

Fall 2001 Meeting, 11/02/01, Middlesex CC

Michael Frame, Yale University: Fractal Geometry Workshop

Minutes of Fall 2001 Meeting



Dr. Frame presents
a workshop on Fractals

Spring 2001 Meeting, 05/04/01, Gateway CC

Herb Gross, Bunker Hill CC: The Future Never Was What It
Used to Be – The Calculus of Everyday Life

Minutes of Spring 2001 Meeting



MATYCONN's outgoing
President, CC Chancellor,
and Herb enjoy a moment
together after the
presentation.

MATYCONN's New President

Bob Lynott, MATYCONN's New Leader



Coming Attractions:

May 10, 2002, MATYCONN Meeting, Workshops

John
Bagioni will
present
"REAL-
TIME
WEATHER



Articles:

CAMPY on Campus
Math Teacher Shortage
MATHCOUNTS
On the Road Again & AMATYC Reflections
Placement Methods
Presentation for SABR

Feature: Campus Corner

Other Info:

2001-2002 Officers, Campus Contacts
Upcoming Conferences, Workshops
Proposed Slate of Officers for 2002-2003
MATYCONN Membership Application
AMATYC Membership Application

Framing our Fall 2001 Meeting



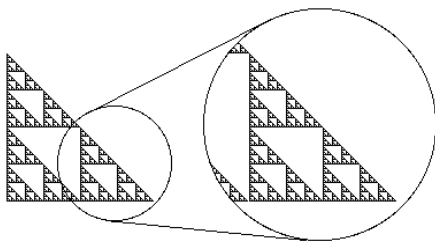
As the story goes, a young professor at Union College presents a talk on his work in fractal geometry.

Upon beginning his discussion to the group, he looked down, and behold! Who, but Benoit Mandelbrot, was in one of the first rows! According to Michael, this was incredible... how could he stand there and talk on this topic with the guru and

discoverer of fractals in front of him! Obviously impressed with Michael's talk, Benoit Mandelbrot approached him afterward and asked if he would like to come to Yale and work with him.

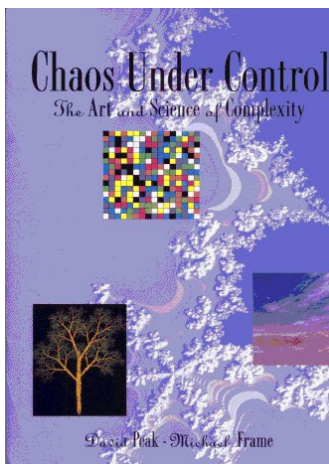
Dr. Michael Frame is an incredibly approachable, brilliant mathematician who has created an intricate, dynamic website (<http://classes.yale.edu/math190a/Fractals/Welcome.html>) that coincides with a fractals course he teaches at Yale. According to Michael, the course is geared to those who are not to become mathematicians or scientists, but to those who will (one day) probably be in positions of importance in business, politics, or such. The course addresses fractals in areas such as the arts, humanities, and social sciences and intends to give students new ways of looking at the world through fractal geometry and instances of finding patterns. This personable man shares very touching and powerful stories during his

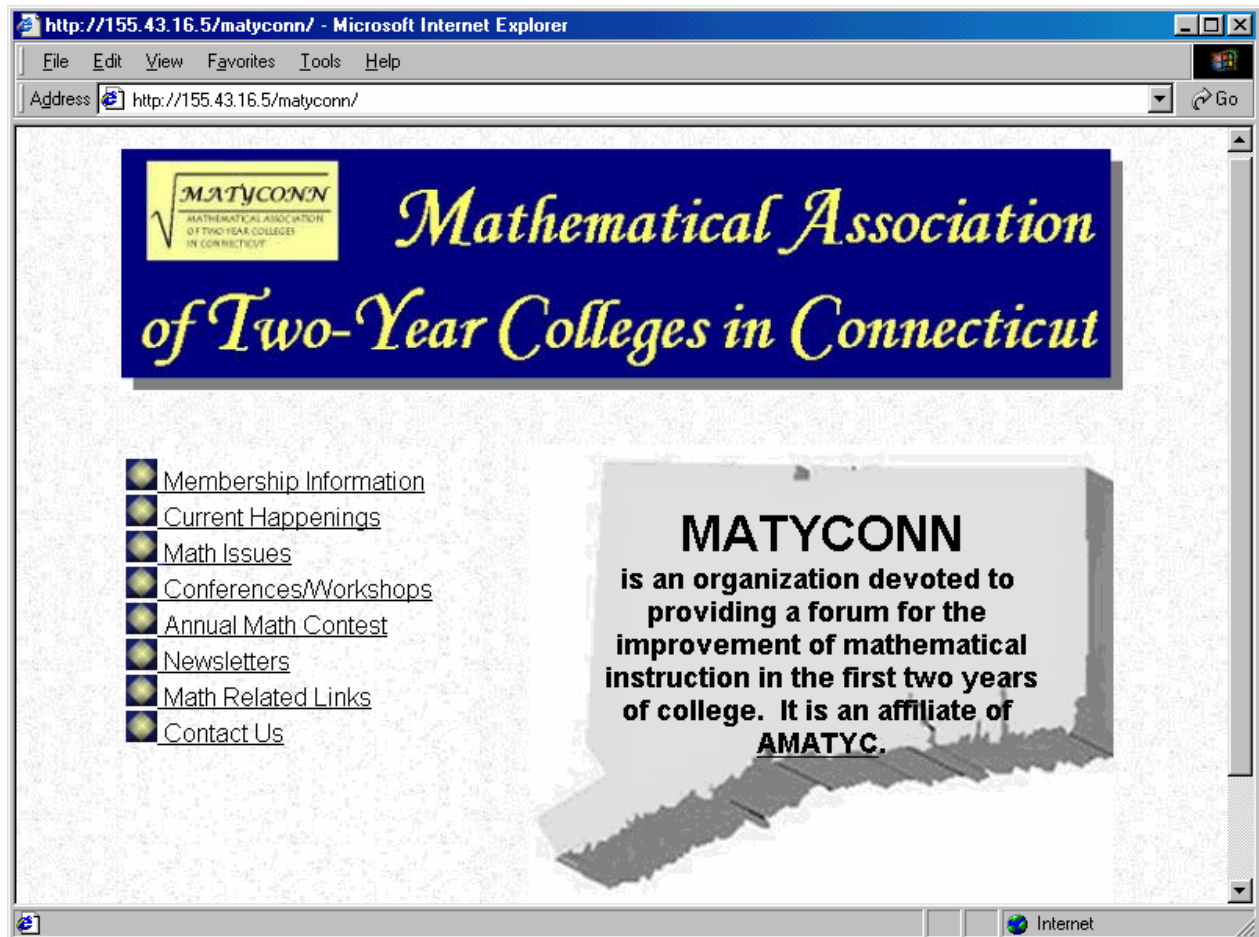
teaching. In addition to teaching, research, and writing, Dr. Frame does outreach activities to include Fractals Workshops for high school and college educators. Matyconn members had the privilege of experiencing his teaching techniques at the November 2, 2001 Dinner Meeting. Dr. Frame simulated his computer classroom environment where participants worked with the material on his website and manipulatives to see first-hand how



reflection, rotation, and translations worked to create complicated fractals from simple shapes.

Dr. Frame has met and worked with many fine mathematicians and scientists. These collaborations culminated in the writing of numerous articles and two books. He co-authored "*Chaos Under Control, The Art and Science of Complexity*," (WH Freeman, 1994) with David Peak. His latest book, "*Fractals, Graphics and Mathematics Education*," co-authored with Benoit Mandelbrot (Cambridge University Press, 2002), is designed to provide mathematical tools which may help readers to uncover connections between the arts and sciences. In the forward, two statements seem of interest and applicable to the studies of Benoit Mandelbrot and Michael Frame. "Rarely do the protagonists in these 'math wars' stop to ask whether different mathematics might yield increased learning." "Simply put, fractals enable everyone to enjoy mathematics."





