



SOCIETY OF ACTUARIES

Article From:

The Actuary

May 1986 – Volume No. 20, Issue No. 5



The Actuary

The Newsletter of the Society of Actuaries

VOL. 20, No. 5

May, 1986

A FLEXIBLE EDUCATION SYSTEM WHITE PAPER

Society members have recently received a most important document. It is, in effect, a preliminary report of the Future Education Methods Steering Committee; but its official title is "White Paper on a Flexible Education System for the Actuarial Profession".

In the October 1984 issue of this newsletter, Jim Murphy, then (and still) the Steering Committee Chairman, had this to say about the reasons for the formation of his Committee: "Currently, actuaries are educated through self-study. Mastery of the educational material is demonstrated by passing the Society's examinations. Both the world in which the actuary operates, and the material which the actuary must learn to operate in that world, have seen major changes. Technology has advanced dramatically, making possible some very innovative educational techniques. Traditional methods of education have been expanded both at university and professional levels. The objective of the FEM Committee is to review and recommend technological and/or traditional education methods for application to the actuary's education."

The White Paper, written by the FEM Committee, directs much of its attention to a related but not identical matter to which they have assigned the initials FES, standing for Flexible Education System. Those reading the White Paper a bit too quickly may find themselves confused. FES is a preliminary and independent step which is nonetheless necessary if FEM concepts are to follow. If this relationship between FES and FEM can be kept firmly in mind, the White Paper is much easier to follow. This article will attempt to keep its readers straight by discussing FES and FEM separately, and in that order.

(Continued on page 6)

TWO MORE FELLOWS JOIN SOCIETY OF ACTUARIES STAFF

The main purpose of the Society of Actuaries, and one of its real strengths, has always been the education of the actuary. The Society's E & E structure over the years has developed into an extensive system supported by an incredible volunteer effort of over 400 SOA members. Last year the E & E Committee administered about 21,500 exams in over 200 locations internationally. This year that number will be even higher.

As the world has become more complex, so also has the Education and Examination System. To meet the challenges that a more complex world often brings, the system has been revised over the years and examinations have been periodically restructured. And now a new proposal called Flexible Education is currently being studied as yet another change to that system.

The Society has been fortunate through the years to have attracted a high calibre of volunteers to work in its E & E system. However, it has become increasingly more difficult for these volunteers to balance all the demands and complexities of the ever-growing E & E system with their individual careers. Therefore, to continue attracting the level of professionalism in our volunteers that we have in the past, and to lend additional support in the E & E area, two Fellows have been added to the SOA professional staff.

Albert E. Easton, FSA, has joined the staff as Director of Examinations, and Warren R. Luckner, FSA, has been named Director of Education. Warren will be on board in June. Both gentlemen bring considerable E & E experience to their new positions.

(Continued on page 3)

A LOOK AT OUR MEETINGS

By John B. Yanko

You may have noticed the four yearly Society of Actuaries meetings have been changing. As Program Committee Chairman, I would like to explain these changes and assure you the meetings are for you — requiring your input and suggestions.

Until the spring of 1985, meetings followed a predictable format. Two Spring meetings were considered general topic with identical programs in two sites. This general topic format included five different meeting "tracks": Individual Insurance and Annuity; Financial; Group Insurance and Health; Pension and Social Insurance; and Professional and Miscellaneous. The third Spring meeting was a specialty meeting developed by the Continuing Education Committee. The Annual meeting followed the five-track format but was 2½ days rather than 1½ days as the three Spring meetings.

The Program Committee, with input from leaders in the profession and Sections, was responsible for each meeting's topic development and recruiting process. In 1984, it became apparent this structure required change to meet the various demands of our growing membership. Thus came the demise of the "twin" Spring meetings and the evolution of three Spring specialty meetings. The Annual meeting has remained a general topic meeting.

The table on page 3 illustrates the change between the old format for spring meetings in 1984 and the new format used in 1985 and repeated in 1986.

Not only did attendance increase almost 18% but also it was more evenly distributed among all three locations.

(Continued on page 3)

White Paper

(Continued from page 1)

Flexible Education System (FES)

Although FES has no relationship to any college or university, its designers have chosen to employ academic terminology. Under FES a number of "courses" are offered, as described in a "catalogue", each providing a number of "credits". A specified number of credits must be earned for a given "degree". Some courses are "required", others may be "electives" chosen from all or a sub-set of courses offered. Courses may be added, changed, or deleted from time to time, but with minimal impact upon the granting of a degree.

