



SOCIETY OF ACTUARIES

Article from:

# The Actuary

May 1968 – volume 2 - Issue 5

# The Education of the Actuary Is a Tonic for Discussion by Several Actuarial Clubs

## From Montreal

by Léon Mondoux

The March meeting of the Montreal Actuaries' Club was enhanced by the presence of Morton D. Miller, President of the Society of Actuaries.

A note prepared by Nicholas Bauer on the subject of Education and Accreditation of Canadian Actuaries had been distributed to the members and was discussed at the meeting. The following extract from Mr. Bauer's note gives a good picture of what he is advocating:

"The best all-around arrangement, therefore, would seem to be a system incorporating completely separate papers to be set by the Canadian Institute for those subjects listed above. (Law, social insurance, taxation, annual statements, accounting and investments).

"The whole educational system, then, would look like this: The Society would continue to set examinations on all subjects considered part of actuarial theory which do not depend on place of practice. This may incidentally include theoretical considerations regarding those subjects, such as, say, accounting, which shall also form subject matter of the later Canadian examinations. The curriculum may be contained in eight or nine examinations, upon the completion of which the qualification F.S.A. would be attained.

"The student would then be required to write the special examination(s) of the country in which he intends to pursue his career leading in the case of the Canadian student to the qualification F. C. I. A."

## No Opposition

Surprisingly enough, there was no categorical opposition expressed by those present, although it must be noted here that participation in the discussion was not particularly heavy. The discussants agreed that there was not much possibility of purely Canadian examinations in the near future in view of the lack of available competent persons to set and correct the examinations.

Gaston Paradis, Director of Actuarial

Studies at Laval University, expressed the hope that the Society will eventually give credit to students for mathematical examinations set by the colleges and universities themselves. Mr. Miller expressed the opinion that logical as this suggestion may be in theory, it appears impossible to implement it for the time being, because of the wide variation in standards among institutions.

Both Colin Jack, President-elect of the C.I.A., and Mr. Miller took the opportunity to describe the impressive amount of work which is now being done to keep the examinations up to date and to increase their Canadian content.

## From Atlanta

by Samuel H. Turner

The Atlanta Actuarial Club discussed the education of the actuary at its March luncheon meeting. Robert W. Batten, Assistant Professor of Actuarial Science at Georgia State College, led the discussion.

The first point discussed was whether the actuary is basically a mathematician or a business man. Both the recruiting effort and the early actuarial examinations definitely seem to emphasize mathematics. The experience of actuarial examination prize winners was cited, indicating that persons interested in theoretical actuarial mathematics are not interested in an actuarial career, primarily because they feel an actuary is too much of a business man.

It was concluded that an actuary is a mathematician, a business man, or both — depending to a great extent upon the individual's ability and basic motivations. Recognizing the potential contribution of the actuary in the use of applied mathematical techniques in business, perhaps this should be emphasized in presenting the profession to the public and to prospective actuaries.

The decline in the number of candidates sitting for the early actuarial examinations was also discussed. The war in Vietnam may affect the number of entrants, but the competition for mathematically-oriented persons from other

## Twenty Years Ago

There are two reasons why I emphasize the continuing education of the actuary. Our record of past accomplishments and progress is one in which we can all take pride. We have shown flexibility and adaptability in meeting changing conditions. This should not, however, make us complacent about the future. Old problems are becoming more complex with our ever-changing economy. Furthermore, new fields are continually being opened to actuaries as, for instance, through the introduction of new forms of group insurance and social insurance.

My second reason is to suggest the desirability of making a thorough review of our postgraduate educational activities, just as we have done of our education work for students. The re-

markable extension in the scope of our efforts and in the economic and social areas which affect our work has made it necessary for us to keep in touch with developments in many fields. Increasing specialization within the profession has made some of us lose contact with actuarial thought beyond the range of our immediate work. Other professions have been experimenting with new methods in postgraduate education and some of these may be appropriate for us. I feel sure that the proposed study could point the way to a more effective program for the continuing education of actuaries, which would enable us better to meet whatever challenges the future may bring.

