The Mathematical Association of America
(Incorporated)

Henry L. Alder
Secretary

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October 5, 1970

To Section Officers and Governors of the MAA:

Dear Colleagues:

Enclosed are the minutes of the meeting of Section Officers held on August 24, 1970 at the University of Wyoming.

Also enclosed for some of you is a report of the Junior College Articulation Committee of the Illinois Section of the MAA, presented to their business meeting on May 8, 1970. This report should prove very valuable to Sections desiring to establish closer and more effective liaison between the two-year and four-year college teachers of mathematics. Since there were not sufficiently many copies of this report available, it has been impossible to include copies to all of you, but every Governor is being sent a copy of this report. If you do not receive a copy and desire one, you can obtain it by writing to:

Professor Arnold Wendt
Department of Mathematics
Western Illinois University
Macomb, Illinois 61455

Sincerely yours,

Henry L. Alder

Henry L. Alder
Secretary

HLA:TW

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MEETING OF SECTION OFFICERS

Monday, August 24, 1970
University of Wyoming

The annual meeting of officers of the Sections of the Mathematical Association of America was held on Monday, August 24, 1970, in the Rendezvous Room of the Washakie Center of the University of Wyoming, Laramie, Wyoming. Professor L. E. Mehlenbacher, Chairman of the Committee on Sections, presided and called the meeting to order at 7:00 p.m. Sixty-one persons were present.

A. List of Official Representatives and Others Present. Twenty five of the twenty-eight Sections were officially represented.

Allegheny Mountain	M. R. Woodard, SEcretary-Treasurer
Florida	G. W. Medlin, Chairman
Illinois	R. L. Shively, Chairman
Indiana	W. C. Swift, Chairman
Iowa	Timothy Robertson, Chairman
Kansas	J. R. Ewbank, Chairman
Kentucky	Aughtum S. Howard, Secretary-Treasurer
Louisiana-Mississippi	D. E. Dupree, Chairman
Maryland-D.C.-Virginia	Denny Gulick, Past Secretary
Metropolitan New York	not represented
Michigan	J. E. Folkert, Chairman
Missouri	Jack Jolly, Secretary-Treasurer
Nebraska	D. L. Skoug, Chairman
New Jersey	not represented
North Central	Alfred Aeppli, Chairman
Northeastern	D. E. Christie, Governor
Northern California	T. H. Southard, Chairman
Ohio	B. J. Yozwiak, Chairman
Oklahoma-Arkansas	E. K. McLachlan, Secretary-Treasurer
Pacific Northwest	not represented
Philadelphia	W. R. Jones
Rocky Mountain	D. J. Sterling, Secretary-Treasurer
Southeastern	H. E. Taylor, Chairman
Southern California	J. A. Ferling, Chairman
Southwestern	L. T. Smith, Chairman
Texas	G. R. Vick, Chairman
Upper New York State	F. R. Olson, Governor
Wisconsin	W. B. White, Chairman

Others present included:

Allegheny Mountain	H. L. Krall, Governor
Florida	D. B. Goodner, Governor
Illinois	F. E. Hohn, Governor
	Arnold Wendt, Committee on Sections
Indiana	W. T. Fishback, Committee on Sections
	B. E. Rhoades, Governor
Iowa	D. E. Sanderson, Governor
Kansas	G. B. Price, Finance Committee, MAA
	W. M. Wedel, Governor

Kentucky	J. H. Wells, Governor
Louisiana-Mississippi	S. H. Douglas, Vice Chairman
	S. R. Knox, Governor
	J. L. Tilley
Maryland-D.C.-Virginia	A. B. Willcox, Executive Director, MAA
Michigan	L. E. Mehlenbacher, Chairman, Comm. on Sections
	H. T. Slaby, Secretary-Treasurer
Missouri	A. G. Haddock, Governor
Nebraska	H. M. Cox, Executive Director, Comm. on High School Contests
	J. M. Earl, Chairman, Comm. on High School Contests
North Central	F. L. Wolf, Governor
Northeastern	V. O. McBrien, Chairman, Comm. on Institutes
	F. M. Stewart, Chairman, Comm. on Assistance to Developing Colleges
Northern California	H. L. Alder, Secretary, MAA
	H. M. Bacon, Chairman, Comm. on Secondary School Lecturers
	D. W. Blakeslee, Committee on Sections
	P. T. Mielke, Executive Director, CUPM
Ohio	D. T. Finkbeiner, Chairman, Comm. to Consider Certification and Accreditation in Math.
Oklahoma-Arkansas	J. E. Scroggs, Governor
Pacific Northwest	D. W. Bushaw, Governor
Rocky Mountain	R. W. Irvine, Chairman
Southeastern	Henry Sharp, Jr., Governor
Southern California	R. B. Herrera, Governor
	T. N. Robertson, Secretary-Treasurer
Upper New York State	Raoul Hailpern, Editorial Director, MAA
	M. W. Pownall, Chairman, Comm. on Visiting Lecturers
	G. S. Young, President, MAA

B. Message from the President

President Young stated that, with his term ending, he wished to point out again the need for increased work by the Sections on the problems facing American mathematics. There are many areas where the national organization cannot work as effectively as the Sections; as an example he cited the demand for local action by two-year colleges. He personally had been made aware of the accomplishments in this direction by the Oklahoma-Arkansas Section. In his visits to Sections, he had found a number of problems common to many Sections, for instance, the problem of how to get mathematicians from major institutions involved and how to find time and money to carry on Section projects. He felt that one of the greatest benefits of Sectional meetings is the contact they provide for people to identify the common problems and work together on them. He felt that much more is accomplished in two-day than in one-day Section meetings.

