# CrossSections 

Edited by: David Ballew, Chairman of the Committee on Sections October 1986

At the August Section Officers Meeting in Berkeley, the suggestion was made to circulate a newsletter to all of the section officers with information on meetings, programs and upcoming events that would be valuable to these officers. This is the initial effort in that direction. -- The Editor.

Each Summer the Mathematical Association of America funds one officer from each Section to attend the Annual Section Officers Meeting. Below is a Sumnary of the Berkeley Meeting.

## SUMMARY OF SECTION OFFICER'S MEETING

1. INTRODUCTIONS: Those present introduced themselves and the designated Section Representatives were given the MAA forms for travel payment.
2. Ben Fusaro discussed the Modeling Competition and promised to send David Ballew a list of persons who could speak about the Competition as Section Meetings.
3. The Summary of Section Activities Report was presented and discussed. It was noted that approximately 3500 persons attended a section meeting in the 1985-86 academic year; this is a far greater number than the sum of all of those attending a Summer or Winter Joint Meeting. Those 3500 attendees heard more than 165 invited addresses, 560 contributed papers and over 150 student presentations. At least ten sections are now sponsoring Summer Short courses and twelve sections gave minicourses as part of their Annual Meetings. The number of contributed papers was as high as fifty in Oklahoma/Arkansas and the number of student presentations was as high as sixteen (in both Oklahoma/Arkansas and in Ohio).

The variety of Section Activities is large and diverse. Several sections sponsor mathematics contests in various forms ranging from the Michigan High School Mathematics Competition to the Indiana Small College Mathematics Contest to the very successful Metropolitian New York Mathematics Fair. Many Sections sponsor Visiting Lectureship Programs for high schools and small colleges. A large number of sections are becoming politically active and influencing areas of concern such as mathematics education, teacher training and curriculum reform. Several other sections are concerned about articulation and transfer and are trying to do something about the problem.

In short, the sections are alive, Involved and working for mathematics, mathematics education and the mathematics community.
4. The finances of the Sections were discussed. It was noted that only lllinois and Metropolitian New York had stated the need for more funds for their
activities. The Section Officers discussed the many ways that their sections raise additional funds. Among these are:
$-->\quad$ Institutional Members: The institutions in the Michigan Sections pay (depending on their size) institutional dues which raise approximately $\$ 1000$.
--) Many Sections charge vendors a fee for space at their meetings. The most common charges range from $\$ 20$ to $\$ 50$. The sections that charged up to $\$ 100$ felt that to be too much. Several sections also get coffee and cookles or wine and cheese from their vendors.
--> Short courses and Mini-courses; As was noted earlier, over one third of the sections give Summer Short Courses and/or provide Mini-courses at their meetings. Almost all raise additional funds through these; one section reported that last summer gave them an embarrassingly large profit.
--> Fees for Math Contests: Several sections conduct Mathematics Contests of various forms which are in addition to the National Contests. These are almost always self-supporting and some even make a profit.

- Registration Fees: It was noted that most sections charge a minimal registration fee. Two sections that have raised their fees to $\$ 10$ found no drop in registrations and attendance.

5. Section Officer's Newsletter: It was recommended that the Committee on Sections produce a Section Officer's Newsletter. This could contain the Summary of Officers Meetings plus additional information of need and interest to sections.
6. Recommendation of Items for the Newsletter: Immediately, it was suggested that Mini-course speakers and topics as well as the Short Course Speakers and topics be published in the next issue of the newsletter.
7. Public Information: Yosef Alavi discussed the present activites of the Public Information Panel and the successes of getting coverage of the ICM and Field's Medals winners. It was noted that there will be a workshop for Section Public Information Representatives at the San Antonio Meeting in January of 1987.
8. Students at Section Meetings: Several noted that there has been an increase in student participation at Section Meetings -- more students and more papers. This was considered a "good thing" and there was discussion of how to gain further increases. It was noted that the Section Officer's Handbook (the Blue Book) has a section on "How to Conduct a Student Paper Session". (If you would like a copy of that material, write to me or to Alicia Bennett at the National Office.) it was strongly recommended that all departments who award student memberships (because of their institutional membership in MAA) also encourage (and provide for) those students to attend the Section Meetings.
9. Section Activity with Articulation and Teacher Training: Several sections have been quite active in the areas of influencing their state legislatures and the varlous state governing and policy boards in the areas of teacher training and articulation between schools. It was generally felt that this was desirable and should be encouranged and expanded.

