ASA Chapters- An Update on their Health Winston A. Richards, Penn. State Harrisburg, 777 W. Harrisburg Pike, Middletown, PA 17057

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Introduction

Each year the American Statistical Association (ASA) Council of Chapters (COC) produces a report of Chapter activities that provides information on the general health of the Chapters. The questionnaire is designed to gather information on membership, Chapter activities, Chapter operations, Chapter concerns, service needs, as well as the utilization of available services from the Council of Chapters and the national ASA.

This year's report questionnaire was identical to last year's. The reason of course for repeating the identical survey was to facilitate comparisons between the 1996 and the 1997 data. The problem with this was that not all of last year's respondents responded this year. We hope that certain broad-based comparisons will be possible.

The questionnaire was mailed to the council representative or president of each ASA Chapter during the spring of 1998 requesting information on Chapter activities during the 1997 calendar year. Follow-up letters were sent to the non-respondents urging them to reply to the survey. The response rate from the Chapters is 78% which has surpassed last year's final response rate of 68%. See figure 1.

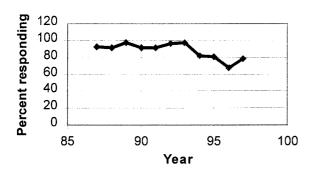


Figure 1

Non-responding Chapters

The non-responders for '95, '96 and now '97 are Dayton, Detroit, Milwaukee, Austin, and Middle Tennessee. The current non-responders are listed in Table 2. We are presenting the data available to us at this moment, June 17, 1998.

Table 1: Non-responding Chapters by Districts

Figure 2 represents the response rate of Chapters by their individual districts. At the time of assembling this report both District 2 with one Chapter and District 6 with fourteen Chapters had 100% response rates.

Figure 2: Response Rate for Chapters by District for 1997

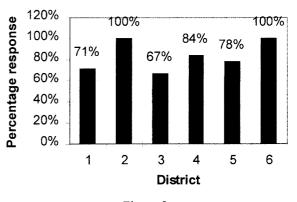


Figure 2

Membership

From the responding Chapters variation in Chapter sizes was apparent. Both Snake River Chapter and Mississippi Chapter reported approximate membership sizes of 20. While the Washington D.C. Statistical Society reported a membership of 1,100. However the majority, 37 Chapters, reported membership of a hundred or less. See Table 2.

Table 2: Number of Members Per Chapter - 1997

Membership	No. of Chapters	No. of Members
1-50	20	683
51-100	17	1317
101-150	8	1109
151-200	4	728
201-250	3	662
251-300	0	0
301-350	1	325
351-400	2	724
401-450	2	867
451-500	1	500
501-550	1	530
601-650	0	0
	0	0
1050-1100	1	1100

Chapter Types

The ASA Chapter memberships and the categories from which they are drawn are summarized in both Table 3 and the pie diagram in Figure 2. Chapter membership comes from Academia (45%), with the largest presence, followed by Business (32%), Government (18%) then Other which makes up (5%). From Table 3 the Academic Category appears to have remained the same from 1995 to 1997, however the Business / Industry and Government categories appear to have grown respectively from approximately 23% of membership in '96 to 32% of membership in '97and from 10% in '96 to 18% in '97. This finding suggests that those members assigned in '95 and '96 to the category of Mixed are now appropriately classified.

Table 3: Chapter Types – 1995-1997

Chapter Type	1997 - %	1996 – %	1995 - %
Academic	45	42	36
Business/Industr	32	23	18
у			
Government	18	10	8
Mixed	5	25	34
Unknown			2

Chapter Types for 1997-percent

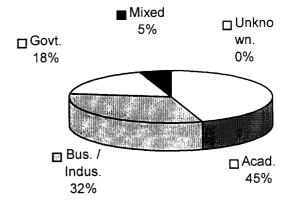


Figure 3

Chapter Members Who are Not ASA Members

52% of the responding Chapters indicated at least 90% of their membership were national members while 40% reported national membership for 50% to 90% of their membership. All reporting Chapters confirmed that there were some ASA members in their Chapters. In other words there were no Chapters among the respondents without some ASA members.