C. Report of the Committee on Assistance to Developing Colleges, Professor F. M. Stewart, incoming Chairman

The President introduced the incoming Chairman of the Committee on Assistance to Developing Colleges, Professor F. M. Stewart of Brown University. He reported

that Professor W. R. Talbot of Morgan State College had directed a highly successful Conference on Mathematics at Developing Colleges, held at the University of Wyoming during the week preceding the Summer Meeting. The Conference helped toward clarifying the nature and role of developing colleges, colleges characterized particularly by their openness. They seek to serve as many students as possible, not merely those with easily identifiable potential. The predominantly black colleges provide the inspiration for the Committee on Assistance to Developing Colleges, which cooperated in organizing the Conference; but several predominantly white colleges have now identified themselves as sharing the Committee's concerns. The CADC asks the Sections to help other colleges to decide whether they should now associate themselves with the CADC. Later, as these colleges communicate their special needs, the Sections will be called upon to help meet those needs. The developing colleges need the assistance of many mathematicians in their local areas, and the Sections can do a great deal to promote useful communication both to and from the developing colleges.

D. Discussion of Proposed New Services to the Sections, Dr. A. B. Willcox, Executive Director

1. In the near future, the Executive Director will write to Section Officers announcing the availability of a display set of MAA books to be used for Section meetings. Books which sell for $6.00 to the general public and $3.00 to MAA members will be available for purchase at $2.75 at Section meetings. Similar reductions will be made for books selling for higher prices. The Section will send to the Washington office completed order forms for books ordered at the meetings, together with a payment for these books at a still lower price, e.g. $2.50 for a book normally selling for $3.00. The discount for the Section is not designed to fill Section coffers, but to compensate the Section for the effort of receiving and transmitting orders and for making a single payment for a substantial number of books. It is hoped that Sections may find such a display for MAA books a valuable addition to their meetings.

Membership application blanks should be available at the Section meeting so that a person could simultaneously apply for membership and purchase books at this double-discount price.

2. The Executive Director noted that it had come to his attention that each Section of the Association should have income tax exempt status under Section 501 (C) (3) of the Internal Revenue Code. It is not clear at this time whether the Association's exempt status extends automatically to the individual Section, and he will clarify this before writing to Section officers. However, it is clear that each Section will have to file IRS Form 4653 informing IRS that it is not a "Private Foundation". To substantiate this claim, it will be necessary to supply information concerning income for the past four years which shows that (a) not more than 1/3 of total support comes from investment income, and (b) more than 1/3 of total support comes from "public sources", such as membership dues, grants from foundations (or the MAA) and income from business activities related to the purposes of the organization.

Each Section should also file with IRS an annual financial report (IRS Form 990-A). This requirement of filing Form 990-A is not a new feature of the present tax reform bill. The requirement has always been there; however, most Sections have been too small fish to come to the attention of IRS. Perhaps this has not changed, but he was told that tax reform has stirred up the waters and that there is some danger that IRS will begin fishing with a finer net.

3. Sections were reminded of the Fund for Aid to Sections from which grants may be made to provide partial support for Section projects. Guidelines for preparing proposals for grants from the Fund have been distributed to Section Officers. In the first year of its existence, the Fund has been less than half used. Sections which are experiencing difficulty financing worthy and desirable activities are urged to submit proposals.

4. Gummed address labels for mathematics department chairmen at institutions in a Section are now available from the Washington office on request. There is no charge for these labels for Section use.

Regarding tax exempt status for Sections, the question was raised whether the Washington office of the MAA could take care of this for all Sections. Dr. Willcox replied that it could be done, but then the Washington office would need financial reports from all 28 Sections to file along with the Internal Revenue Report each year.

Professor H. M. Cox reported that he had used the letter granting the Association tax exempt status and had found this sufficient to secure such status for the Nebraska Section. Dr. Willcox said that he would clarify this with IRS. Professor Cox offered to send a copy of his correspondence.

In answer to a question by Professor D. J. Sterling as to which Section Officer is responsible for filing the appropriate forms, Dr. Willcox replied that the form can be filed by any officer of the Section.

In connection with Dr. Willcox's announcement that gummed labels are available for Section use, it was asked if this includes chairmen of departments of mathematics at junior colleges. Dr. Willcox replied that the list contains many junior colleges and asked for help from the Sections in adding other junior colleges to this list by sending the names of the heads of mathematics departments in these colleges to the Washington office. He stated further that three weeks should be allowed for mailing of the gummed labels.