Horace R. Bassford,  
Presidential Address

TASA, 49:1 (1948)

industries and professions would seem the major reason. In some cases, increasing sums are made available advanced study in the forms of scholarships, assistantships, etc.

Other fields of endeavor apparently offer challenging, interesting, and rewarding occupations with salary and prestige equal to those of the actuarial profession but generally without the rigorous examination process of the actuarial profession. The current examinations may be a deterrent in attracting potential actuaries. Doubt was expressed regarding the effectiveness of prize money offered on the early examinations; i.e., prize money probably does not attract many who plan to pursue an actuarial career.

The scope and content of the actuarial examinations provoked an interesting discussion. It was felt that the early examinations should cover background material which the prospective actuary will need in order to cope with later examinations; they should not primarily serve as rigorous examinations to "weed out" the unqualified. It was suggested that the number of the examinations lowered — perhaps back to the eight exam level without the current specialization process. The examinations should consist only of meaningful basic mate-

rial which the actuary needs to know. Supplemental and specialized material should be available outside the scope of examination requirements through Society publications and other sources.

## Progress Made

Progress has been made; but much remains to be done to improve the examination study material through condensation, elimination of duplications and better writing. This continued improvement of examination material need not lower standards but can serve to eliminate some of the drudgery. One member of the Society expressed the view that this type of criticism from outside the Society will be necessary before any meaningful change will be made in the examination syllabus.

The Club feels that it is not desirable from the United States point of view to increase the amount of Canadian material included on the examinations. Unless the student is working for a company doing business in Canada, it seems that too much Canadian material is already included. From a Canadian point of view, too much detailed United States material is probably required. It was suggested that on the last few examinations certain basic material be

required for both groups of students, with additional separate specialized material and examination questions for United States and Canadian students respectively.

The final point discussed was the extent and orientation of "recruiting" efforts. The recruiting efforts and public relations activities are not as effective as they might be in attracting recruits. More effort should be directed at the high schools. Local clubs could contribute greatly at this level through club-sponsored programs in which local members of the actuarial profession would talk to capable high school students through their different clubs, career-day activities, and so forth.

## From Des Moines

by William T. Tozer

At a meeting of the Des Moines Actuaries' Club on March 20, the education of the actuary was discussed from several points of view.

It was suggested that a separate examination be given on each subject in the syllabus, rather than the present combination of several subjects into a single examination with the requirement of a reasonable knowledge of all in order to pass. As it is now, effort is wasted in repeating the study of some subjects in which the student may be proficient; it may even discourage some very good men.

## New Subjects Needed

The feeling was expressed that the present education and examination program is relying too much on teaching facts rather than fundamentals. To keep up with new developments, it will be necessary to add new subjects and delete some of lesser importance. The need to train actuaries to be security analysts and accountants was questioned. Although the importance of training in the valuation of liabilities was recognized, it was not thought necessary to study every schedule in the Convention blank.

More educational institutions should

be encouraged to adopt a study program leading to an advanced actuarial degree. This might lead to more actuarial research in the academic world. Other professions are benefiting in this way. Also, more expository papers are needed for the continuing education of the actuary. The present formality for presentation of a paper may make some reluctant to undertake the task. Some of this formality may be removed by the scheme of simultaneous sessions recently introduced and by panel discussions.

A criticism was made that the Society and the local Clubs are insulating themselves from the outside world. Too much time is spent talking to other actuaries about such problems as operations research, whereas much can be learned by inviting competent speakers from other professions.

## Pride of Profession

Some believed many people and many companies felt that becoming an actuary is simply a stepping stone and not an end in itself. Companies have a tendency to move an actuarial trainee into a supervisory job of another department as soon as he has secured sufficient education. There was a feeling that we need actuaries as technicians and that there should be pride in being an actuary. The question was raised whether, by having our standards too high, the profession is being damaged more by discouraging good men from entering than it is being helped by keeping out those of lesser competence but who could, nevertheless, qualify as technicians.

The point was made that more effort should be placed on acquainting high school students with the profession to increase the flow of applicants. Opportunity is lost by waiting until the latter part of the college career, because by then many students have decided on other directions. One member of the Club thought that the booklet on the actuarial profession published by the Society left much to be desired and cited a company booklet as an example of a good production. □