Please visit our MATYCONN website!

Access MATYCONN

1. Through AMATYC home page: <http://www.amatyc.org>
Select [Affiliates](#), then select [MATYCONN](#)

or
2. Through Connecticut Community Colleges home page: <http://www.commnet.edu>
Select [Academic Information](#), choose [Academic Information for Faculty and Staff](#), then select [MATYCONN](#)

or
3. Through Naugatuck Valley home page: <http://www.nvcc.commnet.edu>
Select [Academic Programs, Division/Department Pages, Mathematics/Science](#), then [MATYCONN](#)

or
4. Directly at <http://155.43.16.5/matyconn>

MATYCONN's New Leader

Robert M. Lynott, our "Fearless Leader," a gift from Waterbury State Technical College through the merger with Mattatuck Community College, brings much wisdom and enthusiasm to the MATYCONN Presidency.

Bob displays a strong personal commitment to the teaching and learning of mathematics. For more than thirty years, he has been alert to new opportunities, techniques, and approaches to delivering mathematics.

This "man for all seasons" has taught a myriad of mathematics courses in a variety of formats. He has taught Prealgebra through Calculus II courses.



Embracing computer technology (Mac and PC) and the graphing calculator, Bob has taught reform math courses, computer-based courses, and online courses. He pioneered Naugatuck Valley Community College's first distance-learning Statistics course.

Responding to the needs of mature, developmental students needing minimal remediation, Bob researched, suggested, purchased Academic Systems (a computer-based algebra delivery system), and designed a designated computer room. Some students were then motivated to complete two or more courses in one semester. Other students appreciated this mode of mathematics learning and convinced him to put those courses on-line, too.



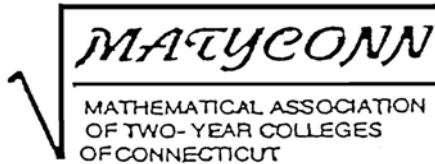
Bob enthusiastically conducts faculty workshops to train and mentor our full-time and adjunct faculty in the use of Academic Systems. In addition, he troubleshoots software and hardware problems for all mathematics courses using the computerized, "smart" classroom.



Rob has conducted MATYCONN workshops, which have inspired students and faculty to explore technology in mathematics both in and out of the traditional classroom setting.

"Bobby" and Barb (Caserta) are presenting "**Math in the Movies**" at this spring's MATYCONN Meeting. It promises to be a fun evening you do not want to miss!

"Bob," "Bobby," "Rob," "Robert," first as Vice President, now as President of MATYCONN, has much to offer the mathematics community. Part of his vision is to visit all other Community College campuses, to attend their mathematics department meetings, and to extend an invitation for people to join and participate in MATYCONN meetings.



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Conferences/Workshops

ATOMIC Spring Conference, March 18-19, Radisson Hotel and Conference Center, Cromwell, CT <http://www.atomic.necaweb.com/>

NEMATYC 2002, "Moving Forward, Looking Backward," April 5-6, 2002, North Shore Community College, Danvers, MA <http://www.bristol.mass.edu/nematyc/>

MBSCC, Mathematics Basic Skills Committee of Connecticut, "**Conference on the Transition from High School to College Mathematics**," April 13, 2002, Central Connecticut State University, New Britain, CT
<http://www.southernct.edu/departments/math/BasicSkillsConference/index.html>

NCTM 80th Annual Meeting, "Realizing the Vision of School Mathematics," April 21-24, 2002, Las Vegas, Nevada <http://www.nctm.org/meetings/vegas/index.htm>

MATYCONN Spring Meeting, May 10, 2002, Naugatuck Valley Community College, Waterbury, CT <http://155.43.16.5/matyconn/Spring2002Meeting.htm>

Outer Banks AMATYC Summer Institute, "Developmental Mathematics Using a Function Approach," Duck, North Carolina, June 9-14, 2002
<http://www.amatyc.org/SumInst/2002/OuterBanks.html>

AMATYC Teacher Preparation Summer Institutes, Green River Community College, Washington, June 16-21, 2002 <http://amatyc.dtcc.edu>

MAA Joint Meeting with Seaway Section, June 21-22, 2002, Williams College, Williamstown, MA <http://www.maa.org/meetings/meetings.html>

AMATYC Teacher Preparation Summer Institutes, Grand Rapids Community College, Michigan, July 7-12, 2002 <http://amatyc.dtcc.edu>

Hawai'i AMATYC Summer Institute, "Mathematics in Hawai'i," Hilo, Hawai'i, July 29-August 2, 2002 <http://www.amatyc.org/SumInst/2002/Hawaii.html>

MAA 2002 National Meeting, MathFest, Burlington, VT August 1-3, 2002
<http://www.maa.org/meetings/meetings.html>

AMS, 2002 Fall Eastern Section Meeting, October 5-6, 2002, Boston, MA
http://www.ams.org/amsmtgs/2068_program.html

15th Annual International Conference on Technology in Collegiate Mathematics, October 31-November 3, 2002, Orlando, FL <http://www.awlonline.com/ictcm/>

AMATYC 28th Annual Conference: November 14-17, 2002, Phoenix, AZ
<http://www.amatyc.org>

AMS & MAA Joint National Meeting, January 15-18, 2003, Baltimore, MD
http://www.ams.org/amsmtgs/2003_baltintro.html
http://www.maa.org/meetings/national_meetings.html

NCTM 81st Annual Meeting, "Building Mathematical Communities," April 9-12, 2003, San Antonio, Texas <http://www.nctm.org/meetings/sanantonio/index.htm>

**Minutes of the MATYCONN Meeting
November 2, 2001
Middlesex Community College**

President Rob Lynott called the meeting to order at 3:20.

Jill Zimmerman gave the Treasurer's Reports. The first Report, dated 5/3/01 was from Kunle Olumide, past treasurer. The report was accepted by the members present (Steve Krevisky, Elaine Dinto). Jill's report, dated 11/2/01 was also accepted (Alice Burstein, Steve Krevisky).

Elaine Dinto reported that she has not updated the web site except for last spring's newsletter. Slav Sharapov has been working with Mike Frame. Some of his work is on Mike's site. The next newsletter will be published next spring. Please send Elaine articles and information.

Kathy Bavelas, Alice G., and Steve Krevisky will be our delegates to AMATYC and will report back to us in the spring. Alice G. distributed copies of the two AMATYC position papers and asked members to send comments before the AMATYC conference.

The annual Math Contest will occur on Saturday, April 6, 2002. Send potential problems to Steve and recruit contestants. Steve will send information to contacts before the fall semester ends. Two items are in need of discussion: a tiebreaker and whether or not the 3:2:1 ration for first, second, and third prizes should be maintained. Let Steve know your feelings. Linda Musco asked what kind of question should be a tiebreaker. Slav asked what would happen if there is still a tie after considering answers to the tiebreaker. Kathy suggested the tiebreaker should be open-ended with a rubric for scoring. Miguel Garcia favors not having a tiebreaker. He suggested including one or more open-ended question on the test itself.

Miguel reported that the Math Issues Committee is alive and well. Members are looking at the question of how our numbering scheme can remain dynamic. Elaine indicated that names for the courses can have no more than 30 characters, and that they must be submitted by next week. Kathy said Pat Hirschy had mentioned some problems with transfer to UConn even with common numbers.

Kathy announced that the next articulation meeting with UConn is scheduled for April 5, 2002 at the West Hartford branch of UConn. She stated that Statistics, Math for Elementary Education, and Differential Equations will be discussed at that meeting. She urged representation from all colleges teaching those courses.