E. How to Organize a Section for Maximum Effectiveness, A Discussion led by Professor H. L. Alder, Secretary of the MAA.

Professor Alder reported that after last year's discussion on "How One Can Organize a Good Section Meeting", the view had been expressed by some that a good Section meeting is only one of the ways to make a Section effective and that there was also a need to discuss ways and means of organizing a Section so that its effectiveness is maximized. As a result of this suggestion, a discussion of this matter was put on the agenda of this meeting. All useful suggestions made at this discussion will be assembled in a small brochure and distributed to all present Section Officers and, in the future, to new Section Officers after their election.

Professor Alder opened the discussion by presenting the following twelve suggestions of his own:

1. Of paramount importance is the election of officers who

   (a) command the respect of the membership of the Section,

   (b) have demonstrated an interest in the activities of the Association, for example, by having served on one of its national or sectional committees,

   (c) possess known leadership qualities,

   (d) are able to give service to the Section for a period of at least three years.

2. To get such people elected, it is necessary that the Chairman of the Section appoint a Nominating Committee at least half a year prior to the time at which it is to report, so that it can give the necessary careful attention to the selection of its nominees.

3. The key position in the Section is that of the Secretary. The success or failure of a Section depends on him to a large degree. Prior to being nominated, he should be carefully instructed concerning his duties, namely

   (a) that he is the person ultimately responsible for the operation of the Section,

   (b) to see that the recommendations of the national office--and, in particular, those made at the summer meetings of the Section Officers--are carried out effectively in the Section,

   (c) whenever necessary, to remind the Chairman of his responsibilities,

   (d) to see that the committees of the Sections carry out their assigned duties by requesting that they make regular reports to the Executive Committee,

   (e) to keep the membership of the Section informed of major events of interest occurring within the Section (a one-page newsletter sent about two or three times a year is a very effective means of doing this),

   (f) to assist in attracting new members into the Association,

   (g) to send reports on Section meetings promptly to the national office for publication in the MONTHLY.

   Because of these many responsibilities, it is imperative that the Secretary is located at an institution where he has the necessary secretarial help available.

   The Secretary should have a clear conception of the importance of his position. If he is reluctant to assume this responsibility, he should not be nominated.

4. Because of his key role, a Secretary should be elected for a term of at least three years and should have the possibility of being renominated and reelected. Many Section By-Laws now have provisions making it impossible for a Secretary to serve for more than one or two terms. Such provisions limiting the number of terms a Secretary can serve should be eliminated from Section By-Laws.

5. The Section Chairman should be nominated with special care. In addition to possessing the qualifications outlined under (1), it is desirable that he also has distinguished himself in some mathematical endeavor,which could be in mathematical research, curriculum development, contest construction, etc. A distinguished mathematician should never be excluded as a nominee because he may decline the nomination. It is known that well-known mathematicians would have welcomed the opportunity to serve as Section Chairmen, but were never asked to serve. A Chairman should, however, never be nominated solely for the purpose of honoring him. There are other and better ways to confer an honor upon a mathematician than by electing him as Chairman of a Section.

6. Since it takes about a year to learn the routine of the office of Section Chairman, it is clearly unwise to have him serve for merely a year. Accordingly, Section By-Laws should provide for a Chairman to serve first for one year as Chairman-Elect, then for two years as Chairman, and that he remain on the Executive Committee for an additional year as Past-Chairman. Thus, the Chairman will be a member of the Executive Committee for a total of four years. A Chairman should not be eligible for reelection as Chairman-Elect or Chairman, and this should be so stated in the By-Laws.

7. In order that the Section has a reasonable number of officers committed to its welfare, it is suggested that each Section also have a First and a Second Vice-Chairman, each serving for a two-year period, with these two officers starting service in alternate years. While the Treasurer normally would be the same person as the Secretary, large Sections, where the Secretary has many responsibilities, might wish to have separate persons serve in these two capacities.

8. Under this scheme, the Executive Committee would always consist of at least six persons (and seven if there are separate officers for Secretary and Treasurer), namely a Chairman, a First Vice-Chairman, a Second Vice-Chairman, a Chairman-Elect (or a Past-Chairman), a Secretary-Treasurer, and a Sectional Governor. For a number of reasons (specifically to provide for the possibility that at the end of his term the First Vice-Chairman might be nominated as Chairman-Elect), the Chairman-Elect and First Vice-Chairman should commence their terms at the same time, that is, should be nominated at the same time, while the Second Vice-Chairman should be nominated in the alternate years.

9. While the qualifications listed under (1) should be considered of overriding importance, some balance in representation among the officers should be aimed for. Thus, it is desirable that at least one officer come from a major university; also where there are many two-year or community colleges within a Section, representation from that constituency should be sought; mathematicians from industry should also be considered as officers.

10. The Executive Committee should hold regular formal meetings--at the very least once a year--at which all aspects of the operations of the Sections should be given thorough review. In particular, special attention should be given to recommendations made by the national office and at summer meetings of Section Officers.

