

The **History** of
AMATYC

1974-1999

American
Mathematical
Association of
Two-Year
Colleges



The emblem design on the front cover is from the official AMATYC banner, designed by Professor Vivian M. Dellinger, Florida JC at Jacksonville. This banner was selected in a nationwide contest among AMATYC members and their colleges. The first presentation was made at the 10-year anniversary meeting in New York, 1984.

The AMATYC History was updated in 1999 by
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Table Of Contents

I. The History of AMATYC, 1974-1999	1
Introduction	1
AMATYC Begins	2
The First Annual Conference	3
Increased National Stature	4
<i>The AMATYC Review</i> Begins	5
CBMS Membership	6
Strong Growth	7
Workshops Become Popular	8
Tenth Anniversary	9
Annual Scholarship Instituted	10
A Second Annual Summer Institute Established	11
Special Issue of <i>The AMATYC Review</i>	11
AMATYC Committees	11
AMATYC's Growth Continues	12
Regional AMATYC Conferences and New Summer Institutes	13
AMATYC Turns to Policy Issues and National Involvement	14
AMATYC Office Opens	16
The American (mathematical) Revolution	16
Affiliate Institutes and Workshops	17
AMATYC's 20 th Anniversary	18
Celebration of the <i>Standards: Crossroads in Mathematics</i>	18
AMATYC Goes Online	20
AMATYC Moves Into the International Mathematics Education Community	21
Moving Ahead—Implementing the <i>Standards</i>	23
Recognizing Teaching Excellence	23
Connecting Colleagues, Institutions, and Programs	25
Spotlight on Expanded Opportunities for Members	26
AMATYC Looks to the Next Millennium	27
The Past and the Future	28

II. Mathematics Excellence Award Recipients	30
III. AMATYC Teaching Excellence Award Recipients	31
IV. AMATYC Conference History	32
V. AMATYC Presidential History	34
VI. AMATYC Membership	36
VII. AMATYC Affiliate Organizations	37
VIII. Grants Awarded to AMATYC	39
IX. AMATYC Foundation Board Members and Corporate Donors ..	41
X. AMATYC's Accomplishments 1992–1998	43
XI. AMATYC's Goals and Objectives 2000–2005	51
XII. Glossary of Abbreviations	53

I. THE HISTORY OF AMATYC, 1974-1999

INTRODUCTION

During the late 1960s and the decade of the 1970s, two-year colleges blossomed from their early beginnings and became recognized as an important educational alternative in the United States. It was not surprising that, out of necessity, the same years witnessed the formation of many statewide two-year college mathematics associations. In 1967, New York state college mathematics teachers formed the New York State Mathematics Association of Two-Year Colleges (NYSMATYC) to act as a primary resource and decision making body for their mushrooming two-year college community. The Pennsylvania State Mathematics Association of Two-Year Colleges (PSMATYC) was formed in 1970. One year later, the Oklahoma Junior College Mathematical Association (OJCMA) was formed as an offshoot of a wider-based organization and was aimed at the improvement of instruction, better communication, and articulation. In 1972, the California Mathematics Council, Community Colleges (CMC³) became the state's first association formed by and for two-year college mathematics instructors. The Ohio Mathematics Association of Two-Year Colleges (OhioMATYC) was also formed in 1972. MATYC associations flourished in Connecticut, Florida, Illinois, Maryland, Massachusetts, and Washington State.

Many of these organizations were formed because of the encouragement and impact of The Mathematics Associations of Two-Year Colleges (MATYC) Journal which began in 1967, edited by George Miller and Frank Avenoso (Nassau Community College, NY) as a New York State newsletter. In 1970, this publication, *The MATYC Journal*, expanded to include nationwide editorial representation and input. The Journal's articles, letters, and editorials reflected the long-felt need in two-year college educators to develop a separate national association to complement existing mathematics interest groups.

In 1973, *The MATYC Journal* began planning for a national forum which would call together members of existing MATYC groups as well as other interested parties. The first national conference, "Symposium for Two-Year College Mathematics Educators," organized by Phil Cheifetz and other MATYC Journal board members, was a huge success with 283 educators attending from all areas of the country, including Hawaii and Alaska. Attendees of that New York City meeting held in April, 1974, participated in the birth of the American Mathematical Association of Two-Year Colleges (AMATYC).

AMATYCBEGINS

The evening meeting on April 25, 1974, officially entitled, “*The MATYC Journal* and the Two-Year College Movement,” witnessed the first stirrings of AMATYC. At that meeting, Herbert Gross of Bunker Hill Community College (MA) responded to a discussion generated by the audience with an impassioned plea to two-year college mathematics educators to “stand up and be counted!” Joe Cicero of Clayton Community College (GA) and Bob Bitts of Arapahoe Community College (CO) were the first to respond to Gross, but Gross’s enthusiasm and charisma inspired the entire audience. By acclamation, Gross was chosen to chair a steering committee of approximately 60 persons interested in forming a national association of two-year college mathematics educators.

On April 26, at the first official meeting of the steering committee, John Massey of Chesapeake Community College (MD) gave AMATYC its first official breath of life: “I move that this body at this time set about to form an organization which will be the national voice of two-year college mathematics teachers and. . . further that we set out to name this organization and to identify its goals and purposes.” It was moved also that “the national association form two committees, a constitution committee and a conference committee, and that three officers,



Sr. Clarice Sparkman (CA) and others at the 1974 founding meeting

president, vice-president and treasurer, be appointed. Herb Gross, John Massey, and Sister Clarice Sparkman of San Jose City College (CA) were nominated respectively for these positions. The nominations were unanimously approved by those present.

In response to a prevailing theme of the conference, new president Gross established a Developmental Mathematics Curriculum Committee (DMC) as the first academic committee of AMATYC and appointed Frank Greene of Essex County Community College (NJ) and Richard Hyman of Everett Community College (WA) as co-chairpersons. Other committees met at this time also: the Constitution Committee chaired by Robert Bitts of Arapahoe Community College (CO) and the Conference Committee chaired by William Drezdson of Oakton Community College (IL).

The Constitution Committee, comprised of Sister Sparkman, John Massey, Bob Bitts, Donald Cohen, Mike Colchiski, and Mike Totoro, met in Colorado in October, 1974. This committee officially named the organization AMATYC and formulated a proposed constitution. The constitution, which was formally ratified in October, 1975, established these fundamental purposes of the new association:

1. To provide a national forum for the exchange of ideas to further develop and improve the mathematics education of students in two-year colleges.
2. To coordinate activities of affiliated organizations on a national level.
3. To promote the professional development and welfare of its members.

The constitution provided for regional vice-presidents, along with the offices of president, president-elect, treasurer, secretary, and past president. A delegate assembly composed of state delegates and representatives from affiliated organizations was formed to function as the policy-making body of the association.

The Developmental Mathematics Curriculum (DMC) Committee with active members Frank Greene, Richard Hyman, Alice Berridge, Jim Baldwin, Juliana Corn, Carmine DeSanto, Bob Rosenfeld, Mike Totoro, Dennis Christy, and a large group of supporting members, planned and organized a survey of existing remedial programs in two-year colleges. This 64-page report was published in October, 1975 by AMATYC, and marked the release of the organization's first study.

THE FIRST ANNUAL CONFERENCE

AMATYC's first annual meeting was held in Chicago, from October 29 to November 1, 1975, with approximately 300 people in attendance. Bill Drezdson chaired a large committee which handled all details of the conference. Phil Cheifetz, who had been instrumental in organizing the successful New York City conference the previous year, provided input and counsel. The following members

were actively involved in planning the conference: John Bradburn, Martin Brown, Teresa Butzen, Allan Christenson, Joseph Cicero, Ann Dice, William Dolid, George Dorner, Elaine Drezdson, Hal Hackett, Rudy Maglio, Mike McSwigan, Ray Moehrlin, Charlene Pappin, and Sister Lorraine Veldenz.

At the conference, Joseph Lipson, University of Mid-America (NE), delivered the keynote address on "The Emerging Student." Thirty-six sessions were held with speakers representing 14 states. At the general business meeting, the constitution was ratified and the following officers were elected: Sister Sparkman, president; Joseph Cicero, president-elect; Mike Colchiski, secretary; and Phil Cheifetz, treasurer.

The second annual meeting was held in San Francisco, October 26-30, 1976. Conference chair Charles Miller and his committee arranged pre-conference tours and workshops including tours of the individual study center, computer center, space science center, and electronics museum at Foothill College and of the learning centers at West Valley College, Los Medanos College, and Contra Costa College. At the general business meeting, President Cicero began his term of office with new officers: Phil Cheifetz, president-elect; Mike Colchiski, secretary; and Brandon Wheeler, treasurer; and regional vice-presidents: Bob Bitts, central; Gene Cooper, southeast; John Massey, mid-Atlantic; Sam McInroy, northeast; Ray Moehrlin, midwest; Gus Pekara, southwest; Jim Snow, northwest; and Ray Wuco, west. Amber Steinmetz and James Baldwin were officially appointed as DMC committee co-chairpersons. Plans for DMC program evaluation guidelines and for a multiple choice test-item pool were developed.

INCREASED NATIONAL STATURE

Discussion of the inter-relationship of AMATYC and the National Science Foundation (NSF) was an important part of the San Francisco meeting. President Cicero pointed out that NSF had never funded a two-year college mathematics curriculum program. There was evidence that NSF proposals were reviewed and evaluated by mathematicians who were unaware of the needs and problems of the two-year college. Cicero began to establish lines of communication with NSF. To this end, on March 3, 1977, he addressed the Senate Special Subcommittee on Science, Research and Technology.

AMATYC's third annual meeting was held in Atlanta, October 11-15, 1977. Conference chair Tom Thomson and committee members arranged for a two-day pre-conference workshop on "College Mathematics Teaching and the Development of Reasoning" presented by Phil McGill and Mel Thornton. There were 71 different conference sessions. Norman Schaumberger, Bronx Community College (NY), Ronald Graham of Bell Labs, and Edwin Moise addressed the assembly at general sessions.

At the general business meeting President Cicero transferred the presidency to Phil Cheifetz and introduced the new officers: Mike Colchiski, president-elect; Brandon Wheeler, treasurer; Mike Totoro, secretary; and regional vice-presidents: Chris Boldt, Cliff Fairley, James Kropa, Al Liberi, John Massey, Elaine Pavelka, Amber Steinmetz, and Ray Wuco. Awards were presented to Jim Baldwin, Amber Steinmetz, and Tom Thomson for their outstanding service to AMATYC.

The chairpersons of the following committees made important reports: Developmental Mathematics Committee, Amber Steinmetz and Jim Baldwin; Grants, Richard Lefkon and Jim Snow; Constitution, Joe Menard; Education, Tom Carnevale; Membership, Terese Butzen; Public Relations, Alice Berridge; Liaison, Al Utterback and Vernon Hood; Newsletter, John Pace; and Conference, Tom Thomson and Alice Hagood. President Cicero announced that California, Florida, Tennessee, Texas, New York associations, The American Symposium of Publishers, the National Council of Teachers of Mathematics (NCTM), and the Mathematical Association of America (MAA) Board of Governors had invited AMATYC participation at their respective meetings.

AMATYC's annual conference for 1978 was held in Houston, October 11-14. Conference chair Alice Hagood and committee members planned tours of local colleges and of NASA's Johnson Space Center. More than 500 people attended the different parts of this conference. There were 58 speakers and over 25 book publishers and manufacturer representatives displaying their wares. Morris Kline, Professor Emeritus, New York University, addressed the body in a keynote address on "Saving Undergraduate Education" and Astronaut Lt. Col. Robert F. Overmyer gave the concluding address. At the general session president Cheifetz announced that membership of AMATYC now exceeded 500.

Awards and recognition of outstanding service to AMATYC were made to John Bradburn, Terese Butzen, Joe Cicero, Bill Drezdson, Alice Mae Favro, Alice Hagood, Mike Totoro, and Brandon Wheeler. Results of the AMATYC election were announced: Mike Colchiski, president; Bill Drezdson, president-elect; Brandon Wheeler, treasurer; Mike Totoro, secretary; and regional vice-presidents: Jim Baldwin, Chris Boldt, George Cocks, Bob Carson, Jim Kropa, Elaine Pavelka, Amber Steinmetz, and Ray Wuco.

THE AMATYC REVIEW BEGINS

The AMATYC Newsletter, first published in fall, 1977, by John Pace and later by Alice Berridge and Doug Brown, gave news of AMATYC committees and reports from executive board members. The format was changed in November, 1978, to a booklet, and the sections on reports and announcements were expanded. In 1979, *The AMATYC Review* emerged as a full-fledged journal with Alice Berridge, Doug Brown, and Alice Hagood as the first editorial staff.

A Constitution Committee, chaired by George Cocks and Jim Baldwin, drew up a revised constitution which was formally accepted by the membership in a ballot in fall, 1979. The new Constitution expanded the Delegate Assembly to include representatives from state affiliate organizations in addition to state representatives appointed by the AMATYC regional vice presidents. The delegates responsibilities were expanded to solicit membership in addition to the efforts of the Membership Committee, chaired by Alice Berridge (NY).

More than 300 members attended the 1979 conference held in San Diego, October 18-20, to hear 61 speakers at 54 different sessions. The conference arrangements were made by Joan Adaskin, Tom Carnevale, and Betty Otten. Moshe F. Rubinstein, University of California at Los Angeles, who made the conference keynote address, was highlighted in the second issue of *The AMATYC Review*, "Moshe Rubinstein, Master Teacher" by Roger Breen of Florida Junior College. The concluding address was by Peter A. Griffin, California State University: "52 Things To Remember When Playing Blackjack."

The newly elected officers were Bill Drezdson, president; Brandon Wheeler, president-elect; Amber Steinmetz, treasurer; Michael Totoro, secretary; and regional vice-presidents: Merilee Adams, James Baldwin, George Cocks, Patricia Dyer, Elaine Pavelka, Stephen Rodi, Karl Smith, and Will Worthey. Officers began serving two-year terms in accordance with a constitutional amendment passed in 1979.