To bring specificity to their proposals, the White Paper includes an illustrative 12-course Prototype for the Associate degree, showing how FES can be applied to the first five parts of the current exam syllabus.

In summary, FES is little more than the breaking of the examination syllabus into smaller segments, and the adoption of terminology that emphasizes the Education side of the E&E effort. Its great advantage is its flexibility, allowing the E&E structure to evolve as conditions change. FES is considered by the Committee as a virtual necessity if many of the aspects of FEM are in the future. Expressed concerns about FES lie in administrative complexity, and in the possibility that the "travel time" to the ASA and FSA degree may be (inadvertently) increased.

Future Education Methods (FEM)

The FEM Committee, formed only some 18 months ago, is not yet ready to make any specific recommendations in this complicated and potentially controversial area. Nonetheless, Appendix 4 of the White Paper gives some 11 examples of FEMs under consideration. Those of most immediate interest would involve credit toward certain (not all) FES courses through SOA-sponsored

| Course No. | Course Description | Credits | Required or | | Exam Hours |
|------------|-----------------------------|---------|-------------|-----------------------------|------------|
| | | | Elective | Pre-FES Equivalent Part No. | |
| 101 | Calculus and Linear Algebra | 30 | R | 1 | 3 |
| 110 | Probability | 15 | R | 2 | 1.5 |
| 120 | Statistics | 15 | R | 2 | 1.5 |
| 121 | Applied Statistics | 15 | R | 3 | 1.5 |
| 130 | Operations Research | 15 | E | 3 | 1.5 |
| 135 | Numerical Methods | 10 | E | 3 | 1 |
| 140 | Compound Interest | 10 | R | 4 | 1 |
| 150 | Actuarial Mathematics | 40 | R | 4 | 4 |
| 151 | Risk Theory | 15 | R | 5 | 1.5 |
| 160 | Survival Models | 15 | E | 5 | 1.5 |
| 162 | Construction of Tables | 10 | E | 5 | 1 |
| 165 | Graduation | 10 | E | 5 | 1 |
| Total | | 200 | | | 20 |

Because the requirement for the Associateship is 200 credits, and only 200 credits are offered, effectively all courses are required initially; but only until the course list is extended. Eventually the five courses with the E designation may truly become electives.

The White Paper also displays a prototype for the Fellowship in FES form, and again implying no change in E&E content. Here the break-up of the current exam syllabus into smaller segments is not quite so neat. Courses in the 200 series represent the current part 8, and in the 300, 400, 500 and 600 series represent the current parts 6, 7, 9 and 10.

seminars, university course substitutions, research papers, or other professional exams. Readers who have a special interest in FEM may wish to refer to Appendix 4 as some indication of how the FEM winds may be blowing. They will find, however, that the essential thrust of the FEM discussion in the White Paper is to help make the case for FES.

Death

John J. Frucella

FSA 1972

DEMUTUALIZATION

The Society Task Force on Mutual Life Insurance Company Conversion has announced the release of a report documenting the modelling work commissioned by the Task Force. The model is a tool to help clarify conversion issues. Preliminary results were discussed by Walter Shur at the 1985 annual meeting.

Copies of the model report may be obtained from the Task Force Chairman, Harry D. Garber, at his *Yearbook* address. □

Draft Implementation Plan

Despite the obvious and admitted fact that much is yet to be determined, the White Paper includes a most ambitious implementation plan. The current draft calls for implementation in three phases, none to be very long delayed:

1. Reorganization of Parts 1-5 into a set of courses comparable to series 100 of the prototype—to be in place in time for the 1987 examinations.

2. Reorganization of Parts 6-10 into a set of courses comparable to series 200-600 of the prototype—in time for the 1988 examinations.

3. Appropriate FEM concepts to be implemented as approved, with most initially viable and appropriate concepts in place by 1989.

Current Status

The Steering Committee is moving rapidly and efficiently. The White Paper is not the only recent development. FES/FEM is being discussed at the Spring meetings, with the local actuarial clubs, and with representatives of co-sponsoring organizations. The implementation effort appears to be well underway.

By the time readers receive this issue of *The Actuary*, the Society's Board, after collecting and analyzing the comments solicited by the White Paper, may well have made the decision in favor of FES. We can expect to hear more about FEM. □