Steve said we need a membership update so we can apply to Jack Keating for a \$200 affiliate grant. Cora will publish a membership directory in the spring.

Rob called for nominations to a Nominating Committee. Elaine Dinto and Marian Egan will serve.

The spring meeting will be held on May 10, 2002 at Naugatuck Valley. Kathy will inquire about Dr. Flush as a possible speaker.

At the suggestion of Richard Patrick, Middlesex's Center For Teaching TLC (Teaching and Learning Consultant), today's dinner will be funded by Center For Teaching. Money paid by members for today will be donated to the MATYCONN Scholarship Fund.

Felipe Flores reported that his college cut funds that had paid for EA tutoring in the Math Lab and that faculty were asked to assume tutoring duties. Inadequate funding for tutors is a problem for several colleges.

Six community colleges will host gifted middle school students on May 17, 2002. The CAMPY program will include sessions for the students and their teachers.

The meeting adjourned at 4:30.

Respectfully submitted,

Alice Burstein (with assistance from Linda Musco)

Minutes of Spring 2001 MATYCONN Meeting
Gateway Community College
May 4, 2001

The meeting was called to order at 3:30 pm by President Miguel Garcia.

1. **Welcome.** Miguel welcomed all to Gateway Community College. Miguel complimented Elaine Dinto on her work developing and maintaining the MATYCONN Website.
2. **Approval of Fall Meeting Minutes.** The meeting minutes (which were not distributed but available to all on the MATYCONN website) of November 17, 2000 were approved.
3. **MATYCONN Webmaster position.** Steve Krevisky discussed the necessity to create a new position to maintain and update the MATYCONN website. This will require amending of the constitution by the executive committee to include the position. Miguel suggested that an interim position be created while going through the formal process. Motion made, seconded, passed.
4. **MATYCONN Representation on CT Leadership Council.** Barbara Paskov spoke to the need to insure representation on this council. The body agreed that this representation is important and should continue. Current members are Miguel Garcia, Barbara Paskov, and Kathy Bavelas.
5. **Newsletter.** 1.) Bonnie Simon solicited information from all for inclusion in the newsletter and reiterated the need for conveying information to herself and/or Elaine Dinto. 2.) Stories, articles, and news items can be emailed to Bonnie S. and Elaine D. anytime from the MATYCONN site (there is a "contact us" icon). 3.) Bob Lynott noted that the spring newsletter is probably the best ever due to the work of Bonnie and Elaine. Alice Grandgeorge suggested that flowers be sent to Bonnie in recognition of her work. Kathy Bavelas seconded. 4.) Steve Krevisky commented that a newsletter of this quality is important to have at least once a year. 5.) Bonnie said that due to being in an electronic age they plan to keep the webpage updated with information but only publish a printed document once per year. 6.) Steve K. asked that in the fall an AMATYC update be included. Elaine encouraged all to look at the website and give comments and feedback to her.
6. **Minority Scholarships.** Slav was not present at the meeting and Miguel announced that he was not aware of any applications. Miguel requested authority to make decisions if scholarship requests were submitted. Miguel proposed to Bob Lynott (incoming president) that the executive committee create a budget to present to the body with a line item for scholarships, contest winners, etc. Steve K. suggested that the executive committee might meet in June to make plans for this.
7. **CSU – CC 2002 Conference.** Elaine Dinto announced that on April 13, 2002 the Math Basic Skills Council of CT (formerly the CSU Basic Skills Council) will hold a joint conference with ATOMIC for teachers of grades 7 –12 and college. The intent of the conference is to provide a forum for discussions between high school and college educators. She questioned whether MATYCONN would want to provide any monetary support. Kathy Bavelas reported that ATOMIC decided to provide up to \$500 support and suggested that the body might be willing to provide a donation of up to \$50. A motion was made and passed to support this. Marion Egan commented whether it might be good to increase the costs of MATYCONN as a means to raise more money. Schools might cover this from professional development funds. Miguel noted that this might be something for the executive committee to discuss.
8. **MATYCONN Campus Representatives.** Elaine Dinto said she needs to update the web contact list and wanted to verify whether people want to continue as reps. Miguel questioned whether all campuses have representatives. Bob Lynott indicated his plan to attend math department meetings at all CCs in the future and to extend an invite for people to join and attend MATYCONN meetings.
9. **AMATYC News.** Jack Keating, Northeast Region Vice-President, announced that he hopes all will take advantage of the resources AMATYC offers. He passed out various items to all and announced that students can join the math league. The Fall AMATYC Conference will be in Toronto and information regarding the conference will be in the upcoming issue of the AMATYC News. Many grant opportunities are available through AMATYC, many with emphasis on teacher education. Steve Krevisky expressed appreciation for Jack K. attending the meeting and the sharing of information.

10. **Math Contest Update.** Steve passed out a memo listing the contest winners and also a copy of a memo of support for the contest to CC Presidents from Chancellor Herzog. The following were the winners:
Steve asked the body which of the following to do regarding prizes: - prizes for the 4 top scorers
- prizes for the top 5 scorers

Tied for first place with scores of 40 out of 40	
Eun Sun Herbst	-- Middlesex
Anthony Gentile	-- Norwalk
Mark Tufanov	-- Gateway
Walter Woodland	-- Gateway
Honorable Mention with scores of 39 out of 40	
Mark Flores	Three Rivers

Discussion included: Miguel commenting that Gateway gives \$150 for their top prize so MATYCONN needs to do at least that. He also expressed the need to get monies from local businesses to support the contest. \$50 had been received from 7 of the 9 colleges participating. K. Bavelas made a motion that MATYCONN donate up to \$500 and the monies be split among the top 4 winners, and the top 5 all get plaques. Motion passed.

Miguel noted that having a tie-breaking activity might be something to consider. Steve K. solicited any comments/ideas for the contest and also commented that Kate McLaughlin had gotten money from Northeast Utilities in the past for the contest. Steve also indicated he would like help with the contest.

Miguel concurred that there are reasons for businesses to get involved in MATYCONN.

11. **Membership Chair.** Elaine Dinto indicated that Cora Preibus had agreed to be membership chair. The membership directory now resides in a database.
12. **Math Issues.** 1.) Kathy Bavelas commented on the system to system articulation with UCONN: Diff Eq is in the process; PreCalc, Calc I, Calc II, Calc III are articulated, although it is important that students contact David Gross at UCONN regarding Calc II. 2.) Kathy B. announced that two more campuses are needed for the CAMPY (CT Association for Mathematically Precocious Youths) day scheduled for May 17, 2002. The day will consist of 6 campuses hosting grade 5-8 students and conducting 2 ½ hour inquiry based workshops. 3.) Kathy also addressed the issue of the intermediate algebra prerequisite for transfer courses to CSU. Kathy stated that Karen Grosz was surprised at this; although the CC's have known about this for 3 years and have been working with CSU. Tim Craine, CCSU, was present to address the issue. Tim provided all a FAQ sheet and was looking for feedback. Tim commented that one of the large problems is that many colleagues such as counselors, etc., are math phobic. The FAQs are to help all understand the issues and the facts. Tim stated that the K. Grosz memo contained errors. To help accommodate all, the Mathematics Basic Skills Committee (MBSCC) of CT passed a motion at their April 27, 2001 meeting. The motion consists of the following:

- (1) To recommend that the intermediate algebra prerequisite take effect fall 2001 and apply to courses taken fall 2001 and after.
- (2) Exceptions will be made only with approval of the mathematics department chair at each CSU campus. It is recommended that only students that have made substantial progress toward completion of a planned program be granted exemptions.
- (3) The policy takes full effect for courses taken fall 2002 and subsequently.

Tim implored all to talk with counselors and others at the various campuses and also indicated that the CSU vice-presidents support this.