CBMS MEMBERSHIP

Several regional newsletters were published for the first time in the early 1980s with the purpose of supplying local AMATYC news to members. Regional vice-presidents helped increase the effectiveness of the Delegate Assembly by appointing a wide network of campus representatives. Also at this time, the Conference Board of the Mathematical Sciences (CBMS) unanimously voted to invite AMATYC to affiliate membership.

The DMC Committee continued its varied sub-committee activities on minimal competencies, hand-held calculators, evaluation models, teacher qualifications, and test-item pools under the direction of new chair Patricia Dyer. Annual DMC reports and a survey done in 1975 were filed with ERIC.

Also in 1979, Phil Cheifetz was appointed Executive Director, a position AMATYC experimented with for two years and discontinued in 1981 when Cheifetz had to resign for personal reasons. The year 1979 also marked the establishment of institutional memberships. Sixteen institutions were honored in volume 1, number 2, of *The AMATYC Review* as the first AMATYC institutional members.

The 1980 conference was held in Washington, D.C., October 10-13. Its success was attributed to chairperson Josephine Gervase of Manchester Commu-

nity College (CT). Featured speaker was Kyo Jhin, United States Department of Education, who addressed the need for government support of proposals from two-year colleges. At the conference, Brandon Wheeler assumed the president's role. Karen Sharp and Steven Terry were appointed to fill unexpired terms as the Midwest and Northwest region vice-presidents, respectively. New AMATYC committees were initiated at the Delegate Assembly meeting: AMATYC and Legislative Action; Encouragement of Women in Mathematics, chaired by Marilyn Mays (TX); and Computers in Math, chaired by Donald Coscia (NY).

In April, 1981, the AMATYC executive board accepted the resignation of president Brandon Wheeler and appointed James Baldwin as president pro-tem. Spring, 1981, also marked the development of two executive board manuals: a policy handbook and a comprehensive planning manual for conferences were developed through long hours of board deliberation, under the direction of Amber Steinmetz.

In the summer of 1981, AMATYC had grown to 849 individual members and 74 institutional members. Plans were finalized for the October 7-11, 1981, conference in New Orleans under the direction of Gail Jones of Delgado Community College (LA). The tradition of an annual breakfast began at this conference.

At the 1981 New Orleans conference James Baldwin became president. Other officers beginning their terms were: Amber Steinmetz, president-elect; Patricia Dyer, treasurer; Alice Berridge, secretary; and regional vice-presidents: Ray Collings, George Cocks, Josephine Gervase, Stephen Rodi, Karen Sharp, Steven Terry, Karl Smith, Will Worthey. Bill Leonard, California State University at Fullerton, launched the conference with his keynote address "Standing by the Seashore." Workshops and 50 sessions were attended by the more than 300 participants. At the Delegate Assembly, plaques were presented to past presidents Phil Cheifetz, Mike Colchiski, and Bill Drezdson and to AMATYC committee workers Judy Ackerman, Alice Berridge, Jerry Blemker, Jim Bulwan, Ron Davis, Josephine Gervase, Alice Hagood, Margie Hobbs, Kenneth Hogan, Bill Jones, Gail Jones, and Paul Thomas.

STRONG GROWTH

During 1981-1983, AMATYC grew in membership to 951 individual members and 78 institutional members. President James Baldwin led a systematic and successful effort to bring AMATYC into the national mathematics education arena. With increased joint efforts with the MAA and NCTM, AMATYC became known as one of the three principal organizations in the United States concerned with mathematics education.

The 1982 Las Vegas conference was a success as academic committees continued their work and issues were discussed in 50 workshops and lectures.

Some of the major topics of concern were: (1) academic computers and how to enhance the use and functioning of computers in a two-year college course of study; (2) the developmental mathematics curriculum and ways to improve and develop curriculum materials, as well as diagnostic and evaluative procedures, for remedial two-year college students; (3) promotion of relevant and quality professional training of two-year mathematics teachers; (4) encouragement of women in mathematics to enhance the position of women mathematicians; (5) a student mathematics league to encourage student excellence at the two-year college via an annual mathematics competition and other activities; (6) technical mathematics to improve the two-year college technical mathematics programs.

Shirley Trembley of Bakersfield College (CA) was general chair for the Las Vegas Conference. Program chairs were Margie Hobbs and Cheryl Cleaves of State Technical Institute at Memphis (TN). Jerry Blemker of Vincennes University (IN) continued as exhibitor chair, a service he had offered to AMATYC for many years. Dr. Lester H. Lange keynoted the conference with his "Mathematical Stories." Las Vegas also witnessed another AMATYC first: the Committee for the Encouragement of Women in Mathematics created a roommate network to promote networking and encourage conference attendance.

WORKSHOPS BECOME POPULAR

November, 1983, found AMATYC in Orlando, Florida, with conference attendance of 500. Bill Jordan of Seminole Community College (FL) was conference chair assisted by program chair Charles Luttrell. Keynoter John Neff of Georgia Institute of Technology intrigued the audience with his question "Where Does Mathematics Lead Us?" Norman Schaumberger of Bronx Community College (NY) entertained a packed AMATYC breakfast with humorous vignettes from his years of teaching.

One Orlando conference highlight was the joint AMATYC-MAA panel on curriculum organized by AMATYC president James Baldwin with panelists Geoffrey Akst, John Bradburn, Solomon Garfunkel, Henry Pollak, Amber Steinmetz, and Gail Young. Many members arrived early for a full day of six "pre-conference" workshops. In addition to the 45 individual sessions, computer workshops and sessions were especially popular.

New officers for 1983-1985 were announced at the Orlando conference to take AMATYC into its second decade: Amber Steinmetz, president; Stephen Rodi, president-elect; Patricia Dyer, treasurer; Karl Smith, secretary; James Baldwin, past-president; and regional vice-presidents: Ray Collings, Dale Ewen, Joyce Friske, Herb Garrett, Larry Gilligan, George Jain-Cocks, Steven Terry, and Will Worthey. Jay Huber was appointed editor of *The AMATYC Review*.

During Amber Steinmetz's presidency AMATYC was the recipient of a Sloan Foundation Grant which led to the first summer institute at Rexburg, ID. Ricks College was selected as the site of the Institute due to the enthusiasm of Steven Terry (Northwest region vice president) and his desire to host the institute on his campus. Karen Sharp (Mott Community College, MI) served as the project director of the grant. This summer institute proved so popular that it became an annual AMATYC institute.



Ricks Summer Institute: Karen Sharp; Mr. & Mrs. Steven Terry; Dan Thomas, Instructor

TENTH ANNIVERSARY

The annual AMATYC conference returned to New York City in October, 1984, to celebrate the tenth anniversary of AMATYC. The conference chair, Allen Angel, presided over a very successful conference. By the 1984 conference the membership of AMATYC had grown to 1,000 individual members, 20 state affiliates, and 75 institutional members. Black and gold were chosen as the official colors of AMATYC. The Mathematics Excellence Award was established to recognize educators who have made outstanding contributions to mathematics or mathematics education at the two-year college, and the first award was presented to Phil Cheifetz by President Amber Steinmetz. National recognition was extended to AMATYC with invitations to participate in two national conferences: the CBMS Conference "New Goals for Mathematical Sciences Education" (1983), and the Sloan Conference titled "New Directions in Two-Year College Mathematics" (1984).

The next conference (1985) was held at the Hyatt Regency in Memphis, TN, under the direction of conference chairs Margie Hobbs and Cheryl Cleaves. It was announced that the new board consisted of Stephen Rodi, president; Karl Smith, president-elect; Amber Steinmetz, past-president; Cheryl Cleaves, secretary; Karen Sharp, treasurer; and regional vice-presidents: Allen Angel, Dale Ewen, Joyce Friske, Wanda Garner, Herb Garrett, Margie Hobbs, Donna Szott, and Steven Terry. Don Albers was given the second Mathematics Excellence Award.

In 1985, AMATYC published a booklet, *Methods of Evaluating College Remedial Mathematics Programs*, and the official newsletter, the *AMATYC News*,

began under the leadership of Dale Ewen. A sub-committee of the Education Committee, chaired by John Impaglianzzo, presented their report titled "The Two-Year College Teacher of Mathematics." KYMATYC joined the list of AMATYC affiliates in 1985. Don Cohen was appointed editor of *The AMATYC Review*, with Paul Dudenhefer, production manager, and Eleanor Young, advertising manager.

The 1986 conference held in the west under the shadow of the Golden Gate Bridge in San Francisco, CA, had 602 attendees. The general chairperson for this conference was Hal Andersen. Jean Burr Smith was the recipient of the Mathematics Excellence Award, and it was also announced that henceforth this award would not be given more frequently than every other year. The Committee for the Encouragement of Women in Mathematics changed its name to the Equal Opportunity in Mathematics Committee and its purpose was expanded to include mathematics education issues related to ethnicity as well as gender.

Kansas City was the site for the 1987 conference which was chaired by Forrest Lowe. New officers announced in Kansas City were: Karl Smith, president; Dale Ewen, president-elect; Stephen Rodi, past-president; Cheryl Cleaves, secretary; Karen Sharp, treasurer; and regional vice-presidents: Allen Angel, Ron Beeler, Wanda Garner, James W. Hall, Margie Hobbs, Marilyn Mays, Jim Newsom, and Barbara Poole.

ANNUAL SCHOLARSHIP INSTITUTED

Karl Smith announced the establishment of an annual Charles D. Miller Memorial scholarship in the amount of \$3,000 sponsored by Scott, Foresman/Little, Brown Publishers. The recipient of the scholarship would be the winner of the Student Mathematics League Contest, an annual mathematics competition that gives special recognition to two-year college mathematics students.

AMATYC Membership in 1987 reached 1,500 members. A presidential committee was appointed to develop innovative ideas for increasing membership. It was decided to undertake a major membership drive, and over the next two years membership grew to almost 2,000 members. Efforts were also made to formalize the grant writing process in order to position the organization for future developments in grants for two-year colleges. President Karl Smith made an increased awareness of the need for congressional support a priority of his term of office. In 1988, AMATYC became a member of the Council of Scientific Society Presidents (CSSP).

A SECOND ANNUAL SUMMER INSTITUTE ESTABLISHED

Under the leadership of Paul Calter, a second institute was established at Vermont Technical College in 1988. Conference planning was considerably enhanced by appointing a conference coordinator who would act as a liaison between the board and the conference chairperson. The first coordinator appointed was Cheryl Cleaves.

One of the most pressing issues of the time was the need for information about placement and assessment. Karl Smith appointed a Task Force on Placement and Assessment consisting of Lou Hoelzle, chairperson, Rikki Blair, Cheryl Cleaves, Dale Ewen, Wanda Garner, Bill Jordan, and Stephen Rodi. This committee heard testimony, collected evidence, and grew in size and interest, until in 1990 it was made a standing AMATYC committee.

The first international conference was held in Calgary, Canada, in 1988. Murray Klamkin was the keynote speaker, and Bill Leonard was the breakfast speaker. David Ropp, Rock Valley College, was the first student recipient of the \$3,000 Charles D. Miller Memorial Scholarship. Peter Lindstrom was given the Mathematics Excellence Award. The conference chairpersons, Steven Terry and Shao Mah, brought us all into the spirit of Western hospitality with white Calgary western hats evident everywhere. New affiliates AlaMATYC, GMATYC, IMATYC, KAMATYC, NCMATYC, NYSMATYC, and ORMATYC were welcomed into the AMATYC fellowship.

SPECIAL ISSUE OF *THE AMATYC REVIEW*

Under the leadership of Don Cohen, editor of *The AMATYC Review*, the journal continued to grow and prosper. A special issue, *Two-Year College Mathematics Education for the 1990s*, was published as AMATYC assumed a greater leadership position for two-year college instructors. A donation of \$5,000 from Hewlett-Packard made this issue possible.

AMATYCCOMMITTEES

Committees and affiliates have added to the strength of AMATYC. Many of the academic committees were divided into several active subcommittees.

The Academic Computing Committee (Wade Ellis, Jr. and Don Hutchinson, co-chairpersons) became a resource for both questions and answers pertaining to the instructional use of computing machinery in the mathematics classroom. The subcommittees of this committee were the Communications Subcommittee, the Conference and Institute Subcommittee, and the Grants Subcommittee.

The Developmental Mathematics Committee (Bob Malena, chairperson) actively sought to improve the quality of instruction and the student success rate in developmental mathematics courses by increasing communication among individuals involved in this endeavor and by improving methodology. The five subcommittees were the Computer Concerns Subcommittee, the Evaluation Subcommittee, the Hand-held Calculator Subcommittee, the Minimal Competencies Subcommittee, and the Student Learning Problems Subcommittee.

The Education Committee (William Schooley, chairperson) investigated the concerns of and promoted quality professional training of two-year college mathematics faculty and department chairs. The subcommittees were the Chairpersons Subcommittee, the Library Subcommittee, the Qualifications Subcommittee, and the Professional Concerns Subcommittee.

The concerns of the Equal Opportunity in Mathematics Committee (Hanna Schott, chairperson) were to address issues of women and minorities regarding their positions in mathematics and mathematics education. The subcommittees were the Womens' Issues Subcommittee and the Minorities' Issues Subcommittee.

The Placement/Assessment Committee (Lou Hoelzle, chairperson) was concerned with placement and assessment testing in mathematics. The main function was to serve as a resource and support group for members and their institutions who are dealing with the questions of placement testing and assessment.

The Student Mathematics League (Steve Blasberg, chairperson) encouraged student excellence at two-year colleges via an annual mathematics competition and other activities.

The Technical Mathematics Committee (Ray Collings, chairperson) provided a national contact point and forum for those who have an interest in technical mathematics in two-year colleges and post-secondary education. The subcommittees were the Engineering Technology Subcommittee, the Emerging Technology Subcommittee, the Trade/Industrial Technology Subcommittee, the Allied Health and Human Services Technology Subcommittee, the Business Technology Subcommittee, and the Computer/Data Processing Technology Subcommittee.

The Grants Committee (Susan Forman, chairperson) was charged to solicit and submit grant proposals on AMATYC's behalf and develop a comprehensive grants policy and related procedures.