It was noted that the Sections that had been most successful were those sections that were identical with a state (i.e. lliinois, Florida, Michigan, etc.)

## HAMOBOOK FOR SECTION OFFICERS $-=$ THE BLUE BOOK

Each Section is supposed to have two copies of the Handbook for Section Officers; this is a blue three ring binder. Both the Chalr and the Secretary of each Section should have one. If you don't, ask your predecessor where it is. If it is lost, contact Allcia Bennett at the MAA Headquarters and ask If you can get one.

HINTH ANRUAL SECTION SURVEY
Year Ending June 30, 1986
Each year the Comaittee on Sections conpiles a summary of a survey of section programs and activities. You may find it useful information so here it is.

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(Ho Report Received by July 21, 1986)

| Florida | 168 | yes | yes | no |
| :--- | :---: | :---: | :---: | :---: |
| Illinois | 80 | no | yes | yes |
| Idiana | -- | -- | $\cdots$ | $-\cdots$ |
| (No Report | Received by July 21, | 1986 ) |  |  |


| Intermountain | 100 | no | yes | yes | no | yes | \$5 | 4 | 4 | 34 | 12 | 1 | poor good good poor |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| lowa | 72 | no | no | yes | no | yes | $\$ 2$ | 2 | 3 | 21 | 7 | 0 | good good poor poor |
| Kansas | $\begin{aligned} & 70 \text { aems } \\ & +40 \mathrm{hs} \end{aligned}$ | no | yes | yes | no | no | \$4 | 1 | 3 | 17 | 2 | 0 | poor fair fair poor |
| Kentucky | 87 | yes | yes | yes | yes | yes | \$1 | 3 | 2 | 10 | 0 | 0 | poor good fair poor |
| Louisiana/ Mississippi | 14 | yes | yes | yes | -\$50 | yes | \$5 | 2 | 2 | 25 | 11 | 2 | fair good fair poor |
| Hetro NY (Ho Report | $130$ <br> Received | by July | $\text { y } 21 \text {, }$ | (986) | --- | -- | --- | - | 2 | 12 | 0 | 1 | --------- |
| Michigan | 125 | yes | no | yes | \$50 | yes | $\$ 5$ | 3 | 8 | 17 | 4 | 1 | good good good fair |
| Hissourl | 95 | yes | yes | yes | no | yes | $\$ 3$ | 2 | 3 | 9 | 1 | 1 | fair good fair poor |
| Nebraska | 100 | no | no | yes | no | yes | cont. | 2 | 2 | 17 | 1 | 1 | good good -... good |
| Hew Jersey | $\begin{aligned} & 66 \\ & 45 \end{aligned}$ | no | no | yes | no | yes | free | 2 | 3 | 0 | 0 | 1 0 | fair good good fair | ATIEND KTG? HTG?