Steve K. commented on the importance of having a mechanism to consider case by case basis, e.g. at Middlesex this sometimes requires students to take an additional course. Miguel commented that the motion is good because it allows the process to continue. Discussion began on the prerequisite issue itself but was recognized that the appropriate place for it would be Math Issues or MBSCC meetings.

13. **Treasurer's Report.** Due to Kunle not present yet, Kathy Bavelas moved to postpone the treasurer's report to executive committee meeting. Passed.
14. **Election of Officers for 2001-2002.** Miguel thanked the body for the opportunity to serve MATYCONN and acknowledged the work of the executive committee. The following slate was presented, moved to accept, and passed.

President:	Bob Lynott
Vice-President:	Alice Burstein
Secretary:	Barbara Paskov
Treasurer:	Jill Zimmerman
Membership Chair:	Cora Preibis
Math Contest Coordinator:	Steve Krevisky
Minority Scholarship Chair	Slav Sharapov
Newsletter Editor:	Bonnie Simon
Newsletter Editor (and Webmaster):	Elaine Dinto

Bob Lynott thanked Miguel and Steve K. for their work on the conference. Bob also donned his "math garb" and comically and sincerely welcomed speaker Herb Gross and thanked him for all he has done for two year teachers of mathematics.

The meeting adjourned at 4:47 pm.

Respectfully submitted,

Barbara Paskov

Spring Matyconn Meeting, May 4, 2001 Herb Gross, Keynote Speaker

"If you deliver stale donuts in a Rolls-Royce, does that make them fresher?"

This was one of the thought-provoking quotes issued by Herb Gross in his talk titled *The Future Never Was What It Used to Be: The Calculus of Everyday Life*. Herb shared the history of the community colleges and AMATYC. He punctuated his move from M.I.T. math instructor to founding head of the Math Department at Corning Community College, back to M.I.T. as Senior Lecturer at the M.I.T. Center for Advanced Engineering Study, and then to Bunker Hill Community College teacher with his definitions of junior college, 2-year college and community college. He believes that the community college is the great catalyst that keeps this nation going.



Herb is dedicated to the concept that the college should serve the community and students. In this context he stated, "It's an oxymoron to talk about



national standards for community colleges. Each community college must hone in on the local business and other professional needs as well as to articulate well with the relatively small handful of upper division colleges to which most of their students transfer." He made a strong point that the meaning of "two years" in the phrase "two-year college" had nothing to do with calendar years, but rather when the

student graduated, he or she would have completed the first two years of the traditional college education. Some of our incoming students need nurturing and many of them have responsibilities that are not shared by the more traditional college students; for them two years is rarely enough time. As for the increased cost of attending the community college for more than two years,



he tells his students "We have a deal for you that we hope you won't have to use but might like to know -- you can come to us for ten years for the same price it'll cost to go to Harvard or M.I.T. for one!"

Perhaps teachers should require students to study cooperatively but to test individually. In any event, in compliance with our open enrollment policy, as we accept students from all walks of life and all levels of ability, we should be designing more educational delivery systems. Watering down courses isn't the answer. Maybe we should hold the degree of mastery constant and vary the time it takes to attain this mastery. Today's technology (computers, video tapes) makes this approach possible. To his opponents he answers, "Learning self-paced doesn't mean you are expected to perform self-paced; it doesn't take a self-paced learner two hours to watch '60 Minutes'."

In addressing the issue of the expanding curriculum that now seems to permeate many of our basic math courses, he said that maybe we should teach fewer concepts but apply them in a wider variety of contexts. "One concept with a dozen applications makes more sense than teaching a dozen concepts each with one application."



Calculators are a great tool for performing calculations but are of no use for telling you what operations to apply. When a student told him that he didn't have to understand percents because his calculator had a percent key, Herb asked the student to bring his calculator to his office whereupon he asked the following three questions:

- 1) 20 is what percent of 40?
- 2) 20% of 40 is what number?
- 3) 20% of what number is 40?

Herb's main theme was that through gradual evolution, the non-traditional student of past generations has become the traditional student of today's generation. Today's students are here because the good jobs of the past that did not require post secondary education are gone, and the Associates Degree or some post secondary certification is now essential. We did not see the counterparts to this new breed of



students in previous years. In the "old days" students would ask such questions as "How do you use the quadratic formula?" The new breed asks such questions as "Why do I have to know the quadratic formula?" The change in attitude did not develop overnight any more than a person gains 20 pounds over night. Rather the change takes place in almost unnoticeable increments and by the time you see a change, it's been happening for a long time. Herb illustrated his point by telling how he teaches infinitesimals to children as young as those in the fourth grade. He claps his hands and asks the students how much their lives changed when he did this. They all tell him that there was no change in their lives. He then asks them how much they expect their lives to change in the next 20 years and they tell him that they expect big changes. Then he asks "What if I were to keep clapping my hands for 20 years? Are you trying to tell me that each time I clap my hands nothing happens but that in 20 years of nothing happening a lot can happen?" And as young as they are, the students grasp the important concept that just because you couldn't measure it, it doesn't mean that nothing happened.



After dinner, we enjoyed *Conversations with Herb*. He described his concept of Math is a Second Language where he insists that students see a number as an adjective, i.e., 4 apples, 4 oranges, rather than a noun, four. For example, the fact that $3 \text{ dimes} + 2 \text{ nickels} = 40 \text{ cents}$ does not mean that $3 + 2 = 40$. This approach makes performing arithmetic operations and algebraic operations more relevant and meaningful to students as it carries over to many "real life" applications.

Herb's answer to "Where will I ever have to use algebra in my life?" is along the lines of asking the student such a question as "How come football players do hundreds of pushups during practice but never do even one during a game?" It's clear to any football fan that calisthenics give the players the strength to perform the things they have to do during the games. In this context,

algebra is one of the calisthenics in the game of life or at least in the game of critical thinking. When queried about the validity of his point of view, Herb chuckled and added, "My methods may never work in theory, but they always seem to work in practice."

In Herb's opinion, it is crucial for us to be great "coaches," although it would be great if we were great "players" as well. As for our future roles, the teacher, as coach, specializes in



1. making material relevant to student needs;
2. creating a delivery system to help the lower half of the class without impeding the progress of the upper class (bimodal classes);
3. providing a live support system that encourages students to want to come to class.

We teach an important (and often difficult) subject. But what really counts is how we improve students' lives. "In all the things we do, the milk of human kindness is important. But it should never be at the expense of how we give students self confidence by showing them that they can learn things that they were never able to learn before."

Don't be discouraged if we do not succeed in everything we try to do. Remember that a 40% attrition rate (and not all attrition is negative: many students do not come to us with the goal of graduating) means that 60% of those students who would have had virtually no access to higher education without us attained their academic goals. In this context the community college system is the "statue of liberty for those who might otherwise have been academically disenfranchised!"



CAMPY on Campus, submitted by Elaine Dinto

CAMPY (The Connecticut Association for Mathematically Precocious Youth) is a non-profit organization created to serve precocious and talented mathematics students



from across the state. The organization is comprised of educators, parents, business leaders, and others interested in advocating for these students. Judy (St. Marie) Daily, from the Montville School System, is currently chairperson of the organization and is one of the co-founders.

In order to better serve the unique needs of the mathematically gifted, the CAMPY organization advocates for these students to ensure appropriate learning experiences based on the student's abilities, provides mentoring experiences in mathematics when possible, and promotes conferences throughout the academic year for students and teachers. On May 17, 2002, six community colleges across Connecticut will be host sites for up to 100 5th-8th graders each, for a full day of mathematics enrichment. This *CAMPY on Campus* program is an extension of the *Meeting the Challenge Conferences* that have been held for the last five years at Wesleyan University. Several MATYCONN members have volunteered to serve as site coordinators for this year's events: Miguel Garcia (Gateway), Kathleen Bavelas (Manchester), Elaine Dinto (Naugatuck Valley), Marilyn Seman (Norwalk), Marion Egan (Quinebaug Valley), and Linda Tremor (Three Rivers). Each site coordinator was responsible for finding presenters and scheduling five morning and five afternoon sessions. MATYCONN members who are presenting include Kathy Bavelas and Barbara Paskov (Manchester), Joe Karnowski (Norwalk) and Slav Sharapov (Quinebaug Valley).

