I. Call to Order
President Jim Ham called the meeting to order at 3:50 pm.

II. Welcome and Introductions
President Ham welcomed the delegates and announced that Chuck Nolan was appointed as Parliamentarian and Timekeeper. President Ham also introduced the members of the 2018-2019 Executive Board.

Jim Ham – President
Kathryn Kozak – President Elect
Jane Tanner – Past President (in absentia)
David Tannor – Treasurer
Behnaz Rouhani – Secretary
Sophia Georgiakaki – Northeast VP
Dan Fahringer – Mid-Atlantic VP
Nancy Rivers – Southeast VP
Jon Oaks – Midwest VP
Rochelle Beatty – Central VP
April Strom – Southwest VP
Sarah Pauley – Northwest VP
Eric Matsuoka – West VP

III. Announcement of Quorum
Secretary Behnaz Rouhani announced a delegate count of 152 out of 189 delegates and stated that there was a quorum. The final breakdown of the delegate count is as follows:

21 from the Northeast Region, 14 from the Mid-Atlantic Region, 32 from the Southeast Region, 29 from the Midwest Region, 21 from the Central Region, 12 from the Southwest Region, 12 from the Northwest Region, and 11 from the West Region.

IV. Approval of the Rules of Conduct
MOTION to approve the rules of conduct.
Motion made by Christine Mirbaha, affiliate delegate, MMATYC, Mid-Atlantic Region. Motion was seconded by James Adair, state delegate, Tennessee, Southeast Region.

Motion approved
V. Approval of the Agenda
MOTION to approve the agenda.
Motion made by Chris Yuen, affiliate delegate, NYSMATYC, Northeast Region. Motion was seconded by Stefan Baratto, chair, Mathematics and its Application for Careers, Northwest Region.

Motion approved

VI. Approval of the 2019 Minutes Review Committee
MOTION to approve the Minutes Approval Committee for the 2019 Delegate Assembly. The committee consists of Sophia Georgiakaki, Northeast Vice-President, chair; Matthew Westerhoff, state delegate, Washington DC, Mid-Atlantic Region; Frank Marfai, affiliate delegate, ArizMATYC, Southwest Region; Sarah Sexton, affiliate president, MOMATYC, Central Region; and Nancy Sattler, AMATYC Past President, Midwest Region. Behnaz Rouhani, 2018-2019 AMATYC Board Secretary, Southeast Region, is an ex officio member of the committee.

Motion made by Paul Hessert, state delegate, Indiana, Midwest Region. Motion was seconded by Rochelle Beatty, Central Vice-President.

Motion approved

VII. 2018 Delegate Assembly Minutes
President Ham reported that the minutes from the 2018 Delegate Assembly held in Orlando were reviewed, revised, and approved by the 2018 Delegate Assembly Minutes Review Committee, chaired by Sophia Georgiakaki, Vice-President, Northeast.

VIII. Reports
A. President’s Report

The report was received in the Delegate Assembly packet.

Additional items to include:

- There were 1089 registrants for the conference. Total attendance, including 98 guests, was 1187.

B. Treasurer’s Report

The report was received in the Delegate Assembly packet.

C. AMATYC Foundation

The report was received in the Delegate Assembly packet.

D. Strategic Planning

The 2018-2023 Plan was received in the Delegate Assembly packet.

E. Conference Site Selection

Reno, Nevada, was announced as the site of the 2025 AMATYC Annual Conference.
IX. New Business

A. Position Statement on *Distance Education in College Mathematics in the First Two Years*: Anne Magnuson

Motion: That the AMATYC Delegate Assembly approve the attached (amended) position statement entitled *Distance Education in College Mathematics in the First Two Years*. (Attachment A)

Motion made by Anne Magnuson, Innovative Teaching and Learning Committee.

Motion approved

B. Position Statement on *Mathematics for Liberal Arts*: Christine Mirbaha

Motion: That the AMATYC Delegate Assembly approve the attached (amended) position statement entitled *Mathematics for Liberal Arts*. (Attachment B)

Motion made by Christine Mirbaha, Mathematics for Liberal Arts Network.