AMATYC'S GROWTH CONTINUES

The 1989 conference held in Baltimore exceeded 700 attendees, and AMATYC faced the pleasant problem of outgrowing the planned facility. Barbara Gale, the conference chairperson, pulled together the resources of the conference committees. The keynote speaker was Millie Johnson, and the breakfast speaker was Bill Bompert. NDMATYC and MinnMATYC were approved as new affiliates.

The new slate of officers was announced at the Baltimore conference: Dale Ewen, president; Karen Sharp, president-elect; Guesna Dohrman, secretary; Margie Hobbs, treasurer; Karl Smith, past-president; and the regional vice-presidents: Ron Beeler, Wanda Garner, Bill Jordan, Carol Kublin, Marilyn Mays, Jim Newsom, Barbara Poole, and Sandy Spears. A major document published jointly by AMATYC and the MAA, "A Curriculum in Flux: Mathematics at Two-Year Colleges," was available for the first time at the Baltimore conference. The Delegate Assembly approved an expenditure of \$5,000 per year for clerical assistance or released time for the president beginning in 1992. This was a major step in providing future presidents assistance to carry out the enormous job of president.

The 1990 conference in Dallas welcomed new affiliates in Arkansas (ARKMATYC) and New Mexico (NMMATYC). The 1990 conference, chaired by Tommy Thompson and Eddie Robinson, was the first conference with over 1000 attendees. The keynote speaker was James Voytuk, representing project Mathematical Sciences in the Year 2000 (MS 2000). The breakfast speaker was Tom Cochran from Belleville Area College (IL).

In Dallas, the Delegate Assembly was charged with the review and development of policy statements on issues of mathematics reform, the role of technology in the classroom, two-year college mathematics faculty preparation, and the increase of part-time faculty.

Colorado (CoLoMATYC) and Utah (UTMATYC) formally joined the AMATYC affiliates at the 1991 conference in Seattle. Vicky Ringen was conference chairperson. Beverly J. Anderson, Director, Office of Minority Affairs at the Mathematical Sciences Education Board, delivered the keynote address titled "Community Colleges: Promises or Preclusions." The Saturday breakfast speaker was James M. Rubillo, Director of Academic Planning and Professional Development at Bucks County Community College, speaking on "Drug Testing, Casinos, and Booze: Lessons from the Public's Mathematics." Cheryl Cleaves (TN) received a Presidential Award.

New officers began their terms at the end of the 1991 conference: Karen Sharp, president; Marilyn Mays, president-elect; Wanda Garner, secretary; Margie Hobbs, treasurer; Dale Ewen, past-president; and regional vice-presidents: Helen Burrier, David Gustafson, Therese Jones, Bill Jordan, Bill New, Vicky Ringen, Carol Westfall, and Susan S. Wood.

REGIONAL AMATYC CONFERENCES AND NEW SUMMER INSTITUTES

Professional development opportunities were extended to faculty in the Southeast Region through an AMATYC regional conference held at DeKalb College (GA) in May, 1991, chaired by Linda Exley. Karen Sharp, AMATYC president-elect, gave the keynote speech to 160 participants representing 48

colleges in 11 states and the District of Columbia. In addition to many sessions, William Haver, Associate Director, Education and Human Resources Division at the National Science Foundation, and Ray Shiflett, Executive Director of the Mathematical Sciences Education Board (MSEB), were invited to address special sessions.

The Albuquerque Marriott Hotel (NM) was the site of the first Southwest Region Conference in June, 1992, and was attended by 150 persons from 13 states. Conference co-chairs were Michele Diel, Vicki Froehlich, and Mary Robinson. The keynote address by Uri Treisman discussed curriculum reform in two-year colleges. Marilyn Mays, AMATYC president-elect, and Therese Jones, AMATYC Southwest region vice-president, were featured speakers at the luncheon.

With the success of AMATYC Summer Institutes in Idaho and Vermont, a third institute site was chosen at the College of Charleston (SC), offering its first courses in June, 1992, under the direction of Lou Roethel (NY).

AMATYC TURNS TO POLICY ISSUES AND NATIONAL INVOLVEMENT

Major documents for AMATYC were approved by the Delegate Assembly at the 1992 conference in Indianapolis: "Guidelines for the Academic Preparation of Two-Year College Mathematics Faculty," "Two-Year College Mathematics Department Guidelines," and the "AMATYC Strategic Plan." The Strategic Plan, directed by Marilyn Mays, was written by a group of former and current board members, committee chairs and delegates and funded by a grant of \$28,000 from the Exxon Educational Foundation. It was the first major effort of the AMATYC organization to review its mission and goals and set an agenda for the future.

Jaime Oaxaca, Vice Chairman of the Coronado Communication Corporation, gave the opening address at the 1992 Indianapolis conference attended by over 1000 persons and chaired by Lucreda Hutton. Arthur G. Hansen, former Chancellor of the Texas A & M System and President of Purdue University and Georgia Institute of Technology, spoke of the "Impact of Technology on the Teaching of Mathematics" in AMATYC's first afternoon general session. "Your Teaching Behaviour is Showing" was the theme of the Saturday breakfast speech given by James E. Wiegand, Dean of Continuing Education, Indiana University. Stephen Rodi (TX) was presented with the AMATYC Mathematics Excellence Award at the 1992 conference. Rikki Blair (OH) was appointed as the first AMATYC Historian. Joseph Browne (NY) and Jane Covillion (NY) assumed editorial and production responsibility for *The AMATYC Review*.

In 1992, AMATYC's influence at the national level increased with its participation in the newly formed Coordinating Board of AMATYC, MAA, and NCTM, called CBAMN. The purpose of this Board was to coordinate issues relating to the first two years of collegiate mathematics education. This Board consisted of three members of each organization. Karen Sharp served as the chairperson of CBAMN

through 1994. Gregory Foley and Ray Collings were AMATYC representatives to CBAMN during the formative period, followed by Marilyn Mays in 1992, and Wanda Garner in 1993. AMATYC also continued its membership in other national organizations.

AMATYC received a grant from the Exxon Education Foundation in 1992 and the National Science Foundation in 1993 to write *Standards for Curriculum and Pedagogical Reform in Two-Year College and Lower Division Mathematics*. The project directors, Marilyn Mays, Karen Sharp, and Dale Ewen, were assisted by Task Force members, including representatives from AMATYC, the American Mathematical Society (AMS), MAA, NCTM, and the National Association for Developmental Education (NADE): Darrell Abney, Geoffrey Akst, Nancy Angle, Rikki Blair, Linda Boyd, Max Cisneros, Cheryl Cleaves, Don Cohen, Betsy Darken, David Dudley,



Standards Task Force

Carol Edwards, Greg Foley, Susan Forman, Judith Hector, Margie Hobbs, Robert Kimball, Edward Laughbaum, James Leitzel, Dean Priest, Bobbie Righi, Stephen Rodi, William Thomas, Sam White, Susan S. Wood, Kathie Yoder and consultants Sol Garfunkel, Harvey Keynes, and P. Uri Treisman. The first circulating draft was distributed to the AMATYC membership in October, 1993. The second draft titled

Standards for Introductory College Mathematics was presented at the 1994 AMATYC conference in Tulsa, OK.

AMATYC OFFICE OPENS

Competitive proposals were solicited in 1993 to determine the location of a national office for AMATYC. On September 1, 1993, the AMATYC office opened at State Technical Institute at Memphis in Tennessee. Cheryl Cleaves was appointed executive assistant to the AMATYC Board, assisted by Margie Hobbs, AMATYC Treasurer, for oversight and operation of the office. Bill Kelly became AMATYC's first full-time employee in October, 1993.



Marilyn Mays (TX) presenting plaque to Robert Dobbs (middle), VP Academic Affairs, Charles Henderson, Exec. Ass't. to Pres. of State Technical Institute at Memphis

THE AMERICAN (mathematical) REVOLUTION

The American (mathematical) Revolution was the theme of AMATYC's Nineteenth Annual Conference (1993) in Boston, MA. Over 1300 attendees participated in mini-courses, workshops, sessions, and informational forums. Conference co-chairpersons were Jack Keating and Helene Savicki. The conference began with the keynote address by noted educational leader David Pierce, President of the American Association of Community Colleges (AACC). Herb Gross, the founding president of AMATYC and of the New York affiliate (NYSMATYC) and a motivating force in the two-year college movement since 1958, was the breakfast speaker. His speech, "The Teacher as Coach; or Bridging the Gap Between Access

and Equal Opportunity” inspired the audience in 1993 as much as his speech in 1974 when AMATYC was formed. President Karen Sharp awarded AMATYC Presidential Awards to Rikki Blair, Greg Foley, and Phil DeMarois. Two new affiliates were welcomed: Wisconsin (WisMATYC) and Nevada (NEVMATYC).

The AMATYC Board formally approved the formation of the AMATYC Foundation in 1993 to promote and support the educational, literacy, and scientific activities of the organization. Chairperson Philip Cheifetz (NY) and the first Board of Directors, John Bradburn (IL), Margaret Lial (CA), R. David Gustafson (IL), C. Pat McKeague (CA), and Karen Sharp (MI), were named.

The Delegate Assembly acted on several important issues at the 1993 conference. Three position statements were approved on the following subjects: Undergraduate Textbooks, Equal Opportunity in Mathematics, and Calculators. In addition, the AMATYC annual dues were raised to \$50. The following newly elected officers began their terms of office: Marilyn Mays (TX), president; Wanda Garner (CA), president-elect; Bob Malena (PA), treasurer; Martha Clutter (VA), secretary; Karen Sharp (MI), past-president; and the regional vice-presidents: Helen Banes (IA), Rikki Blair (OH), Sadie Bragg (NY), Linda Exley (GA), Therese Jones (TX), Bill New (CA), Vicky Ringen (WA), and Susan S. Wood (VA).

Committee Chairs beginning their terms were: Developmental Mathematics, Jack Rotman (MI); Equal Opportunity in Mathematics, Marcella Beacham (IL); Placement and Assessment, Nancy Sattler (OH); Education, Phil DeMarois (IL); Technical Mathematics, Robert Kimball (NC); Technology in Mathematics Education, Brian Smith (ONT); Student Math League, Glenn Smith (FL); Exhibits/Advertising Chair, Larry Lance (OH). Vicki Froehlich (NM) began her duties as Conference Program Chair at the 1993 conference.

AFFILIATE INSTITUTES AND WORKSHOPS

OhioMATYC hosted the first and second annual Graphing Calculator Institutes at Columbus State Community College, Columbus, Ohio, in February, 1993 and 1994, attended by 120 and 401 participants, respectively. Ed Laughbaum, past-president of OhioMATYC, organized both conferences. Bert Waits, Frank Demana, and many other Ohio mathematics faculty presented at both institutes. The profits from the institute registration were used to establish student scholarships. OhioMATYC also sponsored a week long graphing calculator conference, “Enhancing College Mathematics with Graphing Calculators,” held July 11-15, 1994, at Columbus State Community College under the direction of Ed Laughbaum. Thirty-one attendees from seven states and the United Kingdom discussed the use of technology in mathematics courses, developmental to calculus.

In order to bring current technological developments in mathematics education to individual college departments, AMATYC sponsored its first Visiting Technology

Workshops in 1994. Coordinated by Larry Gilligan (OH) and taught by Larry and eight other professors, Darrell Abney, Judy Ackerman, Dana Calland, Chris Christensen, Jeff Cole, Pamela Matthews, Jim Rowell, and Linda Taylor, technology workshops have been tailored to fit the needs of individual departments, using existing equipment and facilities.

AMATYC's 20th ANNIVERSARY

AMATYC members “Discovered the Excellence” at the 20th Anniversary conference (1994) in Tulsa, OK. Conference chair, Audrey Rose (OK), and local arrangements chair, Jean Woody (OK), coordinated the events. *The AMATYC History, 1974-1994*, including an appendix by AMATYC Historian, Rikki Blair (OH), titled “Professionalization and the Two-Year College Mathematics Faculty” and the second and final circulating draft of the *Standards for Introductory Mathematics*, edited by Don Cohen (NY), were distributed. The keynote address, “Culture, Curriculum, and Community: Making the Reform of Collegiate Mathematics a Reality,” was given by Uri Treisman, Director of the Charles A. Dana Center for Mathematics and Science Education, University of Texas at Austin, and Jaime Pinkham, Chairman of the Board of Directors of the American Indian Science and Engineering Society, presented the Saturday breakfast speech titled “Looking at a Future Rooted in History and Tradition.” The Mathematics Excellence Award was presented to Dale Ewen (IL). Susan Forman (NY) and Elizabeth Teles (MD) received Presidential Awards. The position statement titled “Student Learning Outcomes” presented by the Developmental Mathematics Committee was passed by the Delegate Assembly. A new affiliate, DelMATYC (Delaware), was formed.

CELEBRATION OF THE STANDARDS: *CROSSROADS IN MATHEMATICS*

1995 was a productive year for AMATYC as an affiliate organization in Hawaii and the Pacific Islands (π MATYC) was formed and work continued on the AMATYC Standards, now titled *Crossroads in Mathematics: Standards for Introductory Mathematics Before Calculus*, with the receipt of an Exxon Education Foundation grant in June. On September 7, 1995, Marilyn Mays, AMATYC President, and David Pierce, President of the American Association of Community Colleges, announced the release of the *Crossroads* document at a press conference in Washington, DC. The “Celebration of the Standards” continued at the 1995 annual conference, November 9-12, 1995, at the Excelsior Hotel in Little Rock, AR, with the dissemination of the document.



