



## AEN Newsletter

## Number 6

Welcome to the sixth newsletter for members of the Actuarial Educators Network. These newsletters are intended to provide information that we believe will be of interest to members of the network, and through this improve the quality of actuarial education, and global access to this education. In this edition, we have another thought-provoking article by John Shepherd, as well as information about some important developments in the Actuaries Without Borders section.

### It's all in the numbers...or is it?

Nearly sixty years ago my learning in my third year of school education was summed up on a small piece of paper by hand-written numeric scores for writing, reading, arithmetic and spelling, with a total score out of twenty. More recently I have been watching my grandchildren in their early school years. Their end-of-term feedback on their learning rarely involves numeric marks. More commonly a matrix is used that maps their levels of achievement on a range of specified tasks or skills. At least in schools, there has been a huge shift in reporting from the quantitative to the qualitative on educational assessment.

This shift has not been so widespread in higher education and professional education. The university where I taught for over twenty years switched within the last decade from reporting just a letter grade (HD, D, CR, P or F, each linked to a generic qualitative standard) for each student in each subject to using both a letter grade and a standardised numeric grade (e.g. an integer in the range 85 to 100 if the letter grade was HD).

The longer I practised as a university teacher the less comfortable I became with using only numeric scores in assessment. My main concern was the effect that numeric scores seemed to have on many students. Firstly, numeric scores seemed to invite comparisons with other students, rather than reflection on what they might say about one's own learning to date.

*"You got 7 and I got 6½. You must be smarter than me!"*

I experimented by replacing numeric scores with qualitative feedback (one of three letter grades for each answer, plus written comments on each answer about what could be improved) on in-class tests. I subsequently found that many students are strongly wedded to numeric marks. They often made comments like these:

*"I prefer numeric scores because then I know exactly how well I'm going."*

*"Numeric scores tell me just how much I have to improve to get a higher grade. If I get, say, 63%, I know I'm very close to a Credit."*

Many students ascribed to numeric marks a degree of precision which teachers – if they are honest – would have to say is illusory.

My main concern, however, was that numeric scores were reinforcing a quantitative conception of knowledge – the notion that there is a correct answer to every question and that learning is a process of finding out what



these correct answers are and producing them when requested in assessment tasks. The key to success then is to acquire as many pieces of knowledge as possible and aim for a high score by producing many “correct answers”.

In my view the kind of learning we should be looking for in both higher and professional education is a qualitative shift in the way a learner thinks about some aspect of the world around them. While the use of numeric marks is not going to prevent such learning from occurring it can be a barrier to it – an unnecessary barrier.

Numeric scoring can also place undesirable limitations on those who perform the marking. Over the last decade I have done a lot of marking for two actuarial professional bodies in two similarly assessed courses. In both, students were allowed almost a full day to complete an exam assignment. Given a business or financial problem, and some relevant data, they had to understand the problem, analyse the data, interpret the results and make recommendations to a nominated party, who might be a fellow actuarial student, a more senior actuary or a client.

In both courses the prescribed approach to marking was (at first) atomistic. Marks totalling 100 were allocated 1 or perhaps 2 at a time to fifty, sixty or more prescribed elements. These elements were listed in a marking guide. The elements, taken all together, were regarded as necessary to a good solution to the problem.

I found that after following the marking guide and making fifty or more mini-judgements on how many marks to award for each element I was then looking at the total of the marks and considering whether the whole job was worth more or less than the sum of the parts (a characteristically actuarial response to a preliminary answer!). Often I felt that the total of the marks gave a misleading overall assessment – sometimes too high and sometimes too low – of the quality of the student’s work.

This analytic approach to marking requires a relatively large number of judgements, each focused on a detailed element isolated from the rest of the work submitted. It can lead to an assessment that does not adequately reflect the overall quality of the work submitted.

On the surface it might seem incongruous to suggest that actuaries should be wary of over-reliance on a numeric approach to assessment. In all actuarial work, however, it is not the numbers that are important but what they mean.

Written by John Shepherd (e-mail [johnshepherd3@gmail.com](mailto:johnshepherd3@gmail.com) for comments and feedback).