Motion approved

C. By-laws Change to Delegate Assembly Composition: Nancy Rivers

Motion: That the amendments to the AMATYC By-laws as listed in the attachment (amended) be approved. The revised by-laws would take effect January 1, 2020. (Attachment C)

Motion made by Nancy Rivers, Southeast Vice-President.

Motion approved

X. Items for Discussion - Open Microphone

Issues raised:

- Steven Krevisky, state delegate, Connecticut, Northeast Region. Steve mentioned that, after the International Congress on Mathematical Education (ICME), July 12-19, 2020 in Shanghai, China, the International Group for the Psychology of Mathematics Education (IGPME) takes place July 21-25, 2020 in Thailand. He asked AMATYC to partially fund members to attend these conferences.

- Luke Walsh, affiliate delegate, NCMATYC, Southeast Region. Luke promoted Project Slope. He mentioned that they are applying for a grant in collaboration with the Equity Committee. He mentioned that many injustices currently exist in mathematics.

- Sarah Sexton, affiliate president, MOMATYC, Central Region. Sarah mentioned that elimination of the Affiliate Scholarship would especially hurt adjunct faculty, like herself, who may not be able to attend the conferences otherwise. She asked AMATYC to reconsider bringing this back.

- Pat Barrientos, affiliate president, NMMATYC, Southwest Region. Pat pointed out that in the interest of equity and adjuncts, adjuncts and retirees should not be excluded from voting, holding office, assuming leadership positions, or serving as Delegates; She also suggested that affiliates may want to sponsor adjunct travel. In addition, she mentioned that having an award for the adjuncts would encourage them to attend the conference.

- Julie Phelps, chair, Mathematics Standards in the First Two Years of College, Southeast Region. Julie asked the Board to reconsider the election process, by having interactive sessions. This means having a period during which the membership can see and hear from candidates running
for office. She also asked that AMATYC not use the June 30th date to check membership for voting eligibility; she suggested a later date closer to the actual election period.

- Nancy Sattler, Past President, Midwest Region. Nancy challenged delegates to go to the AMATYC website, read the IMPACT document, and then share what they do in their classes on the IMPACT Live! site.
- Sean Saunders, affiliate delegate, OCMA, Northeast Region. Sean echoed what was mentioned earlier about the Affiliate Scholarship. He said that the Affiliate Scholarship enabled him to attend the Conference every year.

XI. Announcements

A. The 2019 Herb Gross Presidential award recipients were:
   - Karen Gaines and John Pazdar received the 2019 Herb Gross Presidential award.

B. The 2019 AMATYC Teaching Excellence award recipients were:
   - Trisha White, Ozarks Technical Community College, Springfield, MO
   - Andrea Hendricks, Georgia State University, Perimeter College, Clarkston Campus, GA.
   - Holly Markovich, Wake Technical Community College, Raleigh, NC.
   - Paul McCombs, Rock Valley College, Rockford, IL.

C. The Members of the 2021 Nominating Committee were selected:
   - Jim Ham (Chair), Past President
   - Behnaz Rouhani, Southeast
   - Rochelle Beatty, Central
   - Julie Gunkelman, Midwest
   - Dona Boccio, Northeast
   - Christine Mirbaha, Mid-Atlantic
   - Penny Morris, Southeast
   - Florian Haidue, Midwest
   - Nicole Lang, Central
   - Shane Tang, Southwest
   - Luke Audette, Northwest
   - Paula Wilhite, West

D. The 2020 Teaching Excellence Committee was selected:
   - Laura Watkins (Chair), Incoming President-Elect
   - Chris Yuen, Northeast
   - Chris Ward, Mid-Atlantic
   - Debbie Garrison, Southeast
   - Diane Koenig, Midwest
   - Susan Bornsen, Central
   - Patrick Kimani, Southwest
   - Kendall Jacobs, Northwest
   - Spencer Bartholomew, West
   - Pat Barrientos, Adjunct Representative
XII. Adjournment

President Ham thanked the Local Events Coordinator, Turi Suski, and her local team for hosting this outstanding annual conference. He also thanked Keven Dockter, Judy Williams, and the rest of the conference committee for their year-long commitment and great work in bringing this wonderful conference to Milwaukee. He also thanked Parliamentarian Chuck Nolan and all the delegates to the assembly.