11. The Executive Committee should give high priority to the problem of arranging for good Section meetings (see the recommendations resulting from the discussion on this topic at the meeting of Section Officers on August 25, 1969) and also to divising ways and means to assure a good turnout at Section meetings. For this purpose, the Section meetings should be widely publicized, that is, not only among the membership of the Section, but certainly to at least every mathematics department chairman in the Section. Some Sections--for example, the Pacific Northwest Section--hold their meetings jointly with the AMS and, in some cases, also with SIAM. Since people go to only a limited number of meetings per year, Section Officers might consider arranging for more joint meetings with the AMS, SIAM, and other mathematical organizations.

12. One of the strongest links between the national officers and the Sections is provided by the "Plan of Visits of National Officers to Section Meetings". Most Sections now take advantage of this plan on a regular basis. The effectiveness of these visits can be greatly increased by Sections planning for maximum participation of the national officer in Section affairs during his visit. In addition to giving his usual one-hour lecture on a topic of his choice, he should be invited to meet with the Executive Committee of the Section, perhaps at lunch or dinner, and invited to contribute to the discussions at the business meeting of the Section.

He then asked for suggestions from the assembled Section Officers.

Professor W. B. White, Chairman of the Wisconsin Section, inquired about the reasons for the suggestion for separate officers for Secretary and Treasurer. Professor Alder replied that, in the larger Section, the amount of work in which the Secretary-Treasurer is involved might make it desirable to separate these two offices, but that in smaller Sections, this may not be a good idea.

Professor Denny Gulick of the Maryland-D.C.-Virginia Section reported that in his Section arrangements had been made so that a strong Secretary was not needed. For secretarial help, perhaps a wife could help and, with labels now being received from the Washington office and with bulk mailing, the work of the Secretary is not complicated. He felt that the Secretary should not plan meetings; the more people are involved in planning a meeting, the more interesting a meeting results. Because of heavy turnover among faculties, he felt that it would not be possible for a Chairman to be involved in Section work for four year, but possibly two years.

Professor B. E. Rhoades, Governor of the Indiana Section, felt that the GUIDEBOOK was a very valuable document and urged Section Officers to use it. It could be even more valuable if all department chairmen filled out the questionnaires sent them for gathering information for the GUIDEBOOK, so that all departments are listed.

Professor R. B. Herrera, Governor of the Southern California Section, suggested that a preamble be added to Professor Alder's suggestions, stating that Sections have individual differences, and these should be taken into consideration.

Professor H. L. Krall, Governor of the Allegheny Mountain Section, suggested some elaboration on item 12, that is, specific recommendations on how the national officer might effectively be used during his visit to a Section meeting.

Professor J. A. Ferling, Chairman of the Southern California Section, agreed with the importance of the Secretary but felt that the Governor can also provide guidance and leadership for the Section. He urged that more emphasis be given to this.

Professor J. L. Tilley of the Louisiana-Mississippi Section observed that in Sections covering a large area it is difficult to have meetings of the Executive Committee at times other than at the meeting of the Section. Separate meetings would create a financial problem because of the large travel expenses involved.

Professor V. O. McBrien felt that one of the difficulties in getting mathematicians to attend Section meetings was the abundance of other meetings.

Professor F. E. Hohn, Governor of the Illinois Section, suggested preparation by the officers of the Sections of a diary for one year, noting their tasks, which could then be passed along to succeeding officers.

President Young stated that the national officers would like to become more involved in the problems of the Sections, and suggested that, when national officers are asked to visit Sections, they be informed of the problems the Sections may have, for example, the role of the junior colleges. He agreed that the Secretary has a very important role to perform in the Section; he provides continuity.

Professor D. E. Christie, Governor of the Northeastern Section, felt that it was difficult to hold Executive Committee meetings, as desirable as they are in principle. In his Section, the Chairman is responsible for the programs for two years.

Professor Alfred Aeppli, Chairman of the North Central Section, asked if national officers could be asked to serve in panel discussions at Section meetings. Professor Alder saw no reason why this could not be done.

In answer to a question regarding the duties of the Chairman of the Section, Professor Alder felt that the Chairman can exert a great deal of influence to get mathematicians from leading universities to attend Section meetings. If he comes from a large institution, he can take steps to interest his colleagues in attending. He stressed that he did not wish to minimize the very important duties the Chairman has. He noted that, in some Sections, the ex-chairman automatically is the chairman of the Program Committee for the next meeting.

Professor W. R. Jones of the Philadelphia Section reported that the Chairman calls and conducts the meetings in his Section. He also stated that, in their Executive Committee, they had some members-at-large.

Professor Gulick felt that a large Executive Committee complicates matters. Professor Alder agreed that it should not contain more than a few people.

President Young compared the role of the Chairman-Elect with that of the President-Elect of the Association: he is there to find out the problems and can decide what he would like to accomplish during his term as Chairman. He starts off "running" so to speak.

Professor J. E. Scroggs, Governor of the Oklahoma-Arkansas Section, felt that the idea of having a Chairman-Elect and a Past-Chairman was a good one.

Professor Alfred Aeppli reported that his Section has been trying to interest mathematicians from the larger universities and had decided to send out questionnaires to chairmen of departments of mathematics. He suggested that local speakers be used in Section meetings.

Professor B. E. Rhoades reported that in his Section, the large universities are Purdue and Indiana Universities. His Section has attempted to alternate the role of Chairman between persons from these universities and the colleges.