The material presented during the CAMPY workshops is not content traditionally provided students in school. Each 2.5-hour session include hands-on, problem-solving activities. Materials challenge these bright students to connect what they currently know in math to the information being presented. In this Spring's event, many will explore the notion of symmetry, tessellations, mathematical networks, or fractals. Others will experience mathematics as it relates to fields such as archaeology, astronomy, biology, chemistry, heredity, nutrition, structural design, computer-aided drafting, computer networking, accident reconstruction, robotics, architecture, music, origami, and art. Teachers and students will attend the conference sessions together and learn side-by-side, both benefiting from the day's experience.

Mathematical talent is a rare and precious resource -- the CAMPY organization and the community colleges hope to provide an exciting and challenging day for all who participate!



A Volunteer Opportunity

The sum of 40 consecutive integers is 100. What is the largest of these 40 integers?
One-fourth of Holtown High School students are seniors, one-third are juniors. The other 300 students are sophomores. Of the seniors, two-fifths are boys. How many seniors are girls at Holtown High?

Did you figure out the problems yet? The first answer is 22. The second answer is 108 girls.

MATHCOUNTS, founded 20 years ago, is a coaching and competition program that brings to math achievement the same enthusiasm and prestige now enjoyed by athletics. Students are called "Mathletes" and are rewarded for winning competitions at the school, chapter, state and national levels.

The objectives of MATHCOUNTS are to do the following:

- Elevate the prestige associated with achievement in mathematics among seventh and eighth grade students;
- Increase awareness of the importance of mathematics among parents, educators and the general public; and,
- Bring about improvements in mathematics curricula and instruction.

The event consists of three parts. The Sprint round calls for 30 written questions without the use of calculators. The Target round includes eight written questions that allow the use of calculators. The Team round allows the team to collaborate on 10 written questions.

"This is not the answer for everyone, but it is for those students who are sharp and need to be challenged," said a seventh-grade math teacher, who serves as adviser for one school's math league, MATHCOUNTS and enrichment program.

MATHCOUNTS has proven to be a successful national program that is making a major difference in young people's attitudes toward math in middle school and beyond. "Math isn't really that boring," said one of three eighth-graders on a Danbury team. It has become a popular and integral part of enriching the American middle school mathematics experience for a select group of students. A coach states, "These are very bright students who really enjoy the challenge inherent in math and problem solving."

Volunteers – parents, teachers and professionals from business and industry – are the key to the program's success. The MATHCOUNTS Foundation recognizes volunteers' need for both a fixed structure and reasonable flexibility. MATHCOUNTS' volunteers appreciate its regular annual cycle, clearly defined procedures and nationally supported activities. Visit the website at <http://mathcounts.org> or call your local Society of Professional Engineers or email info@ctspe.net for further information.



Coming April 6th, 2002, to your campus!

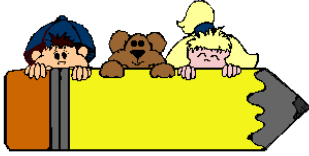
**It's the 12th
ANNUAL
MATH CONTEST!!!!**



Last spring, the system-wide Math Contest had 4 students with perfect scores! Steve Krevisky was able to make a presentation at the June 18 Board of Trustees meeting about the contest, and Chancellor Herzog presented plaques to the 2 students who were there. It was a nice occasion and we hope he can do this again.

Please contact Steve Krevisky at Middlesex CC for more information – 860-343-5792 or SKrevisky@mxcc.commnet.edu.

Shortage of Math Teachers? – You Bet!!



The teacher and school administration shortage is so prominent that legislators, Senator Thomas Gaffey and Representative Cameron Staples, joined forces with educators, Bill Cibes (CSU), Commissioner Ted Sergi, Valerie Lewis (DHE), to address the issues.

On January 30, 2002 Central Connecticut State University hosted the Connecticut General Assembly Education Committee Forum. The keynote address, “Promising Strategies: Addressing the Teacher Shortage,” was given by Twanna Hill, Policy Analyst, Education Commission of the States.

Commissioner Sergi moderated a panel discussion on administration shortages in Connecticut. Panelists included:

- Dr. Randall Collins, Superintendent of Schools, Waterford
CT Association of Public School Superintendents’ *2002 Superintendent of the Year*
- Dr. Harry Hartley, President Emeritus of the University of Connecticut and University Professor in the Neag School of Education
- Dr. Brian Perkins, Chair, Educational Leadership Department
Southern Connecticut State University
- Dr. Ellen Whitford, Dean of School of Education and Professional Studies
Central Connecticut State University

Then Valerie Lewis moderated the Teacher Shortage Panel discussion. Those presenters were:

- Dr. William J. Cibes, Jr., Chancellor of the Connecticut State University System
- Dr. David Cressy, Superintendent of Schools, Cheshire
- Dr. Cynthia Dubea, Dean, Division of Education, Quinnipiac University
- Dr. Marion Galbraith, Reading and Language Arts Teacher at West Side Middle School, Groton
State Board of Education *2002 Connecticut Teacher of the Year*
- James McKenna, Senior Associate, Alternate Route to Teacher Certification Programs Connecticut Department of Higher Education

After much discussion addressing incentives, mentoring, and certifications, the audience agreed that recruiting, preparing and retaining good teachers, which is critical to the future of education in the state, will require collaboration and is “everybody’s business.”

The Math Works Is Coming

Have you ever thought of having your students develop an environmental plan for a brownfields site? Or select a landing site on Mars for the next NASA rover? Or analyze a bloodstain pattern like a crime scene technician? Well, your chance is coming this spring! The *Math Works Project* will be published soon in hard copy and in electronic form thanks to funding from the National Science Foundation, the fine efforts of Connecticut's own John Pazdar, Peter Wursthorn, and Pat Hirschy, enhanced with the participation of St. Louis colleague Karen Gaines.

The *Math Works Project* will provide faculty with a complete package of information and materials to establish and operate either an interdisciplinary capstone course or an interdisciplinary student club. Students will work on open-ended technology problems requiring Internet research and application of the scientific method for solution. They will develop a model portfolio as they progress through the technology problem towards solution, and then cap off the project with a thesis defense to their colleagues. In addition to the 10 laboratories, each with its own technology problem, The *Math Works Project* will provide faculty with support through Faculty Notes, Management Plans and Marketing Plans. A complete package, ready for you and your students! AMATYC members will receive a hard copy of the project through the mail. Everyone will be able to obtain the materials through an Internet site. Save time this summer for some *Math Works* pleasure reading, and start planning your interdisciplinary course or club!

Submitted by Patricia Hirschy

Time Trivia

A Once-in-a-Lifetime
Event!



Did you know...

As the clock ticked over from 8:01 p.m. on Wednesday, February 20th, 2002, time (for sixty seconds only) read in perfect symmetry. To be more precise (military time, day/month, year): 20:02, 20/02, 2002. It was an event which has only ever happened once before. The last occasion that time read in such a symmetrical pattern was long before the days of the digital watch (or the 24-hour clock): 10:01 a.m., on January 10, 1001.

Do you know when we again will have a similar pattern?

Pat Hirschy on December 21, 2002



BULLETIN • BULLETIN • BULLETIN

At the MATYCONN Executive Board meeting in January, some changes to the Business Meeting Agenda were discussed, resulting in a new process.