Chapter Activities/Meetings

Chapters were asked to list the types of meetings/activities, number of meetings and average attendance at these meetings. The distribution of the number of meetings per year by the respondents for 1995-1997 can be seen in Table 4. The 60 reporting Chapters reported an overall number of meetings of 391 for 1997 with an average number of meetings per Chapter of 6.5 and a median of 5 meetings. The number of meetings per Chapter ranged from 0 to 74 with all Chapters except the Washington DC Statistical Society holding between 0 and 15 meetings.

Table 4: Distribution of Number of Meetings/Activities (1995-1997)

Meetings/Activities (1995-1997)					
Number of	1997	1996	1995		
Meetings	%	%	%		
	Response	Response	Response		
	•	•	_		
0	5%	-	3%		
1	10%	12%	10%		
2	7%	13%	19%		
3	12%	15%	13%		
4	13%	12%	8%		
5	13%	6%	13%		
6	8%	12%	5%		
7	5%	4%	5%		
8	5%	4%	6%		
9	5%	6%	3%		
10	3%	-	2%		
11	2%	6%	5%		
12	3%	2%	6%		
13	2%	2%	-		
14	2%	4%	-		
15	2%	2%	-		
74	2%	-	-		
101	-	2%	2%		

Table 5: Percent of Chapters Reporting Various Meeting Types

viceting Types			
Type of Meeting/	1997	1996	1995
Activity	%	%	%
	Response	Response	Response
Local Speaker	73	79	68
Out of Town Speaker	65	71	74
Science Fair	33	31	18
Conference	32	25	24
Symposium/ Workshop	17	15	16
Social Meeting	12	17	16
Videotapes/films	10	13	11
Short Course	23	12	18
Career Day	3		

Percentage of Meetings Held by Chapters by Types of Meeting (1995-1997)

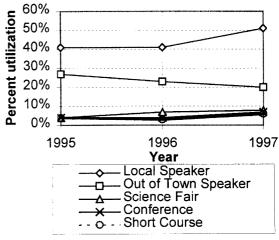


Figure 4

Meetings Jointly Held with Other Organizations

Twenty-six of the 60 responding Chapters (43%) indicated that they had held joint meetings with other Chapters and/or organizations. The number of Chapters mentioning specific types of meetings is provided in Figure 4. Among the groups mentioned are the American Planning Association, National Association for Business and Economics, U. S. Bureau of the Census, ASQC, Merck Research Labs, G. E. Corporate R&D, Los Alamos National Labs, Sandia National Labs, Pfizer, Bristol-Myers Squib and the Mathematics Association of America as well as the Girl Scouts. The number of Chapter meetings held jointly from 95-97 are listed in Table 6.

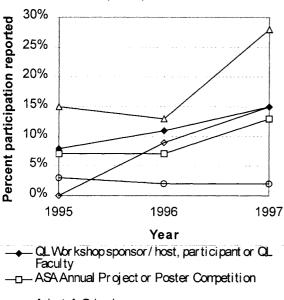
Table 6: Chapter Meetings Jointly Held with Other Organizations

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Group/	No. of	No. of	No. of
Organization	Chapters	Chapters	Chapters
	1997	1996	1995
Local U. or	18	12	12
Colleges			
Other ASA	6	6	7
Chapters			
ASQC	4	3	6
Local Industry	6	3	4
Groups			
State/Federal	2	4	3
Org.			
Other	7	10	12
Groups/Prof.			
Org.			

Participation in Council of Chapters/ASA Projects and Activities

The graphs of reported percent participation of the Chapters in quantitative literacy activities, ASA annual project or poster competition, Adopt-a-School programs, continuing education, submission for the 1997 JSM and the International Science and Engineering Fair appear in Figure 5. Participation appears to have increased on all counts. Sixty Chapters responded.

Participation in Council of Chapters/ASA Projects and Activities – 1995, 1996, 1997



—— Continuing Education Proposal for JSM

→ International Science & Engineering Fair

Figure 5

Council of Chapters Traveling Course

The Traveling Course is a service of the Council of Chapters designed to provide low cost courses to Chapter members. A course savings is achieved by repeating the course in several nearby Chapters. As a result Chapters were asked to provide opinions on future course topics, future speakers, and duration of the course. Their suggestions are listed in Table 7 and 8.