Celebration of the Standards: Robert Witte (Exxon Education Foundation), Elizabeth Teles (NSF), Don Cohen (NY), Karen Sharp (MI), Marilyn Mays (TX), Dale Ewen (IL)

The 1995 conference was a success under the leadership of conference chair, Travis Thompson (AR), local arrangements chair, Linda Thompson, (AR), exhibits/advertising chair, Larry Lance (OH), and conference coordinator, Cheryl Cleaves (TN). The keynote address was given by Solomon Garfunkel, COMAP (MA), titled “The Courage of Our Convictions.” Guadalupe Quintanilla, Assistant Vice President for Academic Affairs, University of Houston, delivered a very moving Saturday breakfast speech titled “An Ongoing Challenge - Success in Education.” Expanded leadership sessions were highlighted including a Department/Division Chairs’ Colloquium “Critical Issues for New Division and Department Chairs” with moderators Jack Alexander, Board of the Mathematical Sciences, and Susan Forman, Mathematical Sciences Education Board, and “An Invitation to an AMATYC Leadership Role,” facilitated by AMATYC officers. The Delegate Assembly chose Toronto, ONT, as the conference site for the year 2001 and approved position statements titled “Working Conditions of Adjunct Faculty” and “Instructional Use of Technology.” Robert Witte, Senior Program Officer for the Exxon Education Foundation, accepted a plaque on behalf of Edward Ahnert, President of the Exxon Foundation, in celebration of the Foundation’s 25th anniversary.

New AMATYC officers taking office at the end of the 1995 conference were: Wanda Garner (CA), president; Sadie Bragg, (NY), president-elect; Marilyn Mays

(TX), past-president; Bob Malena (PA), treasurer; Martha Clutter (VA), secretary; and regional vice-presidents: Gerald Lieblich (NY) served one year, succeeded by Philip Mahler (MA), Susan S. Wood (VA), Mike Schachter (NC), Rikki Blair (OH), Carolyn Neptune (KS), Audrey Rose (OK), Ilga Ross (OR), and Randolph Taylor (CA). Committee chairs also began their 1995-97 terms: Developmental Mathematics, Jack Rotman (MI); Equal Opportunity in Mathematics, Marcella Beacham (IL); Placement and Assessment, Nancy Sattler (OH); Education, Phil DeMarois (IL); Technical Mathematics, Robert Kimball (NC); Technology in Mathematics Education, Brian Smith (ONT); Student Mathematics League, Glenn Smith (FL); Grants, John Pazdar (CT); and Editorial Review/Policy, James Hall (IL). Margie Hobbs (TN) was appointed as AMATYC conference coordinator with a transition year in 1995 and first official responsibilities to begin with 1996 conference.

With the goal of reaching the increasing number of adjunct faculty across the country, Constitution and By-Laws changes creating new membership categories for adjunct and retired faculty were approved in the Summer of 1996.

AMATYC GOES ONLINE

Expansion of the World Wide Web and internet capabilities in the mid-1990s afforded new opportunities for enhanced communication among members. AMATYC's Technology in Mathematics Education Committee created a discussion listserv (MATHEDCC) and discussions about the need for an AMATYC web site began in late 1995. By Fall, 1996, AMATYC had its own domain address, www.amatyc.org, and the web site included conference and institute information, position announcements, officers and committee chairs, awards, links to affiliate organizations, and the *Crossroads in Mathematics: Standards for Introductory Mathematics Before Calculus* document.

As West Virginia formed a new affiliate organization (WVMATYC) in 1996, AMATYC created "Waves of Change" at its annual conference held in the Hyatt Regency and ITT Sheraton in Long Beach, CA, November 14-17, 1996, organized by conference co-chairs, Marilyn McBride (CA) and Melanie Branca (CA), and local arrangements chair, Sue Parsons (CA). The keynote speaker was Glenda Lappan, Michigan State University, "Keeping Our Direction Amidst The Waves of Change: The Standards." The recipient of the Mathematics Excellence Award was Wade Ellis, Jr., West Valley College (CA), who also presented the Saturday breakfast speech titled "Making the Waves of Change." Cheryl Cleaves (TN) received a Presidential Award and the Charles Miller Scholarship Award went to Kevin Foster, Parkland College (IL). The position statement on "AMATYC Guidelines for Internships for Two-Year College Mathematics Faculty" was approved at the Delegate Assembly meeting.

Expanded opportunities for member involvement in 1996 included the approval of the “AMATYC Consulting Professor” position for AMATYC faculty on sabbatical leave to work for and with AMATYC to advance AMATYC’s mission and goals. In addition, AMATYC became an endorser for Faculty Development Workshops through Houghton Mifflin Co., “Faculty Development Programs, Developmental Mathematics, Workshops, Consulting and On-Campus Training,” with reduced registration fees for AMATYC and affiliate members. Over 300 two-year college faculty participated in professional development activities at the Northwest Regional Conference, May 2-4, 1996, at Skamania Lodge, Stevenson, WA, organized by conference co-chairs, Gary Grimes (OR) and Nick Nickoloff (WA).

COMMUNITY

The involvement of AMATYC in the international mathematics education community began in 1991 when the Conference Board of the Mathematical Sciences sought input regarding the selection of members for the United States National Commission on Mathematics Instruction (USNCMI), which advises the National Academy of Sciences on matters pertaining to international education. AMATYC president and past-president, Marilyn Mays (TX) and Karen Sharp (MI), expressed to CBMS the need to change the process to enable selection of two-year college faculty to the Commission.

In 1992, the Seventh International Congress on Mathematical Education (ICME-7) was held in Quebec, ONT. The ICME-7 program had few sessions directed at institutions whose missions were similar to or overlapped those of the community college. Karen Sharp and Marilyn Mays were recipients of partial travel grants from the NSF, arranged for a meeting room, and invited interested people to gather informally.

AMATYC then requested participation of two-year college faculty at ICME-8 to be held in Seville, Spain in 1996. Responding to this request, the International Program Committee (IPC) invited Marilyn Mays to serve on the advisory panel for a Topic Group on “Education for Mathematics in the Working Place.” AMATYC also suggested that a “Sharing Session for Two-Year and Technical Colleges” be offered. This session was announced in the official program and was well attended by faculty from polytechnics, institutions of further education, and technical colleges in several countries. Marilyn Mays and Sadie Bragg (NY) served on the ICME-8 Selection Committee for travel grants. Several members of AMATYC, including five members of the AMATYC Board, received NSF travel grants to assist with expenses for travel to Seville.



ICME-8 attendees: Cheryl Cleaves (TN), Joan Cordova (CA), Susan Forman (NY), Lynn Steen (MN), Mary Lindquist (GA), Therese Jones (TX), Wanda Garner (CA)

AMATYC's efforts to educate the mathematics community, both in the United States and abroad, on the role of the two-year college in international education, have made a difference. In 1998, for the first time in its ninety-year history, a two-college faculty member, Marilyn Mays, was selected for membership to USNCMI. Wade Ellis, Jr. (CA) was added to the six-member Commission in 1999. In addition, the IPC appointed Marilyn Mays as the chief organizer of one of the major week-long Working Group sessions, "Mathematics at Two-Year Colleges and Other Tertiary Institutions," for the ICME-9 conference to be held in Tokyo/Makuhari, Japan in 2000. Evidence of AMATYC in the international mathematics community is also seen with the affiliation in 1997 of its first international organization in Ontario, Canada (OCMA) and with its charter membership in the International Mathematical Olympiad 2001 USA to be held in Washington, DC, in July, 2001.

MOVING AHEAD - IMPLEMENTING THE STANDARDS

With the receipt of additional grants from the NSF and Texas Instruments in 1996, AMATYC announced its Faculty Development Workshops, “*Crossroads in Mathematics - Moving Ahead.*” The four regional workshops were designed for faculty, administrators, and instructional personnel who wanted to develop resources, build teams and consortia, and experience teaching and learning as recommended in *Crossroads in Mathematics: Standards for Introductory Mathematics Before Calculus*. Teams of faculty put the Standards into practice, studied educational change, created “a specific plan of action” for improving mathematics programs, explored with other faculty and administrators the roles each can play in implementing and supporting change, and became aware of successful programs embracing the Standards. The four 1997 *Crossroads* Workshops were:

- 1) in conjunction with the ORMATYC meeting, April 25-27, Gleneden Beach, OR, chair: Don Hutchison (OR), local arrangements: Kathy Taylor (OR)
- 2) a meeting endorsed by the MOMATYC Board, May 29-31, St. Louis, MO, chair: Wanda Long (MO)
- 3) in conjunction with the NYSMATYC summer institute, June 5-7, Poughkeepsie, NY, co-chairs: Don Cohen and Wesley Ostertag (NY)
- 4) in conjunction with the AMATYC Southwest Regional Conference, July 17-20, Flagstaff, AZ, chair and local arrangements: Anne Dudley (AZ).

RECOGNIZING TEACHING EXCELLENCE

AMATYC members attended one of the largest conferences in AMATYC history in Atlanta, GA, November 13-16, 1997, at the Hyatt Regency Atlanta Hotel. Conference co-chairs Linda Boyd and Linda Exley (GA) invited two-year college faculty to “Come Celebrate Our Dream.” Commercial presentations were offered for the first time under the organization of exhibits chair, Max Cisneros (NM). The position of local arrangements chair was eliminated. The keynote address given by Jacquelyn M. Belcher, President of DeKalb College, was titled “Let the Celebration Begin.” The Saturday breakfast speaker was John D. Neff, Georgia Institute of Technology, presenting “The Rules We Live By.” Presidential Awardees were Margie Hobbs (TN) and Marilyn Mays (TX). The Teaching Excellence (TE) Awards were given for the first time to a member in each AMATYC Region: Northeast, Philip Cheifetz (NY); Mid-Atlantic, Agnes Azzolino (NJ); Southeast, Robert Kimball (NC); Midwest, Philip DeMarois (IL); Central, Julie Guelich (MN); Southwest, David Dudley (AZ); Northwest, Lawrence Runyan (WA); and West, Kathie Yoder (CA).



*1997 Teaching Excellence Award Recipients:
Lawrence Runyan (WA), David Dudley (AZ), Philip DeMarois (IL), Robert Kimball (NC),
Philip Chiefetz (NY), Agnes Azzolino (NJ), Julie Guelich (MN), Kathie Yoder (CA)*

The Delegate Assembly approved By-Laws changes in the process of selecting the conference city in 1997. This action gave the AMATYC Board the responsibility for selecting the city and changed the geographical selection to a rotation through 4 regional districts rather than the eight AMATYC regions: Atlantic district: IN, KY, WV, VA, MD, DC, NC, TN, SC, GA, AL, MS, FL, PR, VI and the other Caribbean Isles; Pacific district: CA, NV, ID, MT, WY, OR, WA, HI, AK, and adjacent Canadian Provinces; Great Lakes district: ME, MA, NH, VT, RI, NY, CT, NJ, DE, PA, OH, MI and the Canadian Provinces adjacent to these states; and Prairie district: AZ, NM, TX, LA, AR, OK, UT, CO, KS, MO, IL, NE, IA, WI, MN, SD, ND, and Mexico and adjacent Canadian Provinces. New officers taking office at the end of the 1997 conference were: Sadie Bragg (NY), president; Susan S. Wood (VA), president-elect; Wanda Garner (CA), past-president; Bob Malena (PA), treasurer; Martha Clutter (VA), secretary; and regional vice-presidents: Phil Mahler (MA), Judy Ackerman (MD), John Peterson (TN), Kathy Mowers (KY), Carolyn Neptune (KS), David Dudley (AZ), Ilga Ross (OR), and Sue Parsons (CA). In an effort to increase communication among members, the number of issues of the AMATYC News was increased to 5 issues and Jean Woody (OK) was appointed the new editor. Leadership for *The AMATYC Review* changed, as Virginia Carson (GA) and Jackie Thornberry (GA) were appointed editor and production editor, respectively, in 1998, with their first issue published in spring, 1999.

Input from previous AMATYC committee chairs and members helped restructure the goals and objectives of the AMATYC committees and their names were changed in 1997. The new committee names and their chairs were:

Foundation/Developmental Mathematics, William Thomas, Jr., (OH); Equal Opportunity in Mathematics, Sylvester Roebuck (IL), appointed, but did not complete one year, followed by Michele Diel (NM); Faculty Development, Peg Pankowski (PA); Placement and Assessment, Bill Worpenberg (OH); Program/Curriculum Issues, Phil DeMarois (IL); Technical Mathematics/AAS Programs, Franz Helfenstein (OR); Technology in Mathematics Education, Brian Smith (ONT); Editorial Policy Review and Publicity, Geoffrey Akst (NY); Grants, John Pazdar (CT); Student Mathematics League, Glenn Smith (FL); and Electronic Services, John St. Clair (TN), appointed, but did not complete one year, followed by Vernon Kays (IL).

CONNECTING COLLEAGUES, INSTITUTIONS, AND PROGRAMS

Exemplary programs in the area of teacher preparation at eleven two-year colleges were highlighted at a conference titled “The Integral Role of Two-Year Colleges in the Science and Mathematics Preparation of Prospective Teachers,” sponsored by the NSF Division of Undergraduate Education in March, 1998. AMATYC president, Sadie Bragg (NY), served as chair of the Steering Committee and president-elect, Susan S. Wood (VA), served as co-chair of the Coordinating Committee. Over 100 individuals participated in the conference which focused on strategies to increase the awareness of two- and four-year college mathematics and science faculty and administrators, national leaders in education, and funding agencies of the key role provided by community colleges in the mathematical and scientific preparation of teachers.

“Bridges,” connecting colleagues and institutions, was the theme of the 1998 annual conference at Oregon Convention Center, November 5-8, 1998, in Portland, OR, organized by conference chairperson, Dick Clark (OR). For the first time, the positions of Exhibits and Advertising Chairs were separated into two positions with the appointments of Michael Schachter (NC) and Audrey Rose (OK), respectively. The opening general session address was given by Miriam A. Leiva, Cone I Distinguished Professor of Mathematics at the University of North Carolina at Charlotte, and was titled “Bridging to a New Century in Mathematics.” The Saturday breakfast speaker was Richard B. Minnix, Professor Emeritus of Physics, Virginia Military Institute, presenting “Mathematics in the World Around You.” The Mathematics Excellence Award was presented to Gregory D. Foley, Sam Houston University (TX), and a Presidential Award was given to Robert F. Watson, Director, Division of Undergraduate Education, the National Science Foundation. The position statements titled “The Use of Internet Resources to Enhance Mathematics Instruction” and “Support for Professional Development” were approved by the Delegate Assembly. La-MsMATYC joined the AMATYC affiliate organizations.

