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ACTUARIAL EDUCATION OVERSEAS

by Linden Cole

The Society of Actuaries has special committees working now to try to identify ways of improving actuarial education in North America. We have discovered that similar efforts are underway in both the United Kingdom and Australia.

In the U.K., the Institute of Actuaries has its examinations broken into an "A" group and a "B" group, similar to our Associateship and Fellowship examinations. The Institute relies heavily on a tutorial program to teach the students, rather than leaving them entirely on their own. In the tutorial program, students are given drill problems and quizzes, and get feedback on their performance.

In Australia, the Institute of Actuaries in Australia requires the British "A" group, but an Australian "B" group, for Fellowship in the Australian Institute. They offer formal classes for the "B" group exams in both Sydney and Melbourne, where the vast majority of students are located. For the "A" group, however, the students in the Sydney area receive credit by means of the undergraduate courses at Macquarie University, without any further testing by either the Australian or the British Institute.

The concerns which the two Institutes have addressed are somewhat different from concerns being addressed by the Society of Actuaries. The first concern is that the system is putting too much strain on the available volunteers, because of the emphasis on tutorial courses and classes. They construct and grade quizzes and sets of drill problems, as well as the final examination. A second major concern is the average length of time to reach Fellowship,

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PARTICIPATING IN ACTUARIAL MEETINGS

by Bob Likins

One of the ways we can continue our professional development and contribute to our profession is to get involved in a Society of Actuaries or other actuarial organization meeting. We, of the Society's Committee on Professional Development, offer readers a reminder of how they can become participants in actuarial meetings.

Actuarial Meetings

There are many actuarial meetings to choose from. Besides the Society's four yearly meetings, there are also Section Meetings and Continuing Education Seminars. The American Academy of Actuaries sponsors meetings, including the Enrolled Actuaries meeting, and the Canadian Institute of Actuaries holds three meetings annually. The Conference of Actuaries in Public Practice has an annual meeting and the Casualty Actuarial Society has two meetings each year. Remember your local Actuarial Clubs — they are good places to share your expertise with a smaller group of people.

Meeting Forms

The Society meeting formats change to meet the needs of the subject matter and audience.

- *Panel Discussions* present specific topics with limited audience participation. Participants include the moderator, the panelists and a recorder. The moderator enlists the panelists who make presentations on the specific topic and the recorder who edits the remarks for inclusion in the *Record*.

- *Open Forums* are used when broad discussion of a topic is appropriate.

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WHY NOT RANDOM INTEREST?

by James C. Hickman

Instead of building on the assumption that time until death is a random variable, why doesn't *Actuarial Mathematics* start with the premise that the rate of investment income is a random process? During the past 20 years, it has been the uncertainty in the rate of investment earnings that has produced the greatest inconvenience in managing pension and insurance systems.

This question and statement are typical of many made to the authors of *Actuarial Mathematics*. The question deserves an answer. However, like most important questions, the response can be made at several levels, each deeper than its predecessor.

Tradition

The first answer is based on tradition. Life tables and actuarial science started together. A life table provides an estimate of the distribution of time until death. For many years methods of constructing life tables have been a topic in actuarial education. The same cannot be said for models of the rate of investment earnings.

Scenarios

A second response is motivated by the current popularity of developing interest rate scenarios. These scenarios are used in building models to estimate surplus requirements related to interest rate risk. Can these scenarios be used with a life table in a model that will combine the random nature of both time until death and the rate of investment income? The answer is a qualified yes. The qualification is that a probability distribution must be defined on the set of scenarios.

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EDITORIAL

We have recently been exposed to a semi-serious debate on the following subject: Resolved, that the supply of Type I actuaries exceeds the demand, while there are numerous opportunities for the too few of Type II. Type I includes those with strong mathematical, technical, and problem solving abilities; but weak in people skills. In Type II these strengths and weaknesses are reversed.

In this discussion the affirmative side appeared to have more support. Selection techniques used in the hiring of actuaries, emphasizing qualifications other than the strictly technical, were described. There was some implication that success in actuarial endeavor depends less on the ability to assimilate a specific body of knowledge than on the personal qualities needed for success in general business. Does it then follow that the Society's selection process emphasizes too much of the technical and the specialized? Might we do better to include more of the subjects taught today in business schools—communication, management, marketing?

But the point was also made that actuaries, like engineers, are problem-oriented by definition; and that persons without a flair for problem-solving can never be actuaries, no matter how advanced their people skills. This viewpoint clearly puts technical skills first, considering them a necessary, though not necessarily sufficient, attribute for actuarial success. Those who see it this way are presumably satisfied with our present system, requiring that an actuary demonstrate problem-solving abilities long before he has much opportunity to exhibit people skills.

We got the strong impression that participants like to think of successful actuaries as 'well-rounded'—that no matter how good one might be with *problems* or with *people,* he or she must not be too lacking as to the other. Such a requirement raises a new set of questions. Can a good personnel manager be a strong technician? Can a good problem solver be adept with people? Is there such a thing as a salesman-actuary? or an actuary-salesman? Can we expect to find an actuary skilled with all types of problems, including the not-uncommon type where *people* are the problem?

Readers will have noticed some drift in the interests of our profession away from the purely actuarial and toward other knowledge or skill that an actuary is likely to need. The continuing education effort of the Society is offering seminars on investment, management, communication, and other 'less actuarial' areas. Our current President, seconded in this issue by a past-president, used these pages (November) to encourage actuaries to develop communication skills. It may well be that the ability to speak and to write clearly and effectively, a skill that *we* include within *both* the problem-oriented and the people-oriented categories, is more important than any.

Clearly these few straws-in-the-wind are no indication of reduced emphasis on the unique characteristics of our profession; but they may be an indication that, in this day and age, technical know-how is simply not enough.

C.L.T.

Actuarial Education Overseas

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which they would like to see sharply reduced.

In the U.K., the Institute's committee in this area is recommending that the responsibility for the "A" group of examinations be given to two universities, one in England and one in Scotland. Students would pass their courses to receive credit for the "A" group exams. Overseas candidates would still take Institute "A" group examinations. There would thus be a sharp reduction in the number of correspondence courses and exams to grade.

To meet the second concern, it is proposed to hire FIAs to administer the tutorial program for the B examinations.

This proposal assumes that the universities will do a faster and equally effective job of education on fundamental principles than the present system, reducing the time required to get credit for the "A" group of examinations without lowering standards. A student studying full-time would be expected to have credit for all of the "A" group of examinations in one year.

In Australia, the Institute has observed that the group of students who completes the classes (including doing all of the homework and taking all of the quizzes) have far higher passing percentages than the group of dropouts. Their proposal, following up from that observation, is that after a first unsuccessful attempt on an examination, students will be required to complete all classwork before that examination can even be taken again.

Reducing the number of poor papers and the number of failing students would ease the strain on the volunteer system, and (assuming that students presently dropping out would do much better if they are forced to continue with the classes) reduce the time to Fellowship.

The proposals are now being circulated to members of both Institutes for discussion. It appears that they are likely to be accepted and implemented. □