Professor Alder stated that his suggestions would be revised by taking into account the suggestions just made and will then be sent to the Sections.

F. Report on Accreditation and Certification in Mathematics, Professor D. T. Finkbeiner II

1. In August 1968, the Board of Governors requested CUPM to study the question of accreditation and certification in mathematics and to report the results of that study to the Board by August 1969. CUPM assigned this task to its Panel on College Teacher Preparation, with Professor D. W. Bushaw as Chairman. CTP prepared a 27-page report that was approved by CUPM in November 1969 and transmitted to the Board of Governors in January 1970. The Board then recommended that a subcommittee be formed to transmit the substance of the CUPM Report to the membership of the MAA through the various Sections. That subcommittee prepared (a) a condensed version of the CUPM Report, which appeared in the August-September issue of the MONTHLY and (b) a covering letter and sample questionnaire which were mailed to each Section Chairman and each Section Secretary late in July.

2. Section Officers are asked to

(a) schedule a panel discussion on accreditation and certification at an early meeting of the Section,
(b) call attention of members to the MONTHLY article,
(c) obtain opinions from members concerning the issues raised in the questionnaire,
(d) by June 1, 1971 prepare a summary report that reflects the feelings of members of the Section.

3. It should be emphasized that the present study of accreditation and certification has been conducted as a factual investigation without any implied views on the issues from the Board of Governors or the several committees that contributed to the study. Accreditation and certification are highly technical matters, and Section Officers are asked to do all that is possible to present the issues accurately and impartially in order that the issues receive full and free discussion from the members.

4. Members of the Panel on College Teacher Preparation who prepared the CUPM Report were: D. W. Bushaw, D. T. Finkbeiner II, Joseph Hashisaki, Meyer Jerison, M. W. Pownall, Alex Rosenberg, and Dorothy Stone. Members of the ad hoc committee of the Board of Governors are: R. G. Bartle, Grace E. Bates, D. W. Bushaw, E. A. Cameron, D. T. Finkbeiner II, Joseph Hashisaki, L. H. Lange, and F. L. Wolf.

In answer to a question why this report was printed in the MONTHLY, Professor Finkbeiner replied that the Association wishes to have the point of view of the entire membership.

In answer to a question why the AMS was not involved, Professor Finkbeiner replied, since the Association is concerned primarily with the teaching of undergraduate mathematics, it was felt that this matter fell under the jurisdiction of the MAA.

Professor Rhoades felt that he issues involved were very complex and accordingly suggested very careful planning in the Sections when this matter is brought up.

Professor Finkbeiner added that, if the mathematical community had any idea of adopting a scheme of certification and accreditation, it should have the overwhelming support of the members.

In answer to a question by Professor Southard as to when the MONTHLY containing the report will reach the membership, Dr. Hailpern replied that it should be in the hands of the members during the first ten days of September.

Professor Aughtum S. Howard, Secretary-Treasurer of the Kentucky Section, felt that the Sections may not wish to act after a panel discussion but might need more time. Professor Finkbeiner replied that this should be up to the Section Officers to decide.

Professor Alder observed that inclusion of the panel discussion on accreditation and certification was an excellent device to achieve a good turnout at the next Section meeting. He urged that, in the mailing for the next Section meeting, the importance of this panel discussion might be pointed out.

G. Report of the Committee on the Undergraduate Program in Mathematics, Professor R. P. Boas, Chairman.

The grant from NSF under which CUPM operates has been renewed for two years starting July 1, 1970 (with sufficient funds for a final close-out year in case a further extension is not granted).

On September 1, 1970, Paul Mielke will replace George Pedrick as Executive Director, Andrew Sterrett will replace Mielke as Associate Director, and John White will replace Stephen Friedberg as Staff Mathematician.

Since most of the activities of CUPM are carried out by its various panels and other subgroups, it is convenient to summarize CUPM's activities since January under the various headings.

Advisory Group on Communications. A library list for two-year colleges is now being reviewed in preliminary form. I should be ready for printing in the fall. Revision of the existing Basic Library List (for four-year colleges) has begun. The report of the (now disbanded) Panel on Mathematics for the Life Sciences is being prepared for publication in a preliminary form. The final form will not be prepared until after (1) a revision of the material dealing with Math 10 (Applied Mathematics) and (2) completion of the revision of GCMC (see below).

Problems in College Teaching. This ad hoc group held a conference in March with a group of students from the Detroit area. The discussions of the group at this and earlier meetings were used in preparing an article by Spanier that will appear soon in the MONTHLY, and will also be used in the panel discussion that is part of the program at Laramie.

Computing. Two meetings or the reorganized Panel have been held. Its principal current activity is to design a mathematics major for students who intend to make a career in computer science.

Teacher Training. The Panel has met three times. The revised recommendations were to have been completed at a July meeting in San Francisco; afterwards the Panel will discuss course guides for the new recommendations.

Basic Mathematics. This Panel has held three meetings and a writing session. The objective is to construct a course, more elementary than anything previously suggested by CUPM, whose purpose is not primarily to prepare students for other mathematics courses, but rather to provide students with enough mathematical literacy for their daily lives in our society.

