different projects in order to bring the student voice and perspective to the process of solving mathematical problems. The assessment of the class was based on the students' weekly reports and the students' engagement in the solving process. The result indicated a significant impact on the students' attitude about the class, since the students had expressed their dislike and actual fear of the class before taking it. Afterwards, they reported being enthusiastic about math for the first time. One student is reported to have said, "My attitude toward math was changed after working on the project. I didn't see myself as much of a math person. After finding triple results, it changed my self esteem as far as math goes. I would really recommend more classes like this course."

Methods

This section will discuss the methods to be employed in this study. One instructor will teach the subject—algebra in this case—for two weeks in the usual manner, and a second instructor will teach the same material with the addition of incorporating the history of mathematics along with the lesson. This will take place in two high school classrooms for each instructor, otaling four classes, 98 students in all. This study will take place for two weeks in a high school that uses block scheduling, which means that classes will meet for 90 minutes every other day. In the first group, the class plan will consist of a Pre-Test, then Lesson, then Post-Test, and finally a Survey. In the second group, which also will consist of two classes, the class plan will consist of a Pre-test, a section on the History of Math (approximately 15 minutes), then the Lesson itself, then Post-Test, and finally a Survey. The instructors will compare the performance of students with and without the extra history lesson. An assessment of how the extra lesson on the history of mathematics affected the students' attitudes and performance will be made and reported.

For example, one of the lessons on the historical connection will be finding the Area and Angles of a triangle. Students will use a traditional method of finding this answer. They will be asked to prove that the sum of the measures of the angles of a triangle is equal to 180 degrees. Students will then develop the formula for the Area of the triangle. Students will learn this by being introduced to the history of mathematics regarding triangles. A demonstration of how Heron's formula can be used for problem solving, such as for finding the Area of a triangle, will be given.

Our investigation will be held to a two-week limit. It is our belief that any results will be noticeable and measurable within this timeframe. The investigation is also limited by the availability of test subjects. The school participating in this study is able to provide 98 students at this time. A third limitation is that only two teachers will be conducting this research. While a larger number of test subjects may provide a more accurate outcome, this particular study is expected to result in a reasonably accurate conclusion. It is believed that additional research will be necessary to prove that the hypothesis on which we are basing this study is correct. .

Conclusions

The results of the Pre-Test, Post-Test, and Survey regarding this approach to teaching mathematics were significant. In the Pre-Test results, 20% of the participants were able to answer half of the questions correctly. In the Post-Test, 60% of the participants answered more than half of the questions correctly. In the Survey Results, 80% of the participants indicated that they did not know the history behind the subjects before the lesson, and 80% responded that learning the history of math helped them remember the mathematical concept used.

Also, 70% of the participants indicated they understood the subject more easily by learning the history behind it, and 70% reported that learning the history of math made the lesson more interesting. Students reported being able to find the connection between the lesson and the history of math after the lesson was taught. 70% indicated that learning about all the important people in math history did not help them to know more about math.

After all the class was surveyed, the teacher asked the students verbally what they thought about the lesson. The participants reported being happy about the class and indicated that their 90 minutes on the subject were basically enjoyable with positive learning results.

Teachers can modify the assignments to add some of the history of math into their lesson, and it can positively influence the students' knowledge of the content. I believe that learning the history of math simplifies the contents of the subject and clarifies the objectives. By modifying the length of the lecture, some of the difficult assignments for the students can be more easily understood.

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ily understood.

A Tribute to Vicki Froehlich
by
Mary R Robinson

Vicki Froehlich

President Ellen Schneider asked me to write something for this issue of the NMMATYC News about Vicki Froehlich, who passed away November 28, 2005. I will try to capture some of the specialness that was Vicki in these few words, but those who knew her will know that trying to do that is really impossible because there was no end to her specialness.