SPOTLIGHT ON EXPANDED OPPORTUNITIES FOR MEMBERS

By 1999, AMATYC's membership had climbed to 2720 individuals, 95 retired/adjunct members, 20 students, and 120 institutional members, enabling additional opportunities and services to two-year college faculty and institutions. Carolyn Neptune (KS) was approved as the first AMATYC Consulting Professor to work on a project to revise the AMATYC publication, "The Two-Year College Teacher of Mathematics," first published in 1985. An AMATYC Web Site Coordinator position was created in spring, 1999.

The AMATYC Foundation, which had been established by the AMATYC Board in October 1993 and became a nonprofit 501(c)3 tax-exempt entity in October, 1995, under the leadership of Phil Cheifetz (NY), increased its activities. The Foundation's goals are to: promote and support the goals and educational and scientific activities of AMATYC; provide support and encouragement to two-year college mathematics faculty by helping to provide opportunities for professional growth, interaction with their peers, and a sense of community; work with AMATYC to develop plans for major curriculum and professional development projects and assist AMATYC in seeking funds for these projects; and provide support for special AMATYC projects. The Foundation accomplished its goals under the leadership of Dale Ewen (IL), Chair, during the 1998-99 year with initiatives including major project development, small project development, donor development, travel grants to AMATYC members, and involvement in the AMATYC Silver Anniversary Celebration.

AMATYC's commitment to providing professional development included expanded offerings of the "Traveling the Crossroads Workshops" and other institutes. In August, 1998, an AMATYC Summer Institute was held in Hilo, Hawaii, organized by Jane Iida (HI). The Outer Banks Summer Institute, organized by Ed Laughbaum (OH), was offered at the Army Field Research Facility, Duck, NC, from June 27-July 2, 1999, where participants worked on interesting problems and data in context. The AMATYC INPUT (Innovative Programs Using Technology) Summer Institute, August 4-7, 1999, featured award winners of the 1997 INPUT competition and AMATYC *Crossroads* workshops where participants experienced hands-on technology activities and collaborative activities.

AMATYC endorsed two NSF-ATE Program grants written by John Pazdar (CT), Patricia Hirschy (CT), and Peter Wursthorn (CT), where AMATYC members were selected in the summers of 1996-2000 to develop ten mathematics modules and twenty spin-off activities for two-year colleges at NASA's Kennedy Space Center, FL.

AMATYC LOOKS TO THE NEXT MILLENNIUM

By 1997, the growth of AMATYC's membership, and the complexity of services, programs, and initiatives, warranted a thorough review of its internal operations. Funded by an unrestricted grant from the Exxon Education Foundation, Frank B. Manley & Company of Greenwich, CT, was selected to perform an operational requirements audit of AMATYC. The scope of the audit covered the assessment of organization structure, office staffing requirements including personnel skills and competencies, office functions and procedures, human resources policies and practices, elected and appointed position roles and responsibilities, internal and external resources, office location, and the need for an AMATYC presence in Washington, D.C.

The study commenced in August, 1997 and the Organizational Study Report, featuring a review and recommendations, was presented at the April, 1998 AMATYC Board meeting. An executive summary of the report received wide distribution. In conjunction with the report's recommendations, the AMATYC Board initiated a strategic planning process and commissioned a task force to make recommendations related to the study. The task force members were Judy Ackerman (MD), Wanda Garner (CA), Phil Mahler (chair, MA), Kathy Mowers (KY), John Peterson (TN), Ilga Ross (OR), and ex-officio, Sadie Bragg (NY) and Susan S. Wood (VA). In fall, 1999, the task force made recommendations regarding the location and manner of managing the AMATYC office, the responsibilities of the officers and their interaction with the office, AMATYC publications, an AMATYC presence in Washington, marketing and membership needs, and outreach to increase membership.

In April, 1998, AMATYC began an 18-month Strategic Planning Initiative funded by the Exxon Education Foundation and organized by president-elect Susan S. Wood (VA). A Strategic Planning Task Force, including representatives from AMATYC Delegates, Committee Chairs, Affiliate Leadership, Past-Presidents, the Conference, the Office, the AMATYC Foundation, business/industry, and others, was identified.

The Task Force met in June, 1998 in Dallas, TX, where an initial draft of the AMATYC Strategic Plan for the years 2000-2005 was developed. A second draft incorporated the input gathered from a mailing to all members, a forum and report to the Delegate Assembly at the Portland Conference, Affiliate Presidents' comments, posting on the AMATYC web site, and sessions at various affiliate meetings. A second Strategic Planning meeting was held during the Spring Board Meeting in April, 1999. The thirteen AMATYC Executive Board members, together with Executive Assistant Cheryl Cleaves, Conference Coordinator Margie Hobbs, guests Jean Moon and Ronald Rosier, and consultant Patsy Calkins, finalized the goals and objectives to lead AMATYC into the next millennium. The Strategic Plan for 2000-2005 was presented to the AMATYC membership at the 1999 annual conference in Pittsburgh.



1998 Strategic Planning Task Force (pictured from left to right): front row: Lois Yamakoshi (CA), Margie Clark (GA), Sadie Bragg (NY), Rita Gonzalez (NM), Peg Pankowski (PA), Derek Mpinga (OR); second row: Susan S. Wood (VA), Ilga Ross (OR), Marcella Beacham (IL), Lenda Hill (Texas Instruments), Karen Sharp (MI), Margie Hobbs (MS), Cheryl Cleaves (TN); third row: Charles Miller (NJ), Geoffrey Askt (NY), Philip Mahler (MA), Patsy Calkins (Consultant, MI), Ron Rosier (CBMS, DC), Wanda Garner (CA), John Peterson (TN), Marilyn Mays (TX), Stephen Rodi (TX); Not pictured: Steve DeBauge (Texas Instruments), Jean Moon (MA)

THE PAST AND THE FUTURE

AMATYC's first 25 years have seen membership grow to nearly 3000 with expanded services and professional development opportunities. AMATYC is the only organization exclusively devoted to providing a national forum for the improvement of mathematics education in the first two years of college. The 43 affiliate organizations, serving the United States and Canada, form a network of leaders and information sharing, dedicated to meeting the challenges of the next millennium.

AMATYC's members and leaders have worked together to accomplish the initial mission set in 1974 which was:

- To positively impact the preparation of scientifically and technologically literate citizens.
- To lead the development and implementation of curricular, pedagogical,

assessment, and professional standards for mathematics in the first two years of college.

- ✿ To assist in the preparation and continuing professional development of quality mathematics faculty that is diverse with respect to ethnicity and gender.
- ✿ To provide a network for communication, policy determination, and action among faculty, other professional organizations, accrediting associations, governing agencies, and the public sector.

The 1974 mission was then expanded into 12 goals developed in the 1992 Strategic Plan (see pages 43-52) and in an effort to meet the challenges of the future, transformed into the Strategic Plan for 2000-2005, with the following Goals for AMATYC:

Goal I - Student Success Through the Learning Environment

- ✿ Promote effective learning environments to increase success in mathematics for all students.

Goal II - Student Success Through Educators of Excellence

- ✿ Establish and encourage professional development to enhance the quality of two-year college mathematics education.

Goal III - Member Success Through A National Voice

- ✿ Promote and participate in national initiatives that will benefit lower division collegiate mathematics education.

Goal IV - Organizational Success Through Inner Strength

- ✿ Develop the identity and image of AMATYC and strengthen its organizational structure in order to achieve its mission.

The mission, goals, objectives, and services of AMATYC have changed, expanded, and responded to an ever-changing technologically rich world, enhanced by research about the teaching and learning of mathematics. AMATYC's strength comes from its members and its structure, as the only national organization whose mission is to serve two-year college mathematics faculty. AMATYC's members can be proud of its accomplishments in the past and look with excitement to the future.

II. MATHEMATICS EXCELLENCE AWARD RECIPIENTS

1984 Philip Cheifetz Nassau CC, NY
1985 Don Albers Menlo College, CA
1986 Jean Burr Smith Middlesex CC, MA
1988 Peter Lindstrom North Lake College, TX
1990 Warren Page New York City Tech College, NY
1992 Stephen Rodi Austin CC, TX
1994 Dale Ewen Parkland College, IL
1996 Wade Ellis, Jr. West Valley College, CA
1998 Gregory D. Foley Sam Houston University, TX

III. AMATYC TEACHING EXCELLENCE AWARD RECIPIENTS

1997 Award Winners

<p>Philip Cheifetz Nassau CC Northeast Region</p>
<p>Agnes Azzolino Middlesex County College Mid-Atlantic Region</p>
<p>Robert Kimball Wake Technical College Southeast Region</p>
<p>Philip DeMarois William Rainey Harper College Midwest Region</p>
<p>Julie Guelich Normandale CC Central Region</p>
<p>David Dudley Phoenix College Southwest Region</p>
<p>Lawrence Runyan Shoreline CC Northwest Region</p>
<p>Kathie Yoder Los Angeles Pierce College West Region</p>

IV. AMATYC CONFERENCE HISTORY

Year	Conference City	Conference Chair
1974	New York, NY 300 attendees	Philip Cheifetz Nassau CC, NY
1975	Chicago, IL 300 attendees	William Drezdson Oakton CC, IL
1976	San Francisco, CA 406 attendees	Charles Miller Sacramento CC, CA
1977	Atlanta, GA 450 attendees	Tom Thomson Kennesaw State College & Univ, GA
1978	Houston, TX more than 500 attendees	Alice Hagood Alvin CC, TX
1979	San Diego, CA 350 attendees	Jean Adaskin San Diego Mesa College, CA Betty Otten Retired
1980	Washington, D.C. 344 attendees	Josephine Gervase Manchester CC, CT
1981	New Orleans, LA 326 attendees	Gail Jones Delgado CC, LA
1982	Las Vegas, NV more than 300 attendees	Shirley Trembley Bakersfield College, CA
1983	Orlando, FL 500 attendees	Bill Jordan Seminole CC, FL
1984	New York, NY 439 attendees	Allen Angel Monroe CC, NY
1985	Memphis, TN 448 attendees	Cheryl Cleaves State Technical Institute, TN Margie Hobbs State Technical Institute, TN
1986	San Francisco, CA 602 attendees	Hal Anderson Santa Rosa JC, CA
1987	Kansas City, MO 575 attendees	Forrest Lowe Longview CC, MO
1988	Calgary, ALB 654 attendees	Shao Mah Red Deer College, ALB Steven Terry Ricks College, ID

Year	Conference City	Conference Chair
1989	Baltimore, MD 726 attendees	Barbara Gale Prince George's CC, MD
1990	Dallas, TX 1110 attendees	Tommy Thompson Brookhaven College, TX Eddie Robinson Cedar Valley College, TX
1991	Seattle, WA 1220 attendees	Vicky Ringen North Seattle CC, WA
1992	Indianapolis, IN 1085 attendees	Lucreda Hutton IUPUI, IN
1993	Boston, MA 1323 attendees	Jack Keating Massasoit CC, MA Helene Savicki Dean JC, MA
1994	Tulsa, OK 905 attendees	Audrey Rose Tulsa JC, OK
1995	Little Rock, AR 912 attendees	Travis Thompson Harding Univ, AR
1996	Long Beach, CA 1098 attendees	Marilyn McBride Skyline College, CA Melanie Branca Southwestern College, CA
1997	Atlanta, GA 1243 attendees	Linda Boyd Georgia Perimeter College, GA Linda Exley Georgia Perimeter College, GA
1998	Portland, OR 1117 attendees	Dick Clark Portland CC, OR
1999	Pittsburgh, PA	Rob Farinelli CC of Allegheny County-South, PA
2000	Chicago, IL	Marv Johnson College of Lake County, IL
2001	Toronto, ONT	Paul Balog George Brown College, ONT

V. AMATYC PRESIDENTIAL HISTORY

1975



Herb Gross
Bunker Hill CC, MA

1976



Sister Clarice Sparkman
San Jose City C, CA

1977



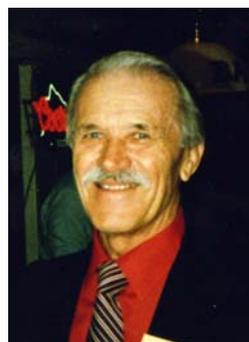
Joseph Cicero
Clayton CC, GA

1978



Philip Cheifetz
Nassau CC, NY

1979



Michael Colchiski
Central Florida CC, FL

1980



William Drezdon
Oakton CC, IL

1981-83



James Baldwin
Nassau CC, NY

1984-85



Amber Steinmetz
Santa Rosa JC, CA

1986-87



Stephen Rodi
Austin CC, TX

1988-89



Karl Smith
Santa Rosa JC, CA

1990-91



Dale Ewen
Parkland C, IL

1992-93



Karen Sharp
Mott CC, MI

1994-95



Marilyn Mays
North Lake C, TX

1996-97



Wanda Garner
Cabrillo C, CA

1998-99



Sadie Bragg
Borough of Manhattan CC, NY

VI. AMATYCMEMBERSHIP

Year	Individual Members	Retired/ Adjunct	Student	Institutional Members
1974	Approx. 300			
1975	Approx. 300			
1976	Approx. 400			
1977	Approx. 450			
1978	Approx. 500			
1979	Approx. 350			
1980	800			
1981	849			74
1982	1,071			
1983	1,156			78
1984	1,216			75
1985	1,451			
1986	1,542			
1987	1,602			28
1988	1,603			
1989	1,703			106
1990	2,098			119
1991	2,568			117
1992	2,652			97
1993	2,560			95
1994	2,767			105
1995	2,365			105
1996	2,179			104
1997	2,467	60	21	85
1998	2,720	95	20	120