Statistics. The recommendations for undergraduate work in mathematics needed as preparation for graduate work in statistics are being put into final form. The Panel held a small conference to help it get started on its other task, to make recommendations about the first course in statistics that is taught by many mathematics departments as a service course.

Minority Groups. The Panel sponsored a conference in Memphis in April. It will meet again at Laramie with an ad hoc committee appointed at the Memphis conference to study the idea of a Center of Excellence at a Black institution. A conference, funded by an NSF grant to Morgan State College, of representatives from developing institutions has been held in Laramie,just before the Summer Meeting.

GCMC Revision. The group has met three times,and something of the probable nature of the revised report can be discerned. It is expected to include a self-contained one-year course in calculus. The influence of the computer will be recognized to a greater extent than before.

Applied Mathematics. The Panel has met twice. It hopes to create several different outlines for an upper-division course in applied mathematics--this is the course listed in GCMC as Math 10, a course that is rarely given, supposedly for lack of appropriate materials.

College Teacher Preparation. The Panel has met twice. It has produced a prospectus for resource papers and is attempting to encourage the writing of some resource papers. It is also preparing a newsletter on the subject of keeping faculty mathematically alive in small colleges.

Activities not connected with any current panel were three conferences on the Two-Year College reports and a conference cn the Beginning Graduate Program in Mathematics.

The Consultants' Bureau made arrangements for 48 visits to colleges, 39 of which were completed by June 30. Alex Rosenberg will become Chairman of CUPM at the end of January, 1971.

H. Report of the Committee on Institutes, Professor V. O. McBrien, Chairman

1. The MAA Committee on Institutes met at the January 1970 meeting of the MAA held in San Antonio. At that meeting they finalized plans to submit an NSF proposal to conduct a six-weeks seminar in probability and statistics at Williams College in the summer of 1971. The proposal has received the approval of the Institutes Committee, the Finance Committee, the Executive Committee, and the officials of Williams College. The proposal was submitted to the National Science Foundation in April (the deadline for proposals is June 1st).

2. The Committee is happy to report that the NSF is supporting at least fifteen 1970 summer institutes for junior college teachers of mathematics. More than fifty proposals were submitted in response to our plea to the mathematical community and to urban university presidents for a strong effort to strengthen mathematical education in the junior colleges.

I. Report of the Committee on Visiting Lecturers, Professor M. W. Pownall, Chairman

During the past academic year, 183 colleges and universities which do not grant the Ph.D. degree in mathematics were visited under the auspices of the MAA Program of Visiting Lecturers. Included were 38 institutions which have not been visited under this program in the last five years.

The Committee feels that longer visits are more effective than one-day visits, and are also more economical; hence, the Committee has recently tried to encourage more colleges to apply for two-day visits. As a result, the Program sponsored 278 and one-half days of lecturing in 171 trips this year, as compared with 274 days of lecturing in 190 trips last year. In addition to being economical, these visits had the beneficial side effect of stimulating relationships among the neighboring schools.

The lecturers and the committee members all feel that the program has been helpful to the colleges visited, especially those in isolated areas. Reports from the colleges confirm this emphatically.

J. Report of the Committee on High School Contests, Professor J. M. Earl, Chairman

Tests and Careers. Contest Chairmen ordered 353,700 copies of the 1970 test for use in the Annual Mathematics Examination on March 10; 25,000 of these were sent to England and much smaller numbers to 13 other foreign coordinates, the most distant in Wellington, New Zealand. As in every year since 1958, a Careers Brochure was inserted in each of well over 300,000 tests which were distributed to more than 7,000 schools by about 60 Chairmen in the ten regions into which the United States and Canada is divided. The Careers expense amounts to nearly $1 per school.

The Examination and Scores. As in 1968 and 1969, a 35 question 150 point multiple 5-choice test was used; there were ten each of Very Easy (3 point), Easy (4 point), Medium (5 point), and five Hard (6 point) questions again this year. The median and upper quartile team and top individual scroes were about midway between the high of 1968 and low of last year, but the lower quartile scores were about the same. In 1970 (1969) 1968, there were 27(16)50 teams on the School Honor Roll. Individual high scores of 120,100, and 80 or above were made by 20(7)42, 96(81)209, and 444(358)701 students; each showed an increase over last year but was still below 1968.

Awards. This year, the Large Plaque was awarded to both Diana M. Bruno of Dumont Community H.S., Iowa, and Gregory Phillips of East Chicago Roosevelt H.S., Indiana, for perfect scroes of 150 points, bringing the total number in all 21 Annual Contests to seven. The first Charles T. Salkind Memorial Silver Cup was won by Stuyvesant H.S., New York, for the highest Team Score of 382.75 out of a possible 450 points. In addition to the 27 framed School Honor Roll Certificates, the 646 awards for high Team Scores include 569 Certificates of Merit for scroes in the upper decile regionally, and awards to the top five schools in each of the ten Regions. All of the above as well as the names of about 868 individual Honor Roll pin, medal, and certificate winners are included in the 1970 Summary of Results and Awards, but no listing of the names of about 5,690 winners of the MAA Pin Award, for the high score in each school, is made there.