1. The agenda will be distributed before the day of the meeting, with a brief explanation of each agenda item. (This way those parties interested in certain items can be sure to be in attendance.)
2. In an effort to try to expedite the business meeting and to insure all topics are addressed, please respond (minimum of one week prior to the meeting): with the following to Barbara Paskov, MATYCONN Secretary.
 - Agenda items and a brief explanation of the item, including time frame.
 - Any announcements to be made at the meeting. (Note: announcements will be included at the bottom of the agenda in a narrative format with a contact name so interested individuals know who to contact for further information.)

Are Your Students Quantitatively Literate?

Do you need a program to accomplish this?

Do you need a course to implement it?

Should quantitative components be integrated into a variety of college-wide courses?

If you are interested in learning more about Quantitative Literacy (QL), plan to attend the *Sixth Annual Meeting of Northeast Consortium on Quantitative Literacy (NECQL)*. It will take place at Trinity College on Saturday, April 20, supported by the Trinity College Dean of Faculty and the National Numeracy Network (NNN).

Topics:

- How do we get the message out?
- How do we make quantitative skills centers more effective and user-friendly?
- Caren Diefenderfer will talk about her experiences creating a QL program at Hollins University, Virginia.

ON THE ROAD AGAIN



Joe Karnowski from Norwalk Community College attended the 14th Annual International Conference on Technology in Collegiate Mathematics (ICTCM) on November 1-4, 2001,

held at the Baltimore Marriott Waterfront Hotel in Baltimore, MD. The conference included sessions and minicourses on Distance Learning, calculator workshops and computer minicourses with an emphasis on professional development, sessions and minicourses to introduce and train attendees in using the web, presentation papers encompassing a wide-range of topics from Developmental Mathematics to Differential Equations and Linear Algebra, and exhibits featuring the latest books and product developments. Joe attended several interesting presentations involving WebCT and technology in Calculus classes, and he learned some great ideas for using technology for studying transformations in College Algebra classes. In addition, he compared notes regarding developmental math students with author David Ellenbogen and got to enjoy some incredibly warm weather for November.

From Steve Krevisky, Middlesex Community College – Last summer I had a lengthy driving trip, which began in

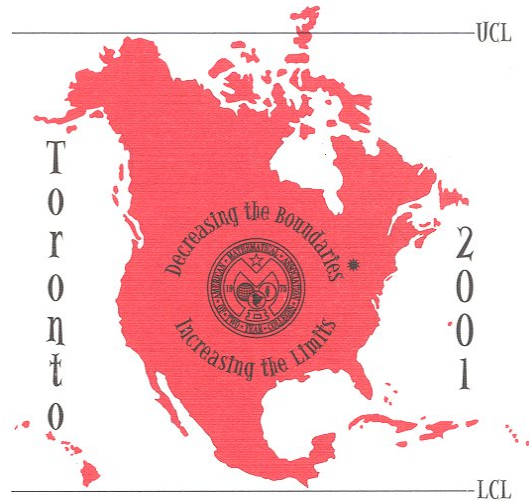
Milwaukee at the annual conference of the Society for American Baseball Research (SABR), where I made a presentation about Hall of Fame pitcher Warren Spahn, who hurled in the Cream City for many years. While on route to do two presentations at the NCTM Western Regional Conference at the University of Wyoming, I crossed through the Midwest, where I visited the famous Field of Dreams movie site in Dyersville, Iowa (Alice G's home state!). I got to see several minor league baseball games, and researched the birthplaces of some famous baseball players. I crossed South Dakota, visiting two schools for Lakota children that I am a contributor to, and especially enjoyed seeing the Badlands, the Pine Ridge reservation, and the historic Wounded Knee massacre site. I then visited the Scottsbluff National Monument in western Nebraska, then continued through Cheyenne to Laramie, Wyoming. In Laramie I presented a paper on western baseball players and reported on what happened at the ICME in Japan that I attended in Summer 2000, when I had been fortunate to receive an NCTM Travel Grant. While in Laramie, I ran into Kathy Bavelas and her husband, quite by chance, in a downtown café. Imagine the probability of this happening! I enjoyed being in Laramie and was able to obtain one graduate credit by writing a paper on the conference experience when I got home from Colorado. I also enjoyed the Rocky Mountains and got to see the Rockies play the Braves in Denver. Overall, I drove over 2,600 miles on this trip!



AMATYC REFLECTIONS

Steve Krevisky from Middlesex Community College

Last fall, I presented at the AMATYC conference in Toronto on pitching statistics in baseball. I also presided at a session, and again served as a Delegate to the annual business meeting. It's good to see people from around the country, whom we don't encounter very often. The dues increase was a controversial issue, and the only reason I supported it was that it could help provide better salary and benefits to the workers in the AMATYC office. I also sat in for Bob Lynott at the affiliate Presidents' luncheon, where we discussed various issues about what was happening at AMATYC. I like Toronto as a city, and it was good to return there. The Royal Ontario Museum is first class, and I know where to buy baseball cards. Next year's conference in Phoenix, will be the organization's 28th (a perfect #). I told the happy Diamondback fans that next year, my Yankees will be back on top, so enjoy your Series win while it lasts!



Alice Grandgeorge from Manchester Community College

At the 27th Annual AMATYC Conference in Toronto, input hearings were conducted on draft position statements on “*Distance Education in Mathematics Courses*” and “*Initial Placement of Community College Students into the Mathematics Curriculum.*” As you recall, I distributed copies of these draft documents during the MATYCONN fall business meeting. Members still may make comments on the revised position statements by visiting the webpage of AMATYC (<http://www.amatyc.org>), then clicking on Academic Committees. Nancy J. Sattler, chair of the Distance Learning Committee, and Judy Marwick, chair of the Placement and Assessment Committee, are the individuals to contact with your comments. Both documents will be revised and a second input hearing will be held at the next Annual Conference of AMATYC in Phoenix, AZ. The committees will present the final versions of the position statements at the Delegate Assembly in November 2002.

Kathy Bavelas from Manchester Community College

Toronto was lovely. Eating out was truly a pleasure. I am so glad I went with my husband. The planning committee wisely gave us Friday evening on our own, and because one could eat at 11 p.m., I was able to attend meetings till very late in the afternoon, go to a play and then have dinner. We had a lovely meal in one very small restaurant (maybe a dozen tables) in the theatre district at 11 p.m. while we listened to live piano and song. Great atmosphere and the food was excellent. *Ma Mia* and the *Lion King* were both tremendous productions, each for its own reasons. *Lion King* has masterful staging. On the advice months earlier of the ticketing agency, we had tickets in the balcony (first row) so we could see all the stage effects. At *Ma Mia*, more in the tradition of a typical play, we sat so close in the orchestra we could see all facial expressions. Two absolutely fantastic evenings of entertainment. I would return to Toronto anytime. The host hotel was extremely comfortable and obliging, the sessions were excellent. The dilemma, how to balance the exceptional professional opportunities with all the marvelous social and sightseeing opportunities! It was truly an outstanding conference, a standing ovation to our Canadian hosts.

From Bunker Hill Community College – Herb Gross reports:

Herb Gross, Professor of Mathematics, and his brother, Dr. Kenneth Gross, professor of Mathematics and Education, have created the Vermont Mathematics Initiative (VHI), a professional development program in mathematics for elementary school teachers. As director of the program, Dr. K. Gross wants “to train teachers to think like mathematicians.” The brothers are determined to raise the mathematics skills of elementary school students by educating their teachers in algebra, geometry, problem solving and calculus in a way that they can assimilate and translate the concepts to their own class.

Herb is also the Keynote Speaker in Binghamton, NY on the weekend of April 12th when NYSMATYC, of which he is founding president, celebrates its 35th Anniversary.

From Middlesex Community College – Steve Krevisky reports:

In December, Steve Krevisky had the chance to speak at the CMC3 conference in California. This is a strong math conference which took place in Monterey, organized by his AMATYC roommate, Randy Taylor. Steve presented a new interest, the NCAA College Basketball Tournament, of which he researched various statistical aspects of the tournament, such as first round upsets.