| Horth Central | 135 | no | no | yes | \$20 | yes | $\$ 5$ | 2 | 2 | 1 | 0 | 0 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 115 |  |  |  |  |  |  |  | 3 | 13 | 1 | 2 | fair good fair poor |
| North Calif. | 190 | $7 ?$ | $1 ?$ | ?1? | $17 ?$ | ?7? | $\$ 5$ | 1 | 5 | 0 | 0 | 0 | good good fair poor |
| Northeastern | 80 | yes | no | yes | $\$ 50$ | yes | $\$ 10$ | 2 | 4 | 1 | 4 | 1 |  |
|  | 145 |  |  |  |  |  |  |  | 6 | 8 | 3 | 0 | poor good fair fair |
| Ohio | 106 | yes | sometimes | yes | \$50 | yes | \$2 | 3 | 2 | 18 | 0 | 0 |  |
|  | $110+35$ | stud | . |  |  |  |  |  | 2 | 9 | 16 | 0 | fair good poor poor |
| Oklahoma/ Arkansas | 120 | no | yes | yes | free | yes | \$5 | 1 | 2 | 50 | 16 | 0 | good good poor poor |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pacif. NH | 59 | yes | no | yes | no | yes | \$8 | none | 2 | 9 | 0 | 0 | ???? fair fair ???? |
| Rocky Htn. | 100 | no | yes | yes | no | yes | \$5 | 4 | 4 | 34 | 12 | 1 | poor good good poor |
| South. Callif | 100 | no | no | yes | no | no | \$3-\$6 | 2 | 2 | 0 | 0 | 0 |  |
|  | 70 |  |  |  |  |  |  |  | 5 | 0 | 0 | 0 | fair good poor fair |
| Southwestern | 32 | no | no | yes | yes | -- | \$5 | 0 | 3 | 12 | 2 | 0 | fair fair poor poor |

(Joint Meeting with Council of Teachers -- Total Registration = 296 with 32 MAA Members)

| Seanay | 140 | no | no | yes | \$20 yes | $\$ 4$ | 2 | $\begin{aligned} & 2 \\ & 2 \end{aligned}$ | $\begin{array}{r} 9 \\ 10 \end{array}$ | $\begin{aligned} & 0 \\ & 6 \end{aligned}$ | 0 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 120 |  |  |  |  |  |  |  |  |  | 0 | fair good fair poor |
| Southeastern | 246 | yes | yes | no | party yes | \$4 | 2 | 3 | 35 | 4 | 0 | good good fair poor |
| Texas | 211 | yes | yes | yes | \$75 yes | \$5 | 2 | 5 | 29 | 5 | 1 | fair good good fair |
| Hisconsin | 180 | no | yes | yes | coffee no | \$5 | 2 | 3 | 33 | 5 | 1 | good good good poor |

VENDOR GEES
You might note that several of the sections charge vendors a fee to display their wares at the Section Meeting. host of these have been between $\$ 20$ and $\$ 50$; the sections that have asked up to $\$ 100$ do not recomend this. However, alaost all sections that have vendors report that they can also get coffee and cookies; one even gets wine and cheese.

## SAN ANTONIO SECTION OFFICERS MEETING

We will have an informal Section officers Meeting in San Antonio in conjuction with the Vinter Joint Mathenatics Heetings in January. The topic will be Public Information and how we can make the public more aware of mathematics. If you are in San Antonlo, please plan to attend. Tine and place will be published in the heeting Program.

LEIIERS TO THE EOITOR
We accept letters to the Editor and, in fact, we encourage them. Send your comants, suggestions and any inforation that you would like to share with others to: David Ballew, Departaent of Computer Science, 447 Stipes Hall, Vestern lllinois University, Kacomb, lllinois 61455

It was felt that sections containing several states might wish to create committees to work within those states; states with more than one section will need to cooperate to create a statewide comnittee.

It was forcefully noted that if the above occurs, then it is necessary for the sections to work with NCTM, the 2-year college groups and other interested organizations.
10. Class Size: There was general discussion of the effect of class size on learning. The Section Officers voted to instruct the Committee on Sections to ask the Committee on the Teaching of Undergraduate Mathematics (CTUM), or whichever Committee is appropriate, to formulate a policy on class size for mathematics classes and for that Committee to ask the Board of Governors to adopt this policy. The Section Officers felt that this would aid them in their discussions with officials on their campuses.
11. Summer Short Courses for High School Teachers: There was general discussion on the desirability and effects of such courses.