1969 Item Analyses. Two item analyses of 10% samples were made for 1969. One was for all team members and the other for the top student in each school. These showed for each question the percentage of students making each of the five choices and giving no answer. The top student average of 41.4 computed from this data, consisted of 16.6, 12.4, 10.1, and 2.3 out of 30, 40, 50, and 30 points possible on the four parts of the test. The team member average which consisted of 14.0, 10.1, 7.5, and 1.8 points was 33.4, so the average team score was 100.2 points. The median top student and team scores reported in 1969 were 40 and 97 points; each was about 3% lower than the corresponding average. The 1969 top student data is displayed in a bar graph on page 54 of the 1970 Summary.

Comments. The National Association of Secondary School Principals has placed the Annual Examination on its Advisory List of Contests and Activities for 1970-71. Four out of the ten top ranking Individuals in this year's William Lowell Putnam Competition were formerly Honor Roll students in the Annual Examination, also 11 out of 27 Honorable Mention Individuals, and 10 out of 30 members of the top ten teams.

Executive Director. This report would not be complete without note of the retirement on August 15 of Professor Fagerstrom as Executive Director. He was the Contest's Founder in 1950 and has been a major influence in both policy and operation over his 21 years of association with it.

K. Report of the Committee on Secondary School Lecturers, Professor H. M. Bacon, Chairman

The Committee consists this year of H. M. Bacon, Chairman, Grace E. Bates, J. N. Eastham, R. L. Finney, J. R. Hanna, Joseph Hashisaki, and N. D. Kazarinoff. A formal meeting of the Committee was not held at the time of the 1969 Summer Meeting of the Association at Eugene because it was not possible for a majority of the Committee to be present. However, Miss Bates, Miss Mary Dolciani (representing Mr. Eastham), and Mr. Bacon met informally with Mr. Willcox and discussed with him his experience to that time in his search for financial support of a national lecturer program. Such a program, on a modest scale, is outlined in a proposal developed by the Committee and dated March 1, 1969.

In February 1970 Dr. Willcox reported that it had not yet been possible to find Foundation or other support for the proposed program. He is continuing his effort to attract support, but the prospects are not at present very encouraging, although a determined effort has just been started to interest a major foundation in the Committee's proposal. The Committee and Dr. Willcox would welcome information regarding any likely financial support.

It is fortunate that some of the Sections are able to carry on secondary school lecturer programs of varying extent. The Committee appreciates and encourages such activity, and it wishes to commend those Sections now carrying on such programs and it hopes ultimately these and additional programs may receive support on a national scale.

L. Reports and Discussion of Section Activities for the Two-Year Colleges

a) Report from the Southeastern Section, Professor H. E. Taylor, Chairman of the Section

The Southeastern Section has circulated a questionnaire to each of the 137 junior colleges within its boundaries. The replies to the questions have indicated that considerable effort is required to provide services that the junior colleges will consider useful. The first two steps that have been taken are (1) the establishment of the office of Vice-President for Junior College Affairs and (2) the inclusion of a session at the next Section meeting expressly for junior college personnel and problems. The new Vice-President has as his duty the development of programs of special benefit for the junior colleges and the obtaining of papers and speakers for the junior college session of the annual meeting.

An especially severe problem for the Southeastern Section is the wide geographic spread of the Section including five states. The distances involved make it practically impossible for junior college people to attend the Sectional meetings except about once every five years.

The Section is going to address itself to solving these problems so that it can provide significant service to the junior college community.

b) Report from the Southern California Section, Professor J. A. Ferling, Chairman of the Section

A Workshop for Mathematics and Computer Science Instructors from the junior colleges in Southern California was held at Pasadena City College on Saturday, April 21, 1970, from 9:00 a.m. to 3:00 p.m. Attendance was in excess of 145 persons, principally from the forty-two junior colleges of the Southern California area, but also from four-year colleges and universities as well as some of the high schools in Pasadena and the offices of Los Angeles County.

The program of the day included two principal addresses, one by Professor T. M. Apostol of California Institute of Technology and the other by Professor J. A. Ferling of Claremont Men's College. Professor Apostol spoke on "Linear Algebra in a Calculus Course" in the afternoon, and Professor Ferling spoke on "Calculus with Computers" in the morning. The morning session was rounded out with three simultaneous panel discussions: I "Calculus with Computers", II "Who Should Teach Mathematics and Statistics Courses?", III "Audio-Tutorial Projects at Fullerton Junior College". The afternoon session was rounded out with a brief summary of the panel discussions and a drawing for door prizes for those other than officers and committee members attending the sessions. During the lunch hour a complete tour and demonstration of the P.C.C. Computer Science Center was given by members of the staff, who held openhouse for all participants in the workshop.

The door prizes given at the conclusion of the sessions consisted of 20 checks payable to the MAA to be used to pay dues.

c. Report from the Oklahoma-Arkansas Section, Professor E. K. McLachlan, Secretary-Treasurer of the Section

In January 1969, Oklahoma Military Academy, a junior college located at Claremore, Oklahoma, organized a meeting of the two-year colleges in the geographical area. The purpose of the meeting was to organize these institutions for the purposes of improving instruction and reducing the transfer problem. Several four-year institutions were also invited to the meeting.