I became acquainted with Vicki Froehlich in 1988 over a series of meetings attended by a group of New Mexico two-year college mathematics instructors to discuss the formation of a New Mexico affiliate of the American Mathematical Association of Two-Year Colleges. Vicki was an instructor in T-VI DADE and was an active part of this group interested in improving the quality of mathematics education at two-year colleges in New Mexico by forming a statewide organization for networking and professional development activities. As part of the organizational committee, and the newly chartered organization, Vicki played an important role serving as both treasurer and secretary in successive terms. In those early days, the NMMATYC Treasurer's added conference duties included collecting the conference registrations, keeping track of membership dues, preparing and labeling the conference bags, creating the name badges and setting up and working the registration desk at the conference. Vicki performed these tasks with solid organization and perfection. In fact, no one ever expected anything less than perfection from Vicki's efforts, because that's how her efforts always turned out! In 1992, when NMMATYC hosted the first Southwest Regional Conference, Vicki served as a Co-Chair of the conference, in charge of local arrangements. In this role, she worked closely with the AMATYC Conference Coordinator and Treasurer. Her expertise and ability to organize and get things done right soon became clear to AMATYC leaders, and when the permanent position of AMATYC Program Coordinator was created, Vicki was the person they asked to fill and define the position.

For nine years, Vicki put the AMATYC program together donating many, many hours to organizing a high quality program for the AMATYC Annual Conferences. When she resigned from that position in 2001, she received a special presidential award from AMATYC President Susan Wood in recognition of the work she did for AMATYC in her position of Program Coordinator. In 2004, Vicki was asked by the leadership of NADE to coordinate the local arrangements for the 2005 NADE conference which was held in Albuquerque. Once again, she put her talents to work for mathematics and developmental education to help put together another great and successful conference.

Because Vicki was so competent, dependable, organized and hard working, few people were aware that she had suffered since early childhood from diabetes. Her condition was serious enough that she required multiple daily insulin injections, but she never made a big deal of it. She completed her duties and worked harder than most people I have ever met, never complaining or using her illness as an excuse for anything. Over the years, the diabetes took its toll on her health, as diabetes is wont to do. She suffered from many complications related to the diabetes, including (but far from limited to) vision problems, bone problems and heart disease.

She and her husband Gary have one daughter, Randi, who was the light of Vicki's life. Vicki was a loving and devoted wife and mother who never ceased to provide anyone within hearing range of the successes and accomplishments of the daughter she adored J. Vicki was also an accomplished quilt maker, and, at one time, she had a collection of koalas that filled an entire room. She was an immaculate housekeeper and loved doing things to her yard to make it look pretty. She loved lobster, shrimp and margaritas, although she couldn't have the margaritas too often due to her illness.

As a friend, Vicki was steadfast and loyal. She was always there to lend a helping hand, a listening ear, or solid support for those she considered her friends. I was truly fortunate to be included in this group. Vicki and I worked closely in NMMATYC and AMATYC, on the NMIMR grant, and were friends throughout those times and after. She was an important influence on my life and a very special part of the 18 years we were friends and colleagues. From November 7-13, 2005, Vicki and I roomed together at the AMATYC San Diego Conference. She had been unable to attend the 2004 AMATYC Conference, and was happy and excited to meet new people and renew friendships and spend time with people she had worked with in AMATYC. We had good times visiting and remembering and enjoying each other's company during the time we were in San Diego. When we left each other on Sunday the 13th to go to our respective homes, we promised each other we would get together more often than we had done in the recent past. Two weeks later, on November 28, Vicki passed away.

She was 52 years of age, full of life, energy, dedication to teaching and love for her family and friends. She left us far too soon, and those of us who knew and loved her – in New Mexico and across these United States, for her influence was far reaching – feel a deep and painful loss. I have a brand new grand-daughter born on February 22 – Vicki's birthday. That makes me smile – and I bet Vicki is smiling too.

NMMATYC OFFICER ELECTIONS

In early April, ballots will be mailed to all members of NMMATYC for the election of president-elect, secretary and treasurer. Joanne Peeples from EPCC is the candidate for president-elect. Joining her on the ballot are Dianne Orrantia from EPCC, candidate for secretary, and Janet Macaluso from ENMU-R, candidate for treasurer. Write-in candidates will also be accepted.

The results of the election will be announced in Las Cruces on May 18-20 at the annual NMMATYC conference. At that time, the new officers will join the current president-elect, Gordon DeSpain from San Juan College, as the 2006-2008 NMMATYC slate of officers.

The candidate's personal qualification statements are listed below.