The meeting adjourned at 4:17 pm.
ATTACHMENT A

Position Statement of the AMERICAN MATHEMATICAL ASSOCIATION OF TWO-YEAR COLLEGES on Distance Education in College Mathematics in the First Two Years

For the purposes of this position statement, Distance Education (DE) shall be defined as follows: “Education that uses one or more technologies to deliver instruction to students who are separated from the instructor and to support regular and substantive interaction between the students and the instructor synchronously or asynchronously.”

The American Mathematical Association of Two-Year Colleges (AMATYC) provides leadership in improving mathematics education regardless of the delivery method. AMATYC’s IMPACT advocates for “increased student engagement to boost retention and provide more productive and successful online learning environments.”

Recognizing that DE mathematics courses are becoming more prevalent in the first two years of college, institutions must maintain high standards and use research-based practices when designing DE courses. While DE courses provide students with learning opportunities that may not have previously existed, these courses may not be appropriate for all students nor all instructors. DE requires alternative teaching and learning methods. Special attention must be directed to the needs and abilities of both students and faculty.

To this purpose AMATYC makes the following recommendations.

Planning, Support, and Maintenance

Colleges should provide:

- Ongoing training and support for faculty and students as an integral part of the DE program.
- Proper infrastructure, including accessible testing centers and well-trained support staff for the Learning Management System (LMS) and other DE-specific systems.
- Support for innovative tools and best practices.
- Equivalent supports for students in DE courses when compared to students in on-campus courses.

Expectations for Instructors

Instructors of DE courses should strive to:

- Stay informed of and implement current best practices in DE through professional development.
- Interact with and support students through regular and substantive communication.
- Work to continuously improve the DE course and student experience.
- Give timely and relevant feedback on student learning.
- Clearly convey course expectations to students.

Expectations for Students

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Students enrolled in DE mathematics courses should:

- Be active learners who are strongly motivated and self-disciplined.
- Participate in class activities consistently.
- Interact with the instructor and other students regularly in a substantive way.
- Turn in course assignments on time.

**Instructional Design**

Course design should be informed by a wide variety of resources and best practices for DE. Well-designed DE mathematics courses will have these attributes:

- The course design addresses established course competencies with appropriate quality and mathematical rigor.\(^4\)
- Course objectives and instructor expectations are clearly communicated.\(^5\)
- Assessments measure student achievement of the learning objectives.\(^6\)
- A variety of activities and instructional materials promote frequent and substantive engagement with the content, other students, and faculty.
- Course tools and activities support the learning objectives.

**Access and Equity**

Since mathematics is an integral part of so many programs of study, it is especially important that all students who could benefit from distance education opportunities in mathematics have access to them. Efforts should be made to maximize student access to DE mathematics courses and all such courses should be ADA compliant to ensure they are fully accessible to all students enrolled in the course.

**Standards and Integrity**

Mathematical thinking and processes aid in the problem-solving skills needed for success in many programs and disciplines. To this end, DE courses must maintain the same rigor and scope of work as mathematics courses of the same title, regardless of delivery format. Security measures such as the proctoring of exams, as outlined in the AMATYC Position Statement on Proctored Testing for Courses Taught at a Distance,\(^7\) should be implemented.

\(^4\) Quality Matters (QM) (2015). *Course Design Rubric Standards, 2\textsuperscript{nd} edition*. Annapolis, MD: QM.

\(^5\) Quality Matters.

\(^6\) Quality Matters.

\(^7\) American Mathematical Association of Two-Year Colleges (AMATYC) (2012). *Position Statement: Proctored Testing for Courses Taught at a Distance*. Memphis, TN: AMATYC.
Sources
Position Statement of the AMERICAN MATHEMATICAL ASSOCIATION OF TWO-YEAR COLLEGES on Mathematics for Liberal Arts

Mathematics for Liberal Arts (MLA) courses are general education quantitative reasoning (QR) courses which provide mathematical skills and perspectives to empower students as they pursue their personal, academic, and career goals. This position statement integrates the position and recommendations of the American Mathematical Association of Two-Year Colleges (AMATYC) for general education mathematics courses.