Steve has also been chairing the System Senate, which is devoted to improving system governance. The Senate has engaged in dialogue with the Chancellor, looking to improve our visibility and activity, and trying to identify key issues, such as curriculum, where we can be effective.

From Naugatuck Valley Community College – Bonnie Simon reports:

Sandy Pettinico and Tony Pruchnicki have just hosted the MATHCOUNTS Competition on February 9.

While Bob Lynott is the Academic Systems troubleshooter on this campus, his expertise was recognized at a regional conference where he learned about new features of the system at Massasoit Community College, MA.

The Math Department is supporting college outreach activities. On December 5, during the “Community Treasure Gala,” Geometry and Mathematics for Elementary Education were exhibited. On April 24, during the Technology Expo, Trigonometry and Calculus labs will be demonstrated.

From Northwestern Community College –Greg Banks reports:

Kunle Olumide is currently on one-year educational leave pursuing his PhD in statistics at UConn and teaching statistics at Eastern Connecticut State University. Kunle and his wife, Folake had their first child, a 6-pound, 8-ounce girl born on February 20. CONGRATULATIONS to Kunle and Folake and to MATYCONN's newest member!

This year Northwestern had one of the highest total math enrollments in over a decade. These courses are being taught by only two faculty, Keith Adams and Greg Banks, and many, many, adjunct faculty. In response to this dramatic increase in enrollment, Greg developed a “Teaching Guide” for math adjuncts to assist with expectations/requirements in basic math/elementary algebra/intermediate algebra classes. Greg has also developed a “Tutoring Guide” for the math tutors in their Academic Skills Center (tutoring center for all subjects) to assist the tutors and address students’ feedback/complaints.

In addition, Greg had developed “advising guides” for Northwestern’s professional staff to assist with advising students into appropriate math classes (e.g. introductory college math vs. intermediate algebra).

Greg is also organizing the 3rd Annual NCCC 9-hole student/staff golf tournament.

From Norwalk Community College – Marilyn Seman reports:

Marilyn attended the Mathematical Association of America MATHFEST 2001 this past summer in Madison, Wisconsin, from 08/01-08/05 held at the Monona Terrace Community and Convention Center. There were interesting sessions on expanding the role of women in Mathematics, technology usage in the classroom, and articulation efforts between institutions.

She also attended a conference held in Utica, NY by the Academy for Leadership, from February 10-15.

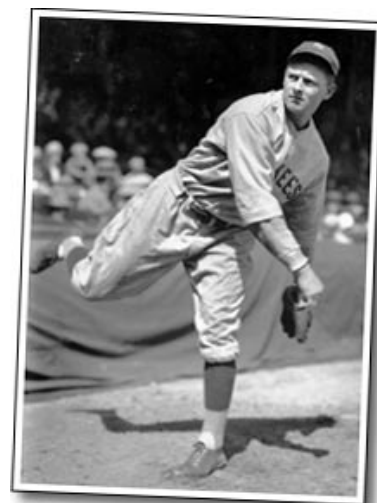
DON'T WAIT(E) FOR HOYT

A PRESENTATION FOR NY SABR

February 23, 2002

By **Steve Krevisky**
Middlesex Community College, Middletown, CT
SKrevisky@mxcc.commnet.edu

In this presentation, we examine the career and statistics of Hall of Fame pitcher Waite Hoyt, who was born in Brooklyn on Sept. 9, 1899, or 9/9/99, which is quite unique. He also played for all 3 major league New York teams, although his time with the NY Giants at the start of his career was brief. He played with and against some of the all-time greats, such as Jimmie Foxx, Al Simmons, Lefty Grove, Babe Ruth, Lou Gehrig, Paul Waner, and others. We will analyze his pitching statistics, looking at ERA compared to the team and league, Wins Above The Team, and Winning % compared to the team. We will also examine his Hall of Fame credentials.



Hoyt's peak year came in 1927, as the Yankees cruised to the pennant with a 110-44 record, and a .714 winning %. Their Runs Scored -- Runs allowed differential was an astonishing +376! While their offense has gotten most of the publicity, their staff led the AL with a 3.20 ERA. The league ERA was 4.14. Hoyt was the ace of this staff, as he went 22-7, with a .759 winning %, 2.63 ERA (2nd in league), 23 CG in 32 starts, and was 3rd in fewest BB/G, and 4th in OOB. Curiously, his K/W ratio wasn't that good -- he only K'd 100+ batters in a season twice in his entire career! Hoyt's erstwhile mound support came from Pennock (19-8), Shocker (18-6), Reuther (13-6) and Pipgras (10-3). Wilcy Moore had 19 wins and 13 saves, and the Bombers had the top 3 in ERA. In addition, the Pinstripe staff gave up the fewest BB in the AL as well as the fewest Runs Allowed. Hoyt was 23-7 in 1928, but his ERA jumped to 3.36. Waite hurled 200+ innings in each season from 1921 through 1929.

Hoyt slumped in 1929-1930, going to the Tigers in 1930, then to the powerhouse A's in 1931. This was the team who dethroned the Yankees, winning 3 consecutive pennants from 1929 through 1931. Waite went 10-5 for the '31 A's, which boasted Grove, Earnshaw and Walberg as 20+ game winners. Waite then came to Brooklyn and NY in 1932, then Pittsburgh in 1933. Hoyt really rebounded in 1934 with the Pirates, as he became the ace of their staff that year. The Bucs went 74-76 for a .493 winning %,

and a staff ERA of 4.19, while the league ERA was 4.06. They were a 5th place team, not much ahead of the Stengel-managed Dodgers. Hoyt went 15-6, with a .714 winning % (second in the NL), a 2.93 ERA (3rd in the NL), with 8 CG in 15 starts. He had 3 SHO and 5 saves. Hoyt was 5th in OOB, walked only 43 batters, with a career high 105 K's. He was the only Pirates' starter who was substantially over .500.

Hoyt's career #'s are quite similar to Jess (Pop) Haines, also a Hall of Famer. Consider the following stats:

Player	W	L	%	ERA	W	K	K/W	SHO	SVS
Hoyt	237	182	.566	3.59	1003	1206	1.2	26	52
Haines	210	158	.571	3.64	871	981	1.13	24	10

The comparison to George Uhle might be interesting as well. Haines also peaked in 1927!

Another interesting stat to consider is WINS ABOVE THE TEAM, which tells you how many wins ABOVE THE TEAM that the "average pitcher" would not have gotten (according to TOTAL BASEBALL). This is calculated by taking the pitcher's winning %, subtracting the team's winning % in games not involving the pitcher, then multiplying by the # of pitcher's decisions that year. For Hoyt's 1927, we calculate this measure as follows: Hoyt went 22-7 for a .759 winning %. The Yanks were 110-44, so without Hoyt, they were 88-37. Thus, Hoyt's WINS ABOVE THE TEAM = $\{22/29 - 88/125\} * 29 = \{.759 - .714\} * 29 = (.055) * 29 = 1.595$. On such a strong team, it's hard to win so many games above the team! Hoyt's ERA of 2.63 was 1.51 below the league ERA of 4.14, and $2.63/4.14 = .635$. Hoyt's ERA was .47 below that of his team (3.20).

In comparison and contrast, we do this also for Hoyt's successful 1934 season for the Pirates, who boasted the Waner brothers, Arky Vaughn and Pie Traynor, but not much pitching. Hoyt went 15-6 on a team that was 74-76 overall, and thus 59-70 without Waite. Therefore, his WINS ABOVE THE TEAM = $\{15/21 - 59/129\} * 21 = \{.714 - .457\} * 21 = (.257) * 21 = 5.397$, so he did quite well, admittedly on a weak team, some of whose batters he would have faced in the 1927 Series! Hoyt's 2.93 ERA was 1.13 below the league ERA of 4.06, and $2.93/4.06 = .722$ (the lower this is, the better). Waite's ERA was 1.26 below his team's 4.19 ERA as well!

