

6. Each session shall commence on the 1st day of October and last until the following 30th of September.
7. The Committee shall meet at least twice during each session, the President to be convener. Five shall form a quorum.
8. The Secretary shall keep minutes of the Meetings of the Society and of the Committee and shall issue notice of meetings to members resident in Ireland.
9. At the first Ordinary Meeting of each session the Treasurer shall submit a Financial Statement for the previous session, duly audited by two persons appointed by the Committee.

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#### Change of ISSN

When this **Bulletin** changed its name from Irish Mathematical Society Newsletter to its present name, the ISSN was inadvertently retained for several issues.

The ISSN has been changed with this issue.

#### GRADUATES SURVEY Preliminary report

Donal P. O'Donovan

#### The background

The David Report on Mathematics in the U.S.A. which appeared in 1984, was successful in raising the awareness and funding of mathematics within that country. Having studied this and an earlier Canadian report, I began advocating the desirability of a broad based study of the mathematical sciences in Ireland. This was several years ago. In a document requested by the Irish Mathematical Society, I outlined the reasoning behind such a report, suggested a form that it could take, and hazarded a guess at the likely requirements in terms of time and money. At the September 1989 meeting of the organisation, at Maynooth, I chaired a discussion about my proposals, and there was broad agreement that something along the lines suggested should be undertaken. It was accepted that somebody from outside mathematics should be in charge, and some possibilities were put forward. Shortly thereafter the I.M.S. decided to recommend that the first step in the proposal, a graduate survey, should be carried out. A form for Trinity graduates was prepared by Richard Timoney and myself, and submitted to the I.M.S. as a specimen. Suggestions were taken on board, and the questionnaire was mailed in April 1990 to all Trinity mathematics graduates since 1945.

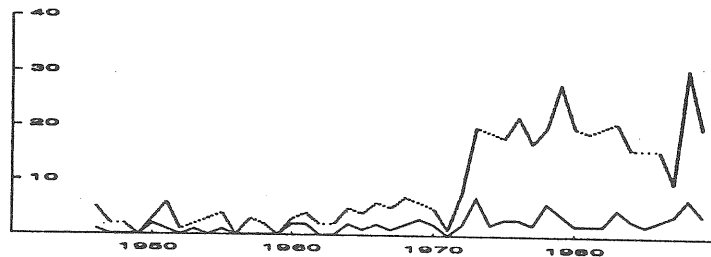
There has been a reasonable response. From a total of 401 questionnaires mailed, 86 were returned completed, and 19 arrived back marked not known at this address. Mailed with the questionnaire was a letter which described the survey, and included a financial appeal for the Trinity Quatercentenary Fund. This could have reduced the number responding, or biased the sample

that did respond, if people chose to respond to both or neither. Also since the early portion of the questionnaire dealt with career data, perhaps those satisfied with their careers were most likely to respond. The numbers responding were just too small to deal with these questions.

To obtain more complete information on recent years we have undertaken a repeat mailing to those from the last fifteen years who had failed to reply. This was done in March 1991. To date no other College has to my knowledge even started the first part of such a survey, which is acquiring/compiling their graduate data base, so in the hopes that a little further prodding might help, I would like to summarise some of the survey results. I say further prodding as David Simms has already compiled and presented much of this information at the 1990 September meeting of the I.M.S. at Dublin City University. Also the ubiquitous Richard Timoney must be credited with much of the work.

**The results**

First here is a profile of the respondents by year of graduation, compared with the number to whom the survey was mailed.



Number surveyed ... and  
number responding —  
(1946-1989)

Here are some of the questions, and the percentage responses.

**Employment status.**

(a) What general category would you put your job in?

First Employment		Present Employment
21	Academic, third level	22
12	Academic, primary or secondary	07
20	Actuarial	11
00	Statistical	01
10	Financial services	09
15	Computer services	20
04	Business	01
02	Management	16
02	Civil Service	00
04	Engineering	00
04	Industrial R&D	05
05	Other	04
05	No Answer	05

(b) What rôle did your mathematics background play in attaining these positions?

02	None	05
15	Only in so far as I had a degree in something	10
13	A small rôle	30
28	A large rôle	23
28	It was an absolute requirement	23

(c) Would you recommend a mathematics degree for people interested in such a position?

15	No	21
68	Yes	66
17	No Answer	12

**Further Study.**

What, if any, further study did you undertake?

	All years	1970-75
Diploma	25	38
Masters	33	42
Doctorate	25	08
Professional qualification	33	46
Other	17	20
None	14	17

These numbers are also percentages. To see how things were changing, I have included a column for seventies graduates. This relates to 24 students. The number of doctorates in the All Years column is strikingly high, but less in the seventies column, by which time numbers of students were increasing. Separate data that David Simms has suggests that this seventies figure for doctorates is too low, which highlights the need for more complete data. The numbers taking a professional qualification are quite large. The bulk of these are an accountancy, actuarial, or insurance qualification. As the response to a later question, there were suggestions that some courses in business and economics should be available to mathematics students. But only some courses, as most people stressed that the most important thing that they had carried away from their mathematics studies was the ability to treat problems in a disciplined and logical way.

**Use of Mathematics**

During your career, how often have you made use of your mathematical training?

never	01
rarely	11
sometimes	28
frequently	22
constantly	37

The remaining questions were specific to the Trinity degree, so I will not bother to comment on them here. The exercise is still

incomplete, but already we have learned much from it. In many cases it has simply confirmed what most of us would have imagined. But imagined information will not be sufficient for dealing with deans, or mandarins. I hope that all mathematics departments will proceed with a similar study, and that in the meantime the I.M.S. will be putting in place the structures needed to complete the picture of all aspects of Mathematical Sciences in Ireland.

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