JOANNE PEEPLES, CANDIDATE FOR PRESIDENT-ELECT

It seems as though some things were meant to be. I received my bachelor's and master's degrees in mathematics from Wichita State University. My master's thesis was in abstract algebra, and because of the professors at WSU and their connections with NMSU I fully expected to go to NMSU for my Ph.D. But, I met my husband, received a scholarship to study in Germany, taught and studied at universities of Alberta, Utah and at SMU – and then we moved to El Paso. I completed my Ph.D. at NMSU in 1989 (numerical analysis). And, I started teaching at El Paso Community College.

I started attending NMMATYC meetings at about the same time, and have been on the NMMATYC board for the last eight years. In May of 2002 I chaired the joint NMMATYC/TexMATYC meeting in El Paso. I've presented at NMMATYC meetings and AMATYC meetings. I've also helped start (2007 will be the first year) the joint NMMATYC/ MAA Southwestern Section meetings (the MAA SW Section has been meeting with ArizMATYC every other year for quite a few years)- I think it is important that all post secondary math instructors have a chance to meet and talk about teaching. In the southwest we all share many of the same problems, and have many of the same challenges – networking is good!

If elected president one of the things I would like to see is some more formal networking between the new two-year college faculty. A mechanism exists for new college/university faculty in the MAA, perhaps we can use their model and be the first AMATYC Affiliate to have such a group. This should also be a good way to get these new faculty members more involved in NMMATYC.

Also, if elected president I would be open to listening to any, and all, ideas that would help make NMMATYC a "*must join*" for all two-year college faculty in New Mexico and El Paso. You, as members, know the importance of membership – we all need to spread the word.

JOANNE PEEPLES
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DIANNE ORRANTIA
CANDIDATE FOR SECRETARY

My name is Diana Orrantia. I am a mathematics instructor at El Paso Community College at the Transmountain Campus. I have been teaching for 14 years (11 part-time and 3 full-time). I have taught all levels of developmental math (Basic, College Prep, Intro and Intermediate Algebra). I have also taught credit level math (College Algebra, Business Algebra, and Mathematical Reasoning for Elementary and Secondary Teachers). I am currently on tenure track.

In the year 2004-2005, I served as the Developmental Ed Coordinator at my campus. I was in charge of Reading, Writing and BASK Math. This department has been dissolved district wide and all three disciplines were absorbed by the Reading, English and Math departments. I now call the Math Department home. As for committee work, I am currently on two committees that serve the developmental math area...intervention and readiness.

In addition to my college experience I have taught at the elementary level (Montessori style) as well as high school (Algebra I and II and Geometry) level.

As for job experience for the position of NMMATYC secretary, I served as secretary for 2 years (2003-2005) on the Thunderbird Service Unit for the Girl Scouts of the Rio Grande Organization in El Paso, Texas. I am now the Service Unit Manager for the Thunderbird Service Unit as well as a voting delegate at our annual business meeting. I am familiar with taking minutes as well as being accurate and concise in reporting them.

Finally, I have been a member of NMMATYC since my graduate years at NMSU of which I am an alum. I received my Masters in Education with a minor in Math in 2001. I love education and math both!

I hope this information helps with making your decision when voting for the position of secretary of NMMATYC.

JANET MACALUSO
CANDIDATE FOR TREASURER

My name is Janet (Perri) Macaluso, and I am the lead instructor in the math department at ENMU-Roswell. I have taught both full and part-time for over 14 years, with nine of those years in my current position. My "history" with NMMATYC began in 1998 when a colleague urged me to attend that year's annual conference. I have now been serving as my campus' representative on the State-wide Articulation Task Force for three years.

My teaching experience includes being one of the first instructors on my campus to teach online courses, and after almost six years of teaching in this format I am still regularly learning new ways to make it work for students. In fact, I am often amazed and a little impressed at the creative ways that other instructors have found to reach, engage, and help students succeed in their online courses.

It was my interest in learning more about online instruction and what other instructors are doing, along with a general desire to kick all our courses "up a notch" in both design and rigor, that first got me interested in attending an AMATYC conference. . I was able to do so for the first time in November 2005, and it was then that I knew I wanted to get more involved in both our affiliate here at home, as well as in the larger organization.What a great opportunity to not only stay on top of the developments in undergraduate mathematics, but to be one of the people who drives those developments!

Since that November conference, I have become a member of the AMATYC Distance Learning sub-committee and am now looking forward to serving NMMATYC as Treasurer. on.