## AWB-Vietnam Opportunity

Actuaries Without Borders (AWB) is pleased to announce a volunteer opportunity in Vietnam for actuaries with teaching experience in actuarial concepts including financial mathematics, financial economics and life contingencies, as contained in the FM, MFE and MLC exams within the US Society of Actuaries’ examination syllabus. This opportunity will require two volunteers to prepare and present materials as well as examine and assess participants at a four-day teaching course in English in Ho Chi Minh City in April or May 2013. The final dates will be determined in consultation with the Vietnamese insurance industry shortly after the volunteers are chosen.



International travel costs (restricted to lowest return economy airfare from your home city to Ho Chi Minh City) as well as local food, hotel and incidental expenses will be reimbursed by AWB and its financial partners for this opportunity. AEN members who are not AWB members will be required to join to participate in the project. If you are interested in this opportunity, please send an email with your resumé to [AWB-Vietnam@actuaries.org](mailto:AWB-Vietnam@actuaries.org) as soon as possible. Along with their emails and resume, volunteer candidates should provide any additional information that they feel is relevant for this particular opportunity, including past teaching experience.

## AWB- Search for AWB Executive Director

As part of its consideration of Strategic Objective 4 (“Support the development, organization and promotion of the actuarial profession in areas of the world in which it is not present or is not fully developed”), the IAA established a Task Force, which included AWB and A&A Committee members. This review recognized the increasing number of projects that AWB is receiving and resourcing, while at the same time expanding its work in related areas such as donor funding of activities. Consistent with the recommendations from the review, AWB is seeking a volunteer to take on the role of Executive Director. Details of this role are available at [http://www.actuaries.org/AWB/Documents/AWB\\_Executive\\_Director\\_Job\\_Description.pdf](http://www.actuaries.org/AWB/Documents/AWB_Executive_Director_Job_Description.pdf). Interested individuals are encouraged to apply to Shiraz Jetha, Chair AWB at [s.jethaa@gmail.com](mailto:s.jethaa@gmail.com) by April 30, 2103.

## AWB-Online courses

The joint AWB/AEN working group on online courses is investigating the possibility of working with the University of Zambia to make use of an IAA approach that combines the internet and telephone to teach actuarial courses. AWB will soon appoint a project manager for the project and is hoping that a trial run will take some time this year. Once the planning is completed, AWB will be looking for instructors interested in participating.

## Future Meetings of Actuarial Educators

Please note this updated list of upcoming conferences for Actuarial Educators—we hope that you will be able to take part in some of these opportunities from around the world.

Region	Event	Dates	Host
United Kingdom	Actuarial Teachers' & Researchers' Conference 2013	18–19 July 2013	Keele University (U.K.)
North America	48 <sup>th</sup> Actuarial Research Conference	1-3 August 2013	Temple University, Philadelphia, Pennsylvania (USA)
Australasia	6th Australasian Actuarial Education & Research Symposium 2013	Nov/Dec 2013	To be advised



## Upcoming IAA Meetings

Unfortunately the joint IAA/Group Consultatif Education Seminar in May 2013 has been cancelled due to lack of registrations. However, the next International Congress of Actuaries in Washington DC in April 2014 is now just over a year away, and will include a session specifically focussed on the AEN, as well as a number of other sessions focussed on education and professional issues.

The 3<sup>rd</sup> African Congress of Actuaries is taking place in Lomé, Togo, from April 24–26 2013, and there will be a presentation on the activities of the AEN.

## Final Comments

Remember that we have now further developed the membership directory to allow search functionality; you can now search for all educators in a particular country, university, teaching area or other specialisation. You can find this at [http://www.actuaries.org/AEN/Directory\\_Login.cfm](http://www.actuaries.org/AEN/Directory_Login.cfm) and access it with the username and password issued in the e-mail accompanying this newsletter.

If you don't see your own name in the directory, this means you haven't entered your details on our website. Please then take the opportunity to enter your details; this can be done at: <http://www.actuaries.org/AEN/Membership.cfm>.

If you know of any educators, or people interested in actuarial education, who would be interested in the network, please encourage them to join by filling out this online form: <http://www.actuaries.org/AEN/Membership.cfm>

Finally, you are receiving this newsletter because you are currently on our e-mail distribution list. We would very much like you to remain part of the network, but if you do want to opt out, or are receiving this e-mail in error, please inform Carla Melvin ([carla.melvin@actuaries.org](mailto:carla.melvin@actuaries.org)) who will remove you from the distribution list.