## FOLLOWUP ON THE SECTION OFFICER'S MEETING

(See Item 4. of the Summary) The Committee on Sections has asked the Finance Committee to continue the Aid to Sections Fund, but to supplement it with up to $\$ 1,500$ which the Committee could use for short term grants to help Sections with temporary financial problems. The Committee would solicit proposals from such Sections, determine their needs and help them find ways of solving their problems over the long term. The Committee understands the cost of printing newsletters, mailing them, and the other costs of Section Activities. However, the Committee feels that there are many excellent ways for the Sections to raise funds for their own programs; many Sections have been very successful in doing this.
(See Item 6. of the Summary) The Mini-Course and Short Course speakers from last year that we know of are in the following list. (If you know of others or if your Section hosted one not here, please send that information to the Editor at the address at the end of this Newsletter.)

| Allegheny Section | Alan Tucker | Discrete Mathematics |
| :---: | :---: | :---: |
| Allegheny Section | Vera Pless | Codes, Designs and Groups |
| Maryland-DC-Virginia | Walter Meyer | Discrete Mathematics |
| Maryland-DC-Virginia | Herbert Wilf | Differential Equations |
| Maryland-DC-Virginia | Weekend With | Mandelbrot |
| Maryland-DC-Virginia | ? Collin ? | Program Design and Pascal |
| Northeast | Alan Tucker | Unifled Approach to Linear Alg. |
| Ohio | Zaven Karian | Modern Design and Analysis of Discrete Event Computer Simulation |
| Ohio | Frederick Rickey | History of Calculus |
| Pacific Northwest | Joe Buhler | Complexity Theory |
| Rocky Mountain | Ben Manvel | Discrete Mathematics |
| Southern California | ? | Coloring and Path-Following |
| Texas | Marvin Keener | Mathematical Applications |
| Wisconsin John D | y, Doug Harris | Algorithms of Discrete Math |

(See Item 10. of the Sumnary) The Committee wrote to President Lynn Steen asking that the problem of class size be considered by the appropriate group. He has asked Dr. David Rozelle, Chairman of the Ad-hoc Committee on Accreditation, to have his Committee look at it and perhaps include it in a more comprehensive enterprise concerning standards, practice and goals for undergraduate mathematics education. Further, Dr. Steen asked if we knew of any such policies that other professional groups had adopted. If you know of such standards, please send them and the name of the organization that adopted them to the editor at the address at the end of this Newsletter.

## WHAT MAKES A SECTION MEETING SUCCESSFUL?

A common topic at the Annual Section Officers Meeting is how to make Section meetings successful. The following list was created at the Winter Meeting in New Orleans on January 8, 1986 by Section officers who had found these to be particularily important. We hope you will find these ideas useful.

Minicourses at Section Meetings
Location -- variety, easy to get to
Encourage a variety of institutions to participate
Get expository speakers from the Ph.D universities; it encourages them to participate and draws in added audience
Meetings of Dept. Chairs. They will come and usually bring others
Joint meetings with other sections and other organizations

Good speakers are critical
Student papers are popular and bring the students
Division of duties among people and institutions
Social activities--lunches, banquets
Special topics and sessions-- Special Interest Groups
Book displays -- vendor materials
Panel discussions
Meetings of Institutional Reps
Industry participation

## MEETING OF SURROUNDING SECTIONS

One service that you might offer to your Section membership is information on programs in surrounding sections. The Newsletter Editor of each Section receives the newsletters of all of the sections. Many sections have found it useful to scan these for items of interest to their membership; in particular some sections publish the time, place and dates of surrounding meetings along with some information about speakers, topics, short courses, etc.

Several sections have their Newsletter Editors pass the newsletters from other sections to the other officers. This is especially important for the Program Chairs as it can give them many program ideas and possible speakers

## MODEL BY-LAWS AVAILABLE

The Committee on Sections has developed a revised set of model by-laws for use by the various sections. If you are in the process of revising your by-laws or if you plan to do so, please write to the Editor at the address at the end of this Newsletter for a revised copy. The Handbook for Section Officers will be updated and you will get a set of the revised by-laws soon, but if you need them now, we will send them.