NMMATYC
AWARDS ANNOUNCEMENT

Michelle Jimenez Memorial Scholarship

Please encourage students at your college to apply for the Michelle Jimenez Memorial Scholarship. The $1200 scholarship is presented each year at the NMMATYC conference to a qualified two-year college student from New Mexico or El Paso. The recipient of the scholarship may use it to further their education in any way they choose.

Qualifications for the scholarship include: Completed a minimum of 12 credit hours, 6 hours from a New Mexico or El Paso two-year college. Maintained an overall GPA of 3.2, and maintained a 3.5 GPA in all math courses. Completed least two of the following courses – Trigonometry/Pre-calculus, Statistics, Calculus/Business Calculus.

An application is available at www.nmmatyc.org. The deadline for submission of all required materials is April 7th. For further information, contact Mary Caffey at mary.caffey@clovis.edu.

Davis Lovelock Teaching Excellence Award
APPLY NOW!

Have you, or someone you know, made outstanding contributions to mathematics at the two-year college level? Nominate someone (or self-nominate) for the David Lovelock Teaching Excellence Award. Nominees must be members of NMMATYC and currently employed as a mathematics instructor in a two-year college or other institution that grants associates degrees. Further information on the award and a nomination packet are available at www.nmmatyc.org. The deadline to apply has been extended to May 1st. The recipient of this prestigious award will be announced at the annual conference, held this year on May 18-20 in Las Cruces.

Past recipients of the award include Peter Steinbach (TVI, 1998), Betty Berry (NMSU-A, 1998), Eleanor Barber (EPCC, 2000), Sinnathamby Pankayatselvan (DABCC, 2002), and Roberta Himebrook (NMSU-A, 2004).

Mathematics: mild, medium or HOT!

<u>Banquet and Keynote Address</u>
Friday, May 19, 5:00pm
NMSU Golf Course Clubhouse
►*Count Her In!*
The Friday evening banquet will begin with a play, performed by high school and college students, that looks at the lives and works of seven women mathematicians.
►Math & Jeopardy (or I have an answer, do you know the question?)
Keynote Speaker: Anne Dudley
Come play Jeopardy with Anne Dudley and reflect on 20 years of change in mathematics education. Along the way, you will dust the cobwebs off your memories and laugh about the way things were (and are). Be careful—you might even learn something you can use in the classroom on Monday!

Anne Dudley teaches mathematics at Glendale Community College in Phoenix where she enjoys students in classes from Beginning Algebra through Calculus. She earned an M.A. and a B.S. in mathematics from Arizona State University and an A.A. from Phoenix College. She is one of eight authors of the Maricopa Project—a reformed-based mathematics curriculum modeled after the AMATYC Crossroad Standards for Foundation Mathematics. She has given numerous talks at local, regional, and national meetings. She is an active member of AMATYC and is the Treasurer of ArizMATYC. In 1996, she won the MAA Southwest Section Distinguished Teacher Award.

Math Humor

INCONSISTENCY THEOREM
LITTLE BOY: "My math teacher is crazy". MOTHER: "Why?"
LB: "Yesterday she told us that five is 4+1; today she is telling us that five is 3 + 2."

ENOUGH, ALREADY!
What did one math book say to the other? *Don't bother me I've got my own problems!*

Divisibility Intrigue
What is the smallest number greater than zero, that the first four prime numbers as well as the first four composite numbers evenly divide?

The Top Ten Excuses For Not Doing Your Math Homework

#10. Galileo didn't know calculus; what do I need it for?

#9. "A math addict stole my homework. When they arrested him, they discovered Mr. Pleacher had been his teacher."

#8. I'm taking physics and the homework in there seemed to involve math, so I thought I could just do that instead.

#7. I have the proof, but there isn't room to write it in the margin.

#6. I have a solar powered calculator and it was cloudy.

#5. I was watching the World Series and got tied up trying to prove that it converged.

#4. I could only get arbitrarily close to my textbook.
    I couldn't actually reach it.
    (I reached half way, and then half of that, and then ...)

#3. I couldn't figure out whether
    i am the square root of negative one or
    i is the square root of negative one.

#2. It was Einstein's birthday and pi day
    and we had this big celebration!
    (This only works for March 14)

#1. I accidentally divided by zero and my paper burst into flames.