VII. AMATYCAFFILIATE ORGANIZATIONS

<u>State/Region</u>	<u>Affiliate Name</u>	<u>Year Founded</u>
Alaska	AKMATYC	1989
Alabama	ALAMATYC	1988
Arizona	ArizMATYC	1983
Arkansas	ARKMATYC	1989
California - Northern	CMC ³	1972
California - Southern	CMC ³ -South	1985
Colorado	ColoMATYC	1991
Connecticut	MATYCONN	1972
Delaware	DeIMATYC	1994
Florida	FTYCMA	1965
Georgia	GMATYC	1988
Hawaii and Pacific Islands	πMATYC	1995
Illinois	IMACC	1972
Indiana	IRMC	1977
Iowa	IMATYC	1988
Kansas	KAMATYC	1988
Kentucky	KYMATYC	1975
Louisiana-Mississippi	La-MsMATYC	1998
Maryland	MMATYC	1974
Michigan	MichMATYC	1981
Minnesota	MinnMATYC	1989
Missouri	MOMATYC	1978
New England	NEMATYC	1972
Nevada	NEVMATYC	1988
New Jersey	MATYCNJ	1989
New Mexico	NMMATYC	1990
New York	NYSMATYC	1967
North Carolina	NCMATYC	1988
North Dakota	NDMATYC	1989
Ohio	OhioMATYC	1975
Oklahoma	OJCMA	1971

Ontario	OCMA	1997
Oregon	ORMATYC	1987
Pennsylvania	PSMATYC	1970
South Carolina	SOCAMATYC	1983
Tennessee	TMATYC	1981
Texas	TexMATYC	1978
Utah	UTMATYC	1991
Virginia	VMATYC	1987
Washington	WAMATYC	1985
West Virginia	WVMATYC	1996
Wisconsin	WisMATYC	1993
Wyoming	WYMATYC	1980

VIII. GRANTS AWARDED TO AMATYC

November 1984 \$30,000

Alfred P. Sloan Foundation

“AMATYC Summer Institute for Two-Year College Mathematics Faculty”

First AMATYC Summer Institute held in Rexburg, ID, August 12-16, 1985

Principal Investigators: Karen Sharp (MI), Steven Terry (ID)

September 1991 \$29,657

Exxon Education Foundation

“Improvement of Community College Mathematics Through Strengthening the American Mathematical Association of Two-Year Colleges by Strategic Planning”

A year-long strategic planning effort for AMATYC

Principal Investigator: Marilyn Mays (TX)

December 1991 \$50,000

Exxon Education Foundation

“Improving Mathematics at Two-Year Colleges”

For the publication, dissemination and implementation of Standards for Mathematics Below the Level of Calculus

Principal Investigator: Marilyn Mays (TX)

May 1993 \$80,515

National Science Foundation DUE-9255850

“Curriculum and Pedagogy Reform at Two-Year Colleges; Moving Beyond Myths to Standards”

To develop standards for introductory college mathematics courses below the level of calculus

Principal Investigator: Marilyn Mays (TX); Co-Principal Investigators: Karen Sharp (MI), Dale Ewen (IL)

September 1994 \$10,175

National Science Foundation DUE-9255850 Amendment 001

Supplemental support for “Curriculum and Pedagogy Reform at Two-Year Colleges; Moving Beyond Myths to Standards”

To develop standards for introductory college mathematics courses below the level of calculus

Principal Investigator: Marilyn Mays (TX); Co-Principal Investigators: Karen Sharp (MI), Dale Ewen (IL)

June 1995 \$34,320
 National Science Foundation DUE-9255850 Amendment 002
 Supplemental support for “Curriculum and Pedagogy Reform at Two-Year Colleges; Moving Beyond Myths to Standards”
 To develop standards for introductory college mathematics courses below the level of calculus
 Principal Investigator: Marilyn Mays (TX); Co-Principal Investigators: Karen Sharp (MI), Dale Ewen (IL)

January 1996 \$120,014
 National Science Foundation DUE-9555059
 “Implementing the Standards for Introductory College Mathematics Before Calculus”
 To implement standards for introductory college mathematics courses below the level of calculus
 Principal Investigator: Marilyn Mays (TX); Co-Principal Investigators: Karen Sharp (MI), Darrell Abney (KY), Cheryl Cleaves (TN), William Thomas (OH), James Leitzel (NH), Martin Flashman (CA)

September 1996 \$18,000
 Texas Instruments, Inc.
 To reprint the AMATYC Standards

December 1997 \$20,000
 Exxon Education Foundation
 “For General Support of the American Mathematical Association of Two-Year Colleges Programs and Activities”
 To perform an AMATYC Operational Requirements Audit
 Principal Investigator: Sadie Bragg (NY)

July 1998 \$20,000
 Exxon Education Foundation
 “For General Support of the American Mathematical Association of Two-Year Colleges Programs and Activities”
 1998 AMATYC Strategic Planning Initiative
 Principal Investigator: Susan S. Wood (VA)

IX. AMATYC FOUNDATION BOARD MEMBERS AND CORPORATE DONORS

1993-94 Interim Board:

Philip Cheifetz, Chair, Nassau CC, NY
 John Bradburn, Vice-Chair, Elgin CC, IL
 Margaret Lial, Secretary, American River College, CA
 R. David Gustafson, Rock Valley College, IL
 Pat McKeague, Cuesta College, CA
 Karen Sharp, Mott CC, MI

1994-95:

Philip Cheifetz, Chair, Nassau CC, NY
 John Bradburn, Vice-Chair, Elgin CC, IL
 R. David Gustafson, Secretary, Rock Valley College, IL
 Linda Davis, Addison Wesley, MA
 Dale Ewen, Parkland College, IL
 Margaret Lial, American River College, CA
 Pat McKeague, Cuesta College, CA
 Karen Sharp, Mott CC, MI

1995-96:

Philip Cheifetz, Chair, Nassau CC, NY
 R. David Gustafson, Secretary, Rock Valley College, IL
 Karen Sharp, Treasurer, Mott CC, MI
 Linda Davis, Addison Wesley, MA
 Dale Ewen, Parkland College, IL
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 Pat McKeague, Cuesta College, CA
 Larry G. Sharp, Attorney, MI

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 Karen Sharp, Treasurer, Mott CC, MI
 Philip Cheifetz, Nassau CC, NY
 Tom Ferrio, Texas Instruments, TX
 Jerome Grant, Prentice Hall, NJ
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 Margaret Lial, American River College, CA
 Marilyn Mays, North Lake College, TX
 Pat McKeague, Cuesta College, CA
 Larry G. Sharp, Attorney, MI

1997-98:

Dale Ewen, Chair, Parkland College, IL
 Tom Ferrio, Secretary, Texas Instruments, TX
 Karen Sharp, Treasurer, Mott CC, MI
 Philip Cheifetz, Nassau CC, NY
 Wanda Garner, Cabrillo College, CA
 Jerome Grant, Prentice Hall, NJ
 Margaret Lial, American River College, CA
 Marilyn Mays, North Lake College, TX
 Pat McKeague, Cuesta College, CA
 Larry G. Sharp, Attorney, MI
 Randolph J. Taylor, Las Positas College, CA

1998-99:

Dale Ewen, Chair, Parkland College, IL
 Tom Ferrio, Secretary, Texas Instruments, TX
 Karen Sharp, Treasurer, Mott CC, MI
 Allen Angel, retired from Monroe CC, NY
 Wade Ellis, Jr., West Valley College, CA
 Jan Ford, Cuyamaca College, CA
 Wanda Garner, Cabrillo College, CA
 Jerome Grant, Prentice Hall, NJ
 Marilyn Mays, North Lake College, TX
 Pat McKeague, Cuesta College, CA
 Daryl Peterson, Houghton Mifflin Faculty Development Program, IL
 Ronald Rosier, Conference Board of the Mathematical Sciences, Washington, DC
 Larry G. Sharp, Attorney, MI
 Randolph J. Taylor, Las Positas College, CA
 Bert Waits, Ohio State University, OH

Corporate donors (January 1994-March 1999):

Patrons (\$2500 or more):

Addison-Wesley Longman
 Academic Systems
 Prentice Hall

Friends (\$1000-\$2499):

Harper Collins Publishers
 John Wiley & Sons

X. AMATYC'S ACCOMPLISHMENTS 1992–1998

American Mathematical Association Of Two-Year Colleges Highlights Of AMATYC's Accomplishments: 1992–1998

The American Mathematical Association of Two-Year Colleges (AMATYC) developed a Strategic Plan in 1991-92 with support from the Exxon Education Foundation and North Lake College, Irving, TX. The process involved various members of the AMATYC community through a Pre-Planning Committee, a Task Force, members of the 1991-93 AMATYC Executive Board and additional members of the mathematics and mathematics education communities. A final draft of the plan was shared with the AMATYC membership at its annual conference in Indianapolis, November, 1992. The goals listed below are the twelve goals stated in AMATYC's 1992 Strategic Plan. Following each goal are the highlights of AMATYC's progress toward accomplishing that goal.

Goal I: Promote the professionalism of two-year college faculty.

- ✱ Developed, adopted, and disseminated AMATYC's *Guidelines for the Academic Preparation of Mathematics Faculty at Two-Year Colleges*.
- ✱ Developed, adopted, and disseminated an official position statement entitled "Guidelines For Internships."
- ✱ Presidential addresses and articles focused heavily on encouraging professional attitude, conduct, and activity among two-year college faculty.
- ✱ Conducted annual conferences, regional conferences, summer institutes, traveling technology workshops, and *Crossroads* regional conferences which offered numerous opportunities for professional development of two-year college faculty.
- ✱ Developed a process for formal recognition and celebration of the accomplishments of two-year college faculty. Began this recognition in 1997 with the first presentation of AMATYC's Teaching Excellence Awards.
- ✱ Introduced *Crossroads in Mathematics: Standards for Introductory College Mathematics Before Calculus* to the public by holding a national press conference in Washington, D.C.
- ✱ Made lapel pins available to members to promote identification with and a sense of pride in their membership in AMATYC.
- ✱ Collaborated with Houghton Mifflin and PBS to develop a professional development teleconference series.

Goal II: Promote the effective participation of adjunct faculty to the greatest benefit of the educational program and the professoriate.

- ✱ Developed, adopted, and disseminated an official position statement entitled "The Working Conditions of Adjunct Faculty."

- Formed a subcommittee to identify and address issues of interest to adjunct faculty.
- Scheduled sessions at annual conferences focused on these issues, including a department chairs' colloquium in 1997.
- Modified the AMATYC membership categories and dues structure to make membership in AMATYC more affordable for adjunct faculty.

Goal III: Ensure that AMATYC has Position Statements to provide needed guidance and support for appropriate educational practices and that these statements reflect the vision of the profession.

- Two position statements were approved by the 1998 Delegate Assembly: “Support for Professional Development” and “The Use of Internet Resources to Enhance Mathematics Instruction.”
- Established a formal process for the development and approval of official position statements.
- Established a formal process for the periodic review, modification, or retirement of position statements.
- Established the Editorial Policy Review and Publicity Committee to assist in the development of position statements and standardize format to ensure a consistent, professional appearance.
- Charged all seven academic committees with the development of position statements for presentation to the Delegate Assembly for official adoption.
- Position statements adopted by the Delegate Assembly since 1992 are:
 1. Guidelines for the Academic Preparation of Mathematics Faculty at Two-Year Colleges
 2. Guidelines for Mathematics Departments at Two-Year Colleges
 3. Working Conditions of Adjunct Faculty
 4. Minimum Mathematics Requirement for AA/AS Degrees
 5. The Instructional Use of Technology in Mathematics
 6. Guidelines for Internships
 7. Undergraduate Textbook Position Statement
 8. Equal Opportunity in Mathematics Position Statement
 9. Calculator Position Statement
 10. Support for Professional Development
 11. The Use of Internet Resources to Enhance Mathematics Instruction
- Implemented a formal hearing structure to allow delegates and members in general to provide meaningful input and feedback on position statements prior to final presentation in the Delegate Assembly for approval.
- Implemented a structured, organized format for conducting the Delegate Assembly to

increase efficiency and effectiveness both in the approval of position statements and in general.

- Moved the focus of the Delegate Assembly toward issues critical to the improvement of mathematics education such as the approval of strong, relevant position statements.

Goal IV: Support reform of content and pedagogy, including the appropriate use of assessment, technology, and a variety of instructional strategies, in all mathematics courses in the first two years of college.

- Obtained grant funding from the Exxon Education Foundation and the National Science Foundation (NSF) to embark on a two-year project to develop standards for two-year college instruction in mathematics before calculus.
- Using broad mathematics community input, wrote, refined and published AMATYC's *Crossroads in Mathematics: Standards for Introductory College Mathematics Before Calculus*. Released the document and an executive summary in the fall of 1995.
- Obtained grant funding from NSF to conduct four regional conferences focused on the implementation of the recommendations found in *Crossroads*. Successful, high quality *Crossroads* implementation workshops were held in New York, Missouri, Oregon, and Arizona during 1997.
- Initiated a plan to provide on-site standards workshops upon request by colleges.
- Established a grass roots level Association Review Group to respond to questions from the National Council of Teachers of Mathematics (NCTM) regarding their K-12 standards documents and to provide input regarding the direction and focus of NCTM's proposed "Standards 2000" publication.
- Established the Assessment/Placement Committee. They are developing a position statement on assessment.
- Developed, adopted, and disseminated a position statement entitled "The Effective Use of Technology in Mathematics Education."
- Conducted a survey of the minimal mathematics requirements in states within the U.S. for associate's degrees.
- Developed, adopted, and disseminated a position statement entitled "Minimal Mathematics Requirements for AA/AS Degrees."
- Developed, adopted, and disseminated a position statement entitled "Support for Professional Development."
- Developed, adopted, and disseminated a position statement entitled "The Use of Internet Resources to Enhance Mathematics Instruction."

Goal V: Encourage institutions and mathematics departments to adopt policies and procedures that facilitate the recruitment and retention of students, especially underrepresented minorities and women.

- Made specific recommendations in *Crossroads in Mathematics* regarding instructional strategies which effectively invite participation and success of minorities and women.
- Developed, adopted, and disseminated a position statement entitled “Equal Opportunity in Mathematics” which addresses the involvement of minorities.
- Increased awareness of issues surrounding the encouragement of minorities and women by providing keynote, breakfast, and invited speakers who addressed these topics at several annual conferences.
- Increased participation in the Student Mathematics League by creating awards for regional winners, by waiving the registration fee for colleges holding institutional memberships, and by offering conference sessions designed to inform and encourage participation.