As a result of this meeting, the two state universities were asked to prepare proposals to NSF under the C.O.S.I.P. program, Oklahoma University in chemistry and Oklahoma State University in mathematics. The proposal for mathematics resulted in a grant for a project involving nine two-year colleges with O.S.U. as host. The project consisted of monthly on-site meetings held on the various two-year campuses and a summer institute held on the O.S.U. campus. The on-site meetings were conducted in three sessions, Friday afternoon, Friday night, and Saturday morning. Each of the monthly meetings was devoted to a particular segment of the two-year college mathematics curriculum and two consultants from four-year institutions were speakers at the Friday sessions. The Saturday session was devoted to a general discussion and summary of the topic for the meeting.

Two of the monthly meetings were held concurrently with professional organizations, one with the Oklahoma Council of Teachers of Mathematics and the other with the Oklahoma-Arkansas Section of the MAA.

The summer institute included a seminar, and the participants took one or two courses from the regular summer school offerings of the host institution. The seminar was used to summarize the academic year's activities and also to plan future activities for the mathematics staffs of the participating institutions.

Several results of this project are as follows:

1. The course offerings of the two-year colleges are comparable with the four-year institutions.

2. The staff members of the two-year colleges no longer consider themselves as mathematical orphans. They are a part of a family of institutions in the mathematical community of the area.

3. They plan to become active in the professional organizations and a significant part of the past Section meeting was devoted to two-year college problems. Also, the office of Second Vice-Chairman of the Oklahoma-Arkansas Section was initiated and is to be held by a member from a two-year college.

4. The association with staff members of the four-year institutions has dispelled the doubts and suspicions which formerly existed and, as a result, the transfer problem no longer exists.

5. The participants feel the program was successful and have asked that another such program be proposed. Also, they have agreed to financially support a similar though more modest program from the budgets of their individual institutions.

In conclusion, the past year and a half has been an active period for the mathematics teachers at two-year colleges in Oklahoma. The individual teacher has become acquainted with his counterpart at other two-year colleges and also has many useful contacts at the surrounding four-year institutions. He is no longer mathematically isolated but realizes that he must make an effort to be included in the mathematics community. The future hopes of the Oklahoma-Arkansas Section is that the two-year colleges will play a useful role in the mathematics education of the population of the area.

d. Report from the Florida Section, Professor G. W. Medlin, Chairman of the Section

The Florida Section of the MAA is entering its fourth year. One of its aims is to promote interest in mathematics among all the institutions in the state including the junior colleges. In addition to the number of private junior colleges, there are 23 state-supported colleges with a combined enrollment of over 100,000. The colleges vary in nature from a strictly two-year liberal arts program to the community college in its broadest concept. Enrollment varies from a few hundred to 20,000.

The mathematics teachers for the most part come from the high schools in the area or from retired service personnel (of course, there are exceptions). The loyalty of the teachers is primarily with the NCTM and its Florida affiliate. A junior college section of this group has been formed.

The Florida Section of the MAA and the supporting colleges have done the following to involve the junior colleges in the Association and mathematics development:

1) Had the Section meeting placed on the state calendar as a meeting approved for junior college mathematics teachers to attend;

2) Have always had junior college staff members hold major Section offices and positions on all committees;

3) Had Section meetings at junior colleges;

4) Had parts of the program designed for the junior college teachers and have had the junior college faculty members on the program.

5) One senior college is hosting nine junior colleges in a three-year COSIP project for mathematics development;

6) The state mathematics articulation committee (six representatives from the junior colleges and six from the state universities) will have their second joint meeting with the Section in 1971.

Professor Medlin recommended that more colleges be encouraged to request COSIP funds to assist the development of the mathematics faculty in the junior colleges and to get the report of the CUPM Panel on Basic Mathematics as soon as possible.

Professor J. L. Tilley of Mississippi State University outlined a project which had been carried on in their Section, consisting of the officers of the Section visiting as many junior colleges as possible in the Section. He himself had visited ten junior colleges to discuss problems of interest to two-year college teachers of mathematics, in particular, CUPM recommendations.

Professor Aughtum S. Howard, Secretary-Treasurer of the Kentucky Section, cautioned against the mathematical community sitting back and letting the colleges of education dictate the guidelines for the training of two-year college teachers. She felt that teachers of mathematics in two-year colleges are just as interested as those in senior colleges to know about research development in mathematics and, more generally, what makes for a successful mathematician. She urged that efforts be made to have two-year college teachers of mathematics establish some rapport with the MAA prior to the time they go to the two-year colleges.

Professor Taylor stressed that progress in effecting closer collaboration with two-year college teachers of mathematics can only be made by all elements of the mathematical community associating with each other on an equal footing.

Professor S. H. Douglas of Grambling College urged greater involvement of Black mathematicians in the affairs of the Sections. This has been done to some extent in the State of Louisiana, but he felt that there was a need to do more, and also in other states.

The meeting adjourned at 9:50 p.m.