Chapters demonstrated a partiality for certain courses. From the responding Chapters regression analysis, survival analysis and generalized linear models topped the list of suggested short courses each receiving a vote of 3. Business statistics, design of experiments, sampling spatial statistics, generalized linear models were among the topics mentioned twice.

The list for 1997 did change somewhat in that the following topics were added namely business statistics, decision analysis, G.F. E. Methods, environmental statistics, forecasting, survey design analysis and ISO900. The Chapters were also asked to suggest the duration for future traveling courses from Table 10. The preferred duration should either be a half day or day long course.

The question related to "other successful short courses" provided the responses in Table 11. The list is somewhat different but not as expansive as that provided in 1966.

Table 8: Suggestions for Future Traveling Course Topics –1997

Bayesian Statistics	Neural Networks
Bootstrapping (2)*	Non-Parametrics
Categorical Data	Power Analysis/Sample
Analysis	Sizes (2)
Consulting Tips	Quality Control Topics
Data Mining (2)	Regression Diagnostics (3)
Decision Analysis	Sampling (2)
Design of Experiments (2)	Spatial Statistics/Data
Environmental	Statistical Programming
Statistics	Statistical Frogramming
Forecasting (2)	Survival Analysis w/cost as
_	the dependent variable (3
Generalized Linear	Survey Sampling (2)
Models (2)	
GFE Methods	Surveys
Graphical Displays	Survey design /Analysis
Linear Models	Tree Analysis i.e. CART
	and its extensions
Mixed Modeling	ISO9000
Analysis with SAS	
Multivariate	Longitudinal Modeling

^{*(}number of times suggested)

Table 9: Suggestions for Future Traveling Course Speakers – 1997

Vincent Barabba	Jonas Ellenberg	Trevor Hastie
George Box	Gerald Hahn	Allan Rossman
Noel Cressie (2)	Frank Haskell	Douglas Zahn
Bradley Effron		
(2)		

Table 10: How long Should Future Traveling Courses Be? – 1997

	One	Two	3-4	All Day	Weekend
	Hour	Hours	Hours		:
Number of Times Checked*	1	4	21	14	0

^{*}Multiple responses allowed – 33 Chapters responded to this item.

Table 11: Other Successful Local Short Courses – 1997

Analysis of Variance	Mail & Self Administered Surveys in the 21st Century
Bayesian Methods	Measurement Error
Bootstrapping	Mixed Models
Cluster Analysis	Multivariate Analysis
Establishment Surveys	SAS
Generalized Linear Models	Software Methods for Power Analysis
Improving Statistical Consulting Skills	Software Design
Logistic Regression	The Ecological Inference Problem

ASA Services Used

Figure 6 outlined service usage responses for the past seven years, from 1995 to 1997. *The Chapter Officer's Handbook*, list of ASA members, mailing labels, notices in AMSTAT *News* and notices in LINK continue to be the most utilized services indicated by responding Chapters. The Chapter visitation program (20%) of utilization suffered a decline in relationship to 1996 (23%) utilization. Several Chapters made suggestions for videotaping. In particular: the President's address at the annual meeting, sampling and survey analysis, and design of experiment.

ASA Service Usage - 1991-1997

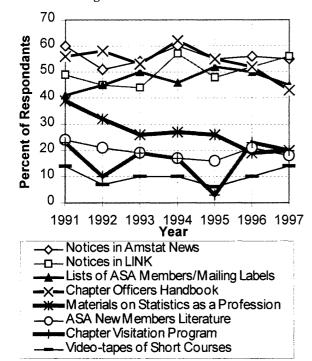


Figure 6

In What Ways can the ASA Offer Your Chapter Better Service or More Help?