Goal VI: Promote the establishment of optimum learning environments.

- Developed, adopted, and disseminated a position statement entitled “Guidelines for Mathematics Departments at Two-Year Colleges.”
- Addressed topics within *Crossroads in Mathematics* which discuss the need to provide a learning environment which will meet the diverse learning styles of students. Provided guidance in that publication as to how to establish this environment.
- Throughout *Crossroads in Mathematics*, stressed the importance of developing critical thinking skills in all students.
- Established summer institutes and traveling technology workshops to provide faculty development which will enhance student learning.
- Established Traveling the *Crossroads* workshops to promote the goals in the *Crossroads* document.

Goal VII: Broaden public awareness of the importance of mathematics in today’s society.

- Worked with the Mathematical Association of America (MAA) and the Conference Board of the Mathematical Sciences (CBMS) to produce a publication on careers in mathematics. The booklet was published by CBMS and distributed at AMATYC conferences.
- Expanded the role of the Editorial Policy Review Committee to include publicity and the writing of articles about mathematics and AMATYC. The committee was renamed the Editorial Policy Review and Publicity Committee.
- Exhibited at the annual conferences of the American Association of Community Colleges to inform this audience of college administrators of the role and mission of AMATYC.
- Collaborated with Houghton Mifflin and PBS to present a teleconference series to inform participants about standards for introductory mathematics before calculus and engage them in discussion.

Goal VIII: Support formal connections with other organizations and with academic institutions.

- Encouraged the formation of the Coordinating Board of AMATYC, MAA, and NCTM. Participated in all meetings of this group.
- Participated in the CBMS's Educational Partnership which includes all CBMS member societies interested in mathematics education.
- Worked on numerous MAA and NCTM projects to represent the views of two-year college mathematics faculty. Examples are the current AMATYC review group which provides input for NCTM's "Standards 2000;" AMATYC representation on MAA's Task Force to revise their "Guidelines for Mathematics Departments" document; and the joint MAA/NCTM/AMATYC Task Force on competitions on which the AMATYC Student Mathematics League Chair served.
- Participated as one of the founding members in the formation of a new organization, the International Mathematics Olympiad 2001 USA, which plans to seek corporate funding to host the Mathematics Olympiad in 2001. This joint effort of over 20 mathematics related organizations will occur in 2001 and involve about 80 international teams.
- Participated each year in the celebration and recognition of the top USA high school student winners of the American Mathematics Competition. Honored these students during a ceremony held in Washington, DC, prior to their international competition.
- Sought and obtained endorsements for *Crossroads in Mathematics* from many other mathematics professional organizations including many of the state affiliates.
- Created a subcommittee on Teacher Preparation and promoted active two-year college participation in this arena in the near future.
- Participated in an NSF funded project highlighting the role of the two-year college in teacher preparation. The AMATYC President served as chair of the national steering committee and the AMATYC President-elect co-chaired the coordinating committee.
- Succeeded in calling the attention of the National Science Foundation to the talents and abilities of two-year college faculty.
- Worked with NSF to actively seek AMATYC members to serve on grant review panels and to make grant funds available to two-year college faculty.
- Obtained representation on the executive committee of the Conference Board of Mathematical Sciences.
- Obtained representation on the Mathematical Sciences Education Board.
- Obtained representation on the US National Commission on Mathematics Instruction.
- Secured increased responsibility and visibility in the mathematics education community.
- Assisted in the creation of several new AMATYC affiliate organizations bringing the total number of affiliates to 43, including one affiliate from Canada.
- Organized receptions for two-year college faculty at the national meetings of other professional organizations, including MAA and NCTM.

- Endorsed selected projects which target mathematics education in two-year colleges such as the Houghton Mifflin Faculty Development Workshops, the Houghton Mifflin/PBS Video Conference Series, and the Ohio State Short Course Program.

Goal IX: Support organizational structures and management for AMATYC and its affiliates that optimize both the use of human and fiscal resources and the ability to identify and respond to ever changing needs.

- Organized annual meetings of all Academic and Service Committee Chairs to coordinate projects and increase communication.
- Created a task force to investigate the involvement of affiliates with AMATYC and vice versa. Recommendations are being implemented.
- Established a headquarters hosted by State Technical Institute at Memphis. Opened the AMATYC Office in late 1993. There are now three full time employees working toward efficiently meeting the needs of AMATYC and its membership.
- Shifted the focus of the meetings of the Delegate Assembly toward substantial issues in mathematics education rather than conference site selection.
- Examined the role and focus of the Academic and Service Committees through careful scrutiny by a task force. Enacted the recommendations which resulted in redefinition of goals, alteration of committee names, the establishment of the Electronic Services Committee, and the division of the former Education Committee into two new committees: the Faculty Development Committee and the Program/Curriculum Issues Committee.
- Shifted day to day communication among the board and the committees to electronic means. In general, shifted into the electronic age of communication.
- Created an AMATYC website with links to AMATYC affiliate webpages.
- Created an Electronic Services Committee to coordinate AMATYC's electronics services and manage its web site.
- Created an electronic discussion group which now has over 600 members for discussion of matters related to mathematics education at two-year colleges.
- Undertook an organizational effectiveness study using an outside consultant during 1997. Recommendations from the results of that study are now being implemented.
- Awarded delegate status to all former AMATYC presidents as a means of utilizing their experience and history of the organization and enhancing continuity of leadership.

Goal X: Ensure the fiscal soundness of AMATYC, both now and in the future.

- Installed a process to ensure that AMATYC's financial records will be professionally audited every other year.
- Reviewed income and expenses at every meeting of the Executive Board and the Delegate Assembly.
- Enacted a plan to return a fixed amount of AMATYC's income to savings each year.
- Formally established the AMATYC Foundation as a separate tax exempt organization to

support the goals of AMATYC. The Foundation financially supported several speakers' participation in AMATYC's annual conference in 1997 and 1998.

- Reviewed the dues structure and increased dues. Added two new categories of membership to accommodate adjunct and retired members.
- Applied for and received grants from the National Science Foundation, Exxon Education Foundation, and Texas Instruments. These grants enabled AMATYC to develop, distribute, and promote *Crossroads*, commission an organizational study, and develop the AMATYC Strategic Plan.
- Established a strong, functional Grants Committee to provide funding source information and application insight to the membership. The Grants Committee curriculum design projects involve many AMATYC members working with the applications resources of the National Aeronautics and Space Administration.

Goal XI: Develop a membership base more representative of all entities concerned with and affected by the lower division mathematics program.

- Restructured dues to offer a reduced rate to adjunct and retired members.
- Established a subcommittee to identify and address the issues of concern to adjunct faculty.
- Revised the Institutional Membership brochure to better articulate the benefits of an institutional membership.
- Revised policy so that both an early conference registration and participation in the Student Mathematics League are complimentary with an institutional membership.
- Began exhibiting our materials and publications in an exhibits booth at the annual meeting of the American Association of Community Colleges.
- Organized receptions, at the national meetings of other professional organizations, for faculty concerned with and affected by lower division mathematics programs

Goal XII: Provide appropriate professional development and support for AMATYC members and their institutions through expanded and enhanced membership services.

- Increased size of annual conferences. Quality and diversity of the program continue to be strong. Strands of focus were modified in 1996 to reflect the strands found in *Crossroads in Mathematics*.
- Established and incorporated the recommendations of a task force on conference issues.
- Invited commercial vendors to present their latest developments, for a fee, during designated conference sessions.

- Continued to upgrade the quality and appearance of both *The AMATYC Review* and the *AMATYC News*. Expanded the *AMATYC News* from three issues per year to five per year in 1997.
- Published our membership list in directory form, both in hard copy and electronically, as a part of the Combined Membership List produced by the American Mathematical Society.
- Printed approved position statements in the *AMATYC News* and placed them on the AMATYC web site, immediately following approval.
- Published an AMATYC Handbook, which is updated with each change of officers.
- Published regional information in each edition of the *AMATYC News*.
- Created annual Summer Institutes in Charleston, SC; Hilo, HI; and the Outer Banks of North Carolina.
- Created Traveling Technology Workshops.
- Created Traveling the *Crossroads* Workshops.
- Held four *Crossroads* Implementation Regional Workshops during 1997. Numerous regional conferences have also occurred.
- Provided conference sessions rich with grant writing tips and resources through the efforts of the Grants Committee.
- Created the Teaching Excellence Awards and presented the first eight regional awards in 1997.
- Used booth at the AACC conference to highlight the colleges that hold institutional memberships and encouraged others to do likewise. Also used this booth to highlight the roles of mathematics faculty in AMATYC to their college deans, vice-presidents and presidents.
- Expanded Student Mathematics League awards to include regional awards.
- Posted AMATYC's professional development activities on the AMATYC website which links to the AMATYC affiliate webpages.

XI. AMATYC GOALS AND OBJECTIVES 2000–2005

American Mathematical Association of Two-Year Colleges Strategic Plan Goals and Objectives for 2000-2005

Adopted 18 April 1999

Goal I – Student Success Through the Learning Environment

- **Promote effective learning environments to increase success in mathematics for all two-year college students.**

Objectives

- A. Review, revise, and continue to promote the AMATYC Standards.
- B. Promote classroom, department, and campus environments that encourage members of underrepresented groups to succeed in and further their study of mathematics.
- C. Identify and disseminate information about teaching strategies and institutional support services that promote success, especially for at-risk students.
- D. Assist colleges in responding to necessary changes in curriculum, pedagogy, and assessment resulting from emerging technologies, workplace demands, and evolving educational goals.
- E. Participate in the development of evaluative criteria and standards for technology-based delivery of mathematics instruction.
- F. Promote the full integration of adjunct faculty into the comprehensive learning environment for mathematics.
- G. Promote improved articulation of two-year colleges with high schools and four-year institutions.

Goal II – Student Success Through Educators of Excellence

- **Establish and encourage professional development to enhance the quality of two-year college mathematics education.**

Objectives

- A. Enhance AMATYC professional development activities for all two-year college mathematics faculty.
- B. Provide a high-quality annual conference.
- C. Promote and enhance professional identity among two-year college mathematics faculty.

- D. Encourage AMATYC members to conduct research on teaching and learning.
- E. Enhance the role of the two-year college in preservice and inservice development of K-12 teachers of mathematics.

Goal III – Member Success Through A National Voice

- **Promote and participate in national initiatives that will benefit lower division collegiate mathematics education.**

Objectives

- A. Serve as the principal voice for two-year college mathematics and communicate the national mathematics agenda.
- B. Seek support from professional organizations, federal agencies, foundations, and businesses to implement AMATYC goals.
- C. Establish relationships with businesses that further the joint objectives of business and education.
- D. Develop and support leaders of two-year college mathematics faculty to address the national mathematics agenda.
- E. Increase involvement of AMATYC members with key national and international committees and policy-making boards.
- F. Institutionalize representation in Washington, DC, to better inform national leaders in government and education of the two-year college mathematics agenda.

Goal IV – Organizational Success Through Inner Strength

- **Develop the identity and image of AMATYC and strengthen its organizational structure in order to achieve its mission.**

Objectives

- A. Offer a full range of membership services to recruit and retain individual and institutional members.
- B. Examine organizational structure and management to optimize AMATYC's human and fiscal resources.
- C. Increase awareness of AMATYC as the principal resource for mathematics education in two-year colleges.
- D. Increase opportunities for communication and collaboration between AMATYC and its affiliates.

XII. GLOSSARY OF ABBREVIATIONS

AACC	American Association of Community Colleges
AMATYC	American Mathematical Association of Two-Year Colleges
AMS	American Mathematical Society
CBAMN	Coordinating Board of AMATYC, MAA, and NCTM
CBMS	Conference Board of the Mathematical Sciences
CSSP	Council of Scientific Society Presidents
DMC	Developmental Mathematics Committee
ICME	International Congress on Mathematical Education
IMO	International Mathematical Olympiad
INPUT	Innovative Programs Using Technology
IPC	International Program Committee
MAA	Mathematical Association of America
MATYC	Mathematics Association of Two-Year Colleges
MS 2000	Mathematical Sciences in the Year 2000
MSEB	Mathematical Sciences Education Board
NADE	National Association of Developmental Education
NASA	National Aeronautics and Space Administration
NCTM	National Council of Teachers of Mathematics
NSF	National Science Foundation
NSF-ATE Education	National Science Foundation - Advanced Technological Education
USNCMI	United States National Commission on Mathematics Instruction

V. APPENDIX: PROFESSIONALIZATION AND THE TWO-YEAR COLLEGE MATHEMATICS FACULTY

Richelle M. Blair, AMATYC Historian

INTRODUCTION

The AMATYC History presented on the previous pages describes the journey and incredible commitment of individuals across the country over the last two decades. It's a journey about real people who wanted to do important things to help students. It's a journey about what it means to be a two-year college mathematics faculty member today. The following pages present a review of research on professions, the professionalization process, and a reflection on what the status of the professionalization of teaching mathematics in two-year colleges is today.

The two-year college sector has been a major provider of mathematics instruction in the United States, providing instruction for “nearly 40 percent of all undergraduate students and accounts for nearly 40 percent of all undergraduate mathematics course enrollments” [1]. In 1974, a group of two-year college mathematics faculty took the first step in the professionalization of their occupation by forming their own professional organization, the American Mathematical Association of Two-Year Colleges (AMATYC). What were the forces that led to this dramatic step? How do those actions compare with the professionalization process experienced in other disciplines? Is the process complete? Are two-year college mathematics faculty considered to be professionals?

PROFESSIONS AND THE PROFESSIONALIZATION PROCESS

The extent to which the occupation of teaching mathematics in two-year colleges is a profession can be assessed within the theoretical framework of the study of professions, the process of professionalization, the culture of professional organizations, and professionalism in the two-year college. “Professionals profess-- they profess to know better than anyone else, the nature of certain matters and to know better than their clients what ails them or their affairs.” [2] For example, medicine professes health, law professes justice, and education professes truth.