Hoyt pitched for about 20 years, and eventually was elected to the Hall of Fame by the Veterans Committee in 1969. Pop Haines made it in 1970. Was Waite a Hall of Famer? One might question this, since Waite had a long wait until he reached the Hall. He entered the Hall along with Musial and Campanella -- rather good company to be in!

Other pitching stats could also be examined, along with analyzing Ruffing, Pennock, Gomez and other notable Yankee hurlers of that era. Let me know your thoughts on these matters!

Placement Methods and Student Success in Elementary Algebra

By *Patricia Hirschy*

It all began with a casual conversation in front of the office microwave. "I'm thinking of doing a research study on English courses," commented Qing Mack, Asnuntuck's Director of Institutional Research (IR). "How about doing one in math?" I suggested. Thereupon started a very interesting year and a half of conversations, computer work, and digging in student folders. We began with the question, "Is there a relationship between student success and placement methods in elementary algebra (Algebra I)?" Seems a simple enough question, right? Sure, as long as the data is ready and available. But then, I have a feeling that you all knew that answer already. Asnuntuck has three placement methods for its elementary algebra course: (1) C grade or higher in prealgebra, (2) appropriate Accuplacer scores in the Arithmetic and Elementary Algebra sub-tests, or (3) SAT score of 400 or higher. Do students in each of the three groups have equal success rates in elementary algebra? Success was defined as earning a C grade or higher, since that grade is needed for the student to be able to register for the next level math course.

We chose our sample to be students registered in elementary algebra for the Fall 1999 term. The basic information we needed was which students were enrolled in the course, what grade they earned, and how they were placed in the course. As part of the placement information, we needed prealgebra grades, Accuplacer sub-tests and scores, and SAT scores. Because math and IR types tend to be nosy people, we decided to also collect information on gender, age, major, student status (fulltime or part-time), and student year (first-year defined to be 24 or fewer credits).

We next had to face the intimidating task of retrieving data from the Banner software system. This activity uncovered some interesting phenomena. Seven of the 148 students who were listed as enrolled in the course seemed to exist only in the mind of Banner. These students never earned a grade for the course, and there was no indication in the student folder (if it existed) that the student had ever registered in the course. Also, all of Asnuntuck's Accuplacer scores were repeated twice in the system. Same scores, same sub-tests, same date -- only a different capital letter in front of the score. Initially we thought these students had all taken the tests at one of the other community colleges and then transferred to Asnuntuck. But no, it was just that the scores were all duplicated. We eventually identified a contact in the Central Office and (hopefully) got that problem straightened out. We also discovered that Accuplacer scores are in Banner only if someone entered them (surprise!). Same with SAT scores (surprise squared).

After gathering all the usable information we could from Banner, we next tackled student folders. This part of the study was *deja vue* from the days of data collection before computers. Locate the file cabinet, pull out the drawer, rustle through folders, pull one out, check to make sure it is the right folder, and leaf through the folder page by page.

Write down the information found (if it was there), and go on to the next student name. This process was repeated several times and in several locations. Student folders are kept in different places, and sometimes the folder was not available at the time we were searching.

When Qing and I were satisfied that we had gleaned every morsel of useful information that could be found within the four walls of the college, we proceeded to the fun part of conducting the descriptive and inferential statistics. Bring on SPSS! And now we get to the part that you have all been patiently waiting for -- the results. Of the 148 students who were enrolled in elementary algebra, there were 107 students who were placed according to one of the three placement methods. Compared to all of the students registered at Asnuntuck in Fall 1999, the elementary algebra group tended to be younger and first-year students. This was good news, because I had previously thought that students were holding off their math courses until the last possible semester of their Asnuntuck career. The other good news was that the results of the Chi-square tests indicated no statistically significant difference in success rates among the three placement methods. Unfortunately, there was quite a range of success rates. The overall success rate for students placed by the SAT score was 60%, placed by the Accuplacer score was 43.2%, and placed by the prerequisite course was 50.5%. The small sample of students placed by SAT score (n=20) prevented successful completion of several Chi-square computations. Results of the Chi-square tests that were performed confirmed common perceptions, even if the results were not statistically significant.

- Evening students had a higher success rate than their day counterparts (63.9% compared to 43.7%).
- Female students earned a higher success rate than male students (56.1% compared to 41.5%).
- Non-traditional students who were 22 years and older earned a higher success rate than the traditional students (61.7% compared to 41.7%).
- The highest success rate occurred with non-traditional students placed by Accuplacer test score (78.9%).
- The lowest success rate occurred with day, male students with a prealgebra prerequisite (20%-ouch!).

I've always felt that the measure of a good research study wasn't in the answer to the question posed for the study, but instead in the number of questions subsequently generated by the results. Using this criterion, Qing's and my research study was a great one! We have many ideas for further studies that will put us back navigating through Banner and searching through student folders. Lest you think this was all drudge work, let me assure you that Qing and I shared many good times together as we slogged through the data collection. Chatter and laughter could be heard many times emanating from Qing's office, and it sure wasn't because Banner said something funny! I look forward to tackling more studies with Qing, and then writing more articles for MATYCONN!

COMING ATTRACTIONS



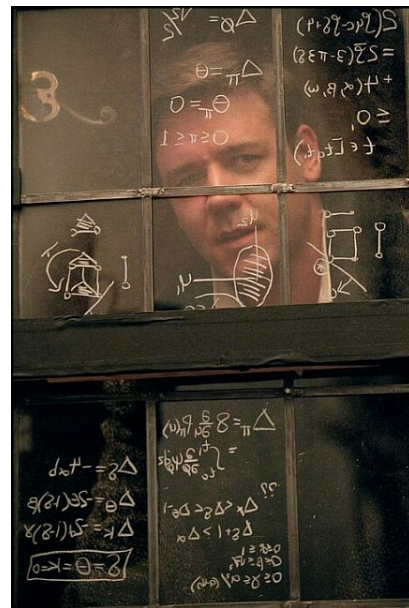
John Bagioni, seasoned science teacher at Wolcott High School, will be presenting "REAL-TIME WEATHER" on May 10 at the MATYCONN annual Spring Meeting. John's passion for the outdoors appears to have led him down the path to becoming a consulting meteorologist. Countless days of observing and photographing cloud formations, recording local climate data and studying disruptive storms during his teenage years solidified his desire to learn as much about the earth sciences as possible. He received a Bachelor of Science degree in Earth Science from C.C.S.U. In 1992, he received "A

Celebration of Excellence" award for the development of a hands-on real-time meteorology course called "Real-Time Weather."

For the past 20 years, John has run a private weather consulting business called Fax-Alert Weather Service. He provides a variety of weather information to clients such as oil companies, construction firms, Public Works Departments, snow removal contractors, Superintendents of Schools, insurance companies, telecommunication providers, emergency response teams and law offices.

John's presentation will demonstrate the incredible role live (real-time) Internet weather data can play in the instruction of meteorological concepts, along with the unavoidable connection between mathematics and weather.

Professors Barb Caserta and "Bobby" Lynott, movie buffs from NVCC, will treat us to a presentation of "MATH IN THE MOVIES." Their finite collection of movie clips will jog our memories and tickle our fancies as we *dine* on sumptuous pizza.



MATYCONN Nominating Committee's

PROPOSED SLATE OF OFFICERS for the 2002-2003 Academic Year

Voting will take place at the May 10, 2002, Meeting at Naugatuck Valley

President: Bob Lynott (Naugatuck Valley)

Write-in _____

Vice President: Alice Burstein (Middlesex)

Write-in _____

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The American Mathematical Association of Two-Year Colleges

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