The above question was asked of the Chapters in the Chapter questionnaire and there were 24 responses. The following is a partially paraphrased summary:

- 1. ASA sponsored list server for special interest discussions.
- 2. By videotaping the JSM short courses and making tapes available for Chapter use.
- 3. Traveling short courses.
- 4. Speakers for our annual meeting, end of May, Boise, Idaho.
- 5. We need short courses or lectures that are affordable for a small Chapter.
- 6. Membership; financial scholarships, speakers and programs.
- Concern about local dues collections by the national organization.
- 8. Up to date list of Chapter members.
- 9. Support out of town speakers for travel and hotel.
- 10. We look forward to ASA relying more heavily on e-mail communication when corresponding with Chapter officers.
- 11. Help with survey of local membership to determine interests; reason for low attendance.
- 12. More prompt response the new membership especially student members. Several have complained to me of the short response time from ASA.
- 13. Need to have membership list of people who paid their dues via national on a more predictable basis and sent to the membership person rather than the Chapter secretary.
- 14. Sending our newsletters, meeting announcements to non ASA members or new recruits.
- 15. Timely updates on Chapter membership helping find outside speakers.
- 16. No, communications and resources are good.
- Help organize linkages with Chapters or organizations with overlapping membership. For example, INFORMS, American Marketing Association.
- I Think ASA can do a better job of updating the membership lists and lowering the membership fee
- 19. The constant encouragement is appreciated

What Issues or Projects Would You Like to see Addressed by ASA or Council of Chapters?

The following are the responses:

- 1. Sell or give out an ASA screen saver. Think of the visibility!!! Or raise funds.
- Develop a lobby for "Videotaping JSM Short courses and making tapes available for Chapter use.
- 3. Create regional meetings jointly in Pacific

- 4. Northwest.
- 5. Provide list of materials available for Chapter use, including information about them and cost for use.
- 6. Best strategies and delivery vehicles for Chapter activities in an era (a) when companies are dispersing geographically making member attendance difficult. (b) Face to face meetings being supplanted by www etc.
- 7. Do better job in updating membership. Statistical literacy.
- 8. How to increase interest in local Chapter activities.
- 9. Inclusion of a broader spectrum, of membership in governance.
- 10. How to make statistics more appealing to students.
- 11. Statistical education and links to community.

Mailing List

Of the 60 Chapters responding, 53 or (88%) reported that they maintained their own mailing lists. The responding Chapters to the survey for 1995 recorded a slightly higher maintenance of their own mailing lists. Namely (90%) respectively. One Chapter reported that they needed primary data on membership at the national level to enable them to develop an appropriate mailing list.

World Wide Web

Of the 54 Chapters responding to the question, Are you now posting Chapter information on the WWW? 33 or 61% indicated that they were, while 13 of the remaining 21, 62% indicated an interest in doing so and 6 of the 13 or 46% planned to begin usage in 1997. For responses to this question in the last three years it appears that more and more Chapters are utilizing the World Wide Web. This is not a surprise. See Table 12.

Table 12: World Wide Web Usage 1995-1997

Using the Web?	No. & % of Chapters 1997	No. & % of Chapters 1996	No. & % of Chapters 1995
Yes	33 (61%)	25 (48%)	22 (38%)
No	21 (39%)	27 (52%)	21 (36%)
If not, is there interest?	13 (62%)		
Will you begin in 1997?	6 (46%)		

Meeting Types

For the individual Chapters responding, the role that short courses played in relation to other activities at each individual Chapter, appeared to be on the rise, after experiencing a decline in '96. The utilization of the out of town speaker appeared to be on the decline. These inferences might be drawn from Table 5 and figure 4. The 1997 distribution with

regard to number of Chapters reporting various meeting is similar to that of 1996. See Table 5. From Figure 4 we see that reporting Chapters held approximately two and one half times more meetings with local speakers than they did with out of town speakers.

Findings

- The response rate for Chapters for 1997 has increased significantly over that for 1996
- From Figure 2 certain Chapters were exceptional in their response rates. Note region 2 and 6
- Chapter membership appeared to be holding steady
- Appropriate classification of membership has taken place
- Utilization of local speakers suggest increased local involvement by Chapters
- One major concern was the underutilization of materials related to statistics as a profession
- The median number of meetings per year for all Chapters was 5, while the mean was 6.5
- Participation in the Council of Chapters ASA projects and activities, though increasing, was still rather limited

Conclusion

Generally though, the above findings suggest that the Chapters are reasonably healthy.

Acknowledgements

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