The study of professions occurs within dynamic sociological contexts. At some point, individual occupations transform their ideals into a philosophy which becomes the central component of the *paradigm* of professions containing the following components:

1. an ideology of faith;
2. a code of ethics;

3. establishment of a set of skills;
4. establishment of standards of excellence;
5. institutional settings for practice and training;
6. guidelines for conduct and control;
7. professional culture sustained by a professional organization. [3]

The philosophy and rules of a profession are the end result of a developmental process involving the following *stages*:

1. it becomes full-time in character;
2. a group lays claim on certain areas and functions;
3. there are places of training;
4. a professional organization is established, first locally, then nationally;
5. rules of professional behavior and general codes of ethics are developed;
6. a prolonged political agitation is evident to obtain the support of the public.[4]

An occupation is considered to be a profession after moving through the stages above and establishing its “faith professed.”

Professionalization emerged in the mid 1960s as the study of the process of becoming a profession, the identification of dynamic characteristics, and a process whereby an occupation becomes a profession. [5] The professionalization *process* consists of fourteen characteristics:

1. Clarifying its defining function;
2. Mastery of theoretical knowledge;
3. Capacity to solve problems;
4. Use of practical knowledge;
5. Self-enhancement;
6. Formal training;
7. Credentialing;
8. Creation of a subculture;
9. Legal reinforcement to protect members;
10. Public acceptance;
11. Ethical practice or code of ethics;
12. Penalties for incompetency;
13. Relations to other vocations;
14. Relations to users of the service. [6]

The goal of professionalization is the creation of a full profession which is stable in the face of social and scientific change. Professionalization occurs within the context of interacting factors and forces. The nature of the occupation, the institution(s) in which the occupation is performed, and the persons performing, affect the process and outcome of professionalization.

Professionalization is an individual activity. Prerequisites for personal and professional maturity are the concepts of individual and institutional identity. Identity is a dynamic concept, which includes “an awareness of self, personality, and of individuality.” [7] As individuals form identity for themselves, the institution’s identity evolves. Identity involves a drawing together of person, institution, and a profession.

In order to become considered “a profession,” a culture must be developed and the process of professionalization completed. The extent to which teaching mathematics in the two-year college has evolved into a profession can be assessed by reviewing the events of the last 40 years in light of the above research on professions and the professionalization process.

1974

From the launch of Sputnik in 1957, until the birth of AMATYC in 1974, diverse institutions, students, and curricula, along with tremendous growth, presented new challenges for two-year colleges. Research into the nature of the two-year college, and its faculty and curriculum show a lack of a clear mission or institutional role. [8] A conflict occurred as institutions tried to provide higher education for all students and meet traditional standards and expectations set by four-year institutions and the public.

Rapid growth of the two-year college in the 1960s and 1970s brought changes in the characteristics of mathematics faculty and mathematics courses. Interviews with two-year college mathematics faculty [9] reflect feelings of insecurity, lack of self-awareness, and isolation. Tremendous instructional responsibility, inadequate professional preservice or inservice training, and a lack of attention from professional mathematics organizations intensified feelings of isolation and frustration for two-year college mathematics faculty. A professional identity crisis developed for faculty that paralleled the lack of clarity of role of the institution within America’s higher education system.

During this time, the two-year college mathematics educators received minimal support from institutions of higher education, the mathematics community, or existing organizations or agencies that they accepted as legitimate. [12] There were few professional development opportunities offered specifically for two-year college faculty at regional and national mathematics conference. Two-year college mathematics educators wanted professional development related to the mission of the two-year college and assistance in designing effective curricula for the diverse students and community needs, but had difficulty finding either. Two-year college mathematics faculty felt that proposals submitted to the National Science Foundation were not viewed as competitive.

Two-year college mathematics faculty across the nation felt different from high

school mathematics teachers or four-year college mathematics professors. They wanted to attend professional education workshops and seminars, share successes and failures, discuss teaching methodology, course content, textbooks, and issues of remedial mathematics education. They wanted to meet with others who understood the issues, students, and environment of the two-year college.

The need to establish a professional identity and communicate with other faculty in similar situations was a catalyst for two-year college mathematics faculty to seek a national forum of their own. This desire became a driving force for individuals who did not want to wait for things to happen to them. They wanted to create their own future. They did so with the formation of AMATYC in 1974.

ENORMOUS COMMITMENT OF INDIVIDUALS

The tireless and selfless actions of individuals in several states working to bring two-year college mathematics professionals together can not be overstated. [11] Interviews with two-year college mathematics educators involved in the formation of AMATYC revealed two persons who secured contracts for hotels for the 1974 and 1975 conferences using their homes as collateral. Another individual took personal financial responsibility for the Friday reception. Another put a rider on his personal insurance policy to protect college equipment used at the 1975 conference. Others paid their own travel expenses to visit other states to help organize new organizations for two-year college mathematics faculty. There are countless examples of institutional in-kind contributions arranged by AMATYC members to support collaborative and professional development activities. The profession of teaching mathematics in the two-year college is where it is today partly because of commitment of these individuals.

The dynamic professionalization process outlined in the literature of professions was in motion for two-year college mathematics educators in the 1970s. By 1975, they could lay claim to the first eight of the fourteen characteristics of the professionalization process outlined earlier. The function and role of the two-year college had crystallized and with it came a clarifying of function for mathematics faculty. A knowledge base in mathematics curriculum design, particularly in remedial mathematics courses and teaching methodology, was established and the solutions to related problems formed at the local and national level. Formal training and graduate programs for two-year college faculty became more available through professional organizations and universities. The mathematics faculty at two-year colleges had created their own subculture within AMATYC and state affiliates, thus becoming autonomous and self-enhancing. The professionalization process had begun, but was not complete.

A “FAITH PROFESSED”

By 1975, the “faith professed” or values to be achieved through the activities of the profession were evident in the purposes of AMATYC listed in the original Constitution:

1. to encourage the development of effective mathematics programs;
2. to afford a national forum for the interchange of ideas;
3. to further develop and improve the mathematics education and mathematics related experiences of students in two-year colleges;
4. to coordinate activities of affiliated organizations at the national level;
5. to promote the professional welfare and development of its members. [12]

The faith professed for AMATYC and the profession of teaching mathematics at the two-year college could be summarized to be: The enrichment of mathematics education in two-year colleges through active communication and dialogue.

In the literature of the study of professions, the philosophy, rules, and professional culture are the result of a developmental process involving the stages outlined earlier. By 1975, the occupation of teaching mathematics in a two-year college was full-time in character, it had laid claim on certain areas and functions, there were formal places of training, and professional organizations existed at the state and national levels. Rules of professional behavior and prolonged political agitation were not well developed, but the occupation of teaching mathematics in a two-year college had achieved four of the six stages in the development of a profession listed previously. Teaching mathematics in the two-year college had moved from an occupation considered to be an arm of high school or university mathematics teaching, to a separate profession in its own right.

AMATYC TODAY

AMATYC today is a vibrant, dynamic, friendly, professional organization which is the direct result of extraordinary efforts on the part of individuals with incredible vision in the 1970s, sustained by continued dedication, exceptional leadership, and tireless commitment of others during the 1980s and 1990s.

The commitment and enthusiasm of individuals observed in 1974 and 1975 is still evident today. The organization which began with less than 300 members, now has individual memberships close to 3,000 and over 100 institutional memberships. AMATYC has grown from a group of individuals seeking personal and professional identity to a mature professional organization offering a variety of services to its members.

The AMATYC of the 1990s is actively working to accomplish the last two stages

of development of a profession: 1) development of rules of professional behavior and 2) prolonged political agitation. The recent Strategic Planning efforts, the AMATYC *Standards for Introductory College Mathematics*, and AMATYC guidelines and position statements, are defining the rules of professional behavior for the association. Two-year college mathematics faculty are now active in the political arena of regional and national policy in mathematics and science education. Two-year college mathematics faculty have created a place for themselves in the mathematics education community.

CONTINUING THE PROFESSIONALIZATION PROCESS

AMATYC provides outstanding services to its membership through leadership activities, the opportunity to interact with professionals across the country, workshops, and institutes. It provides opportunities for the development of a personal and professional identity, which requires an understanding of the drawing together of the person, the institution, and the profession.

The professionalization process for two-year college mathematics faculty is ongoing. Challenges still exist--some old, some new. Two-year college educators must make the time within a busy teaching schedule to become more involved in policy-making at the local, state, and national levels. Two-year college faculty must clarify their own sense of purpose and place in higher education and communicate that role and its characteristics to other professionals. Bridges must continue to be built between the K-12 and higher education sectors. Parents, community leaders, business/industry representatives, and legislators must be thoroughly informed of the role of the two-year college and the expertise of the professionals employed there. Lastly, mathematics instruction at all levels must be changed to engage students actively in the process of learning mathematics for their role in our technological, international society at all levels of the educational system.

Two-year college mathematics faculty across the nation began a journey twenty years ago, but the trip is not over. New and experienced faculty must work together to decide upon the desired destination and how to get there. "The goal of professional education should be the development of the aware, self-directed, professional person. . . .The basis of true professionalization of learning is the individual in charge of his own activities." [13] That development need not occur in isolation. Due to the tireless efforts of professionals across the country, two-year college mathematics faculty have the resources of AMATYC to draw upon. The next twenty years are sure to be just as exciting for AMATYC and two-year college mathematics faculty as the professionalization process continues.


ENDNOTES

- [1] National Research Council, Moving Beyond Myths, Revitalizing Undergraduate Mathematics (Washington, D.C.: National Academy Press, 1991), 4.
- [2] Everett C. Hughes, "Professions," Daedalus 92 (1963): 656.
- [3] This paradigm is found in Argyris and Schon (1974), p. 146; Houle (1981), p. 14; and Vollmer and Mills (1966), p. xi.
- [4] These stages were found in Burrage and Torstendahl (1990), p. 181; Hughes (1963), p. 29; Vollmer and Mills (1966), p. 20; and Wilensky (1964), p. 142.
- [5] Hannes Siegrist, "Professionalization as a Process: Patterns, Progression and Discontinuity." in Michael Burrage and Rolf Torstendahl, eds., Professions in Theory and History (London: Sage Publications, 1990), 177.
- [6] Cyril Houle, Continuing Learning in the Professions (San Francisco: Jossey-Bass Publishers, 1981), 35.
- [7] Arthur M. Cohen, and Florence B. Brawer, Confronting Identity: The Community College Instructor (New Jersey: Prentice-Hall, Inc., 1972), 1.
- [8] Richelle M. Blair, "A Descriptive Study of the Professionalization of Two-Year College Mathematics Practice Between 1957 and 1975" (Ph.D. diss., Kent State University, 1992), Chapter III, 45-82.
- [9] *Ibid.*, Chapter IV, 83-121.
- [10] *Ibid.*, Chapter V, 122-160.
- [11] *Ibid.*, Chapter VI, 161-192.
- [12] Taken from the December 2, 1976 Constitution of AMATYC.
- [13] Cohen and Brawer, Identity, 145.

REFERENCES

- Argyris, Chris and Donald A. Schon. *Theory in Practice: Increasing Professional Effectiveness*. San Francisco: Jossey-Bass Publishers, 1974.
- American Mathematical Association of Two-Year Colleges. "The Constitution of AMATYC." December 2, 1976.
- Blair, Richelle M., "A Descriptive Study of the Professionalization of Two-Year College Mathematics Practice Between 1957 and 1975." Ph.D. diss., Kent State University, 1992.
- Burrage, Michael and R. Torstendahl, eds. *Professions in Theory and History*. London: Sage Publications, 1990.
- Cohen, Arthur M. and Florence B. Brawer. *Confronting Identity: The Community College Instructor*. New Jersey: Prentice-Hall, Inc., 1972.
- Houle, Cyril. *Continuing Learning in the Professions*. San Francisco: Jossey-Bass Publishers, 1981.
- Hughes, Everett C. "Professions." *Daedalus* 92 (1963): 655-668.
- National Research Council. *Moving Beyond Myths, Revitalizing Undergraduate Mathematics*. Washington, D.C.: National Academy Press, 1991.
- Siegrist, Hannes. "Professionalization as a Process: Patterns, Progression and Discontinuity." in Michael Burrage and Rolf Torstendahl, eds., *Professions in Theory and History*. London: Sage Publications, 1990, 177-202.
- Vollmer, Howard M. and Donald L. Mills. *Professionalization*. Englewood Cliffs: Prentice-Hall, Inc., 1966.
- Wilensky, Harold L. "The Professionalization of Everyone." *The American Journal of Sociology* LXX no. 2 (September 1964): 137-158.

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James Baldwin
Past President, AMATYC
Nassau Community College (retired)

During my 2 ½ year term of office, I lead the executive board through a series of resolutions that discussed the role, responsibility and interaction of the executive board, delegate assembly, committee members, state affiliates, institutional members and members. Those resolutions came to be known as the organization's policy manual. During the same time period I asked president elect Amber Steinmetz to develop a series of resolutions dealing with the daily operations of AMATYC conventions. Her resolutions along with the board's added input, became known as the convention planning manual.

A Tribute to Phil Cheifetz
James Baldwin
Past President, AMATYC
Nassau Community College (retired)

After Phil Cheifetz first attended an MAA annual meeting in New Orleans in 1967 he was appalled to find there was not one talk that he could relate to or use in the classroom. This happened again when he attended a second MAA annual meeting. This was one of the reasons that state organizations like NYSMATYC were initially formed years earlier.

Phil began to think about having a national TYC association. When he talked to people in the mathematics community, he was told this would be an impossible task. But Phil being young and foolish, did not take their advice. He began to plan for a 1974 meeting in 1973. He had to find a hotel location in NYC to accommodate the expected number of people attending. He lined up speakers, publishers, and advertisers. He put together the actual speaker program including the times and room locations. Phil did all this without the formal support of any organization. In the end, the conference attracted over 300 people from as far away as Alaska.

At the end of the NYC meeting those interested in going forward, planned for the Chicago meeting, with Bill Dresden as chair. For the next 5 years he was a personal consultant to the presidents and in many ways he was the driving force behind them.

Phil took on a tremendous challenge to initiate the development of a national TYC organization. This was just one reason why Phil became the first AMATYC ME Award winner.