Rationale
QR is an essential learning outcome of all mathematics courses, supporting student success in the 21st century.\textsuperscript{1,2,3} The increasing importance of QR to more programs of study, combined with the national Mathematics Pathways movement, has resulted in MLA courses now being more explicitly focused on developing QR skills. One of three mathematics pathways identified in AMATYC’s \textit{IMPACT} is Quantitative Literacy.\textsuperscript{4} Since MLA courses will serve as capstone courses for this pathway, AMATYC presents the following four recommendations.

Course Purpose
MLA courses should be designed with the goal of increasing students’ quantitative and logical reasoning abilities. MLA courses should assist students to realize the relevance of mathematics and to develop an appreciation for mathematics.

Course Topics and Approach
Content should be useful and meaningful for students and relate to real world applications. Focus should be placed on conceptual understanding through modelling, interpretation, and real world connections. Topics should be covered in appropriate depth and at an appropriate pace so that students gain a sense of mastery. Technology should be utilized in order to reduce the computational load and to facilitate a broad exploration of the concepts.

Engagement
One of the four pillars of AMATYC’s \textit{IMPACT} is “Engagement: Developing Intellectual Curiosity and Motivation in Learning Mathematics” for both students and faculty.\textsuperscript{5} MLA courses should engage students in the learning process by incorporating active learning strategies and exploration through activities and projects that are of general interest to students. Faculty should be encouraged and supported by professional development opportunities to use best educational practices in creating a productive and dynamic learning environment.

Student Audience
While MLA courses are a suitable option to fulfill degree requirements for students in non-STEM-intensive majors, all students in the first two years of college should have access to QR courses because of the great benefits they offer. Students in non-STEM-intensive majors should be encouraged to take at least one additional course in the mathematical sciences above their minimal degree requirement.\textsuperscript{6} Students in STEM-intensive majors would also benefit from a QR course.


5 *IMPACT*, 43-53.

ATTACHMENT C

ARTICLE VII DELEGATE ASSEMBLY

Section 1 The association shall have an annual business meeting (Delegate Assembly) in conjunction with its annual conference. Notice of the Delegate Assembly meeting shall be publicized in writing or electronically at least one month in advance.

Section 2 The Delegate Assembly shall be composed of delegates who are regular members of AMATYC as follows:

A. State/Province Delegates
   1. There shall be two state/province delegates from each state and province, appointed for a term of two years by the appropriate regional vice president. States and provinces with more than 50 regular individual members of AMATYC, are permitted one additional state/province delegate for each 50 regular individual members of AMATYC or fraction thereof above 50, determined by each member’s preferred mailing address. The count of regular individual members of AMATYC will be done on June 30 of even-numbered years.
   2. Terms of state/province delegates shall commence on July 1, or date of appointment, whichever is later, and terminate on June 30, in odd-numbered years.
   3. An alternate delegate from the same state/province may be appointed to serve as proxy in place of a state/province delegate who is unable to attend the Delegate Assembly.

B. Affiliate Delegates
   1. Each affiliate president, who is also a regular AMATYC member, in office at the time of the Delegate Assembly is a delegate to the Delegate Assembly to represent their affiliate organization.
      A proxy cannot replace an affiliate president delegate.
   2. Each affiliate organization may appoint one additional affiliate delegate. Term of appointment will be determined by the affiliate.
   3. An alternate delegate from the same affiliate may be appointed to serve as proxy in place of an affiliate delegate who is unable to attend the Delegate Assembly.

C. Each Executive Board officer is a delegate.
D. Each AMATYC past president is a delegate.
E. Each AMATYC academic committee chair is a delegate.
F. Additional delegates to represent countries not specified in Section XI may be appointed by the Executive Board.

G. No delegate at the Delegate Assembly is entitled to more than one vote.
H. Regional Vice-Presidents shall submit a list of affiliate and state/province delegates to the AMATYC Secretary no later than thirty (30) days prior to the start of the Delegate Assembly.
I. Alternate Delegates may be named by the Regional Vice-President as the delegate replacing an affiliate or state/province delegate at the Delegate Assembly, by notifying the AMATYC Secretary in writing and providing appropriate credentials in writing no later than 6 pm of the day prior to the start of